ECLAC

Economic Commission for Latin America and the Caribbean

INTERNATIONAL CAPITAL FLOWS TO LATIN AMERICA: THEIR IMPLICATIONS FOR INTERNATIONAL AND NATIONAL POLICIES

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INTRODUCTION

The first part of this study examines the features of international capital flows to Latin America, particularly their volatility. The links between capital flows and growth are examined, as well as the features of the main categories of capital flows. This first section also sketches out the domestic policy implications of capital flow volatility, especially as regards the timing and sequencing of reforms. These relate to more careful and possibly more limited capital account liberalisation, to help reduce the risk of volatile capital flows causing costly recurrent crises. They relate also to accelerating reforms and policies (such as privatisation and more investment in human capital and infrastructure) that encourage more foreign direct investment, which is more stable and has other positive affects on development.

The second part examines international policies that can reduce the risk of excessive capital flow volatility as well as policies that can manage those crises better if they do occur, making them financially and developmentally less costly. The discussion on international policies in this study is part of the broader debate on international financial architecture, which has emerged since the crises that started in Asia in 1997 and then spread to several parts of the developing world, including Latin America.

In this debate on international financial architecture, the perspectives and interests of developing countries in general, and those of Latin America in particular, have not been sufficiently taken into account. This study attempts to contribute to that debate, emphasizing the perspective of developing countries and their need for more stable and sustained growth.

The analysis of national and international policies are more strongly interlinked than current debates emphasize. This is particularly relevant for the reform process in Latin American countries. Indeed, to the extent that the international financial system is not sufficiently reformed, to ensure that capital flows become more stable, countries need to become more cautious on capital account liberalisation or to introduce more market–based measures to discourage excessive surges. It also implies the need for new and more counter–cyclical ways of conceiving and implementing domestic financial supervision and regulation. On the other hand, if the international financial system is sufficiently changed, such that there is strong evidence that capital flows will be more stable, then a far stronger case can be made for more rapid capital account liberalisation. This would bring both macro economic benefits, such as supplementing domestic savings with foreign savings, and micro-economic benefits of greater allocative efficiency.

It is therefore in the interests not only of those committed to stable and sustainable development in Latin America, but also of those committed to more rapid and deeper economic reforms in the region, to maximize their efforts to help ensure necessary changes in the international financial system.
I. INTERNATIONAL CAPITAL FLOWS TO LATIN AMERICA

Between 1990 and 1997, Latin American countries experienced a huge increase in the volume of private capital inflows they attracted. Net private flows to the region, reached a record US$88 billion in 1997. It is, however, interesting that the 1997 peak level of private flows reached a similar level (both in real terms and as % of GDP) as the peak of inflows during 1981, when bank lending, that had begun in the mid-1970s reached its maximum level (see below).

The significant increase in the volume of private flows to Latin America during the 1990s can be explained by both domestic and international factors. Clearly, the extensive structural reforms carried out by the majority of countries in the region did much to encourage the return of private capital. More balanced macro-economic policies, such as the elimination of budget deficits and tighter monetary policies, were also crucial to the process. The reforms have served to both ease the entry of foreign capital and increase the creditworthiness of Latin American borrowers.

External factors have also been extremely important (see Calvo and Reinhart, 1993). First, in the early 1990s, the recession in the industrialised countries and the reduction of US interest rates were important contributory factors in the influx of foreign funds to Latin America. This implied that any change to this situation, such as a rise in US interest rates, could contribute to a reduction of capital flows to the region, as happened in 1994. Second, financial liberalisation in industrialised countries and the growing international diversification of the portfolios of institutional investors also served to encourage the flow of capital to emerging markets generally including to Latin America (Griffith-Jones, 1998). Thirdly, contagion – from crises in other countries or even other regions – has become an increasingly important phenomenon in the 1990’s.

The significant increase in the volume of flows to Latin America in the 1990s, itself a reflection of the increasing integration of global finance, is accompanied by very high volatility of those flows. Indeed, the pattern of surges and reversals not only are repeated over time but have become more frequent in recent years. Two recent crises, the Mexican peso crisis of 1994/95 and the international financial crisis of 1997/98, have brought violent swings in the levels of capital flows to Latin America. The peso crisis led to significant but fairly brief reversals of portfolio flows to the region in 1995, while the international financial crisis which began in Asia has led to major declines in capital flows to Latin America, and to a currency crisis in Brazil. At the time of writing, it is yet unclear how long the relative drought of capital flows to Latin America will last, though there are hopes and some evidence that their recovery will be more like in 1995-96 rather than 1983-89.
This high volatility in international capital flows to the region is important because, while foreign capital inflows can improve growth and investment levels in recipient countries and thereby help achieve development goals, reversals associated with volatile flows are extremely damaging. Financial crises, and reversals of financial flows, have a serious negative impact on the real economies of affected countries, leading to loss of output and increased poverty levels. Furthermore, volatility itself (of capital flows and of macro-economic variables) is damaging to investment, growth and employment.

One of the effects – and indeed one of the aims – of the reforms in Latin America, as well as elsewhere, has been to attract more capital flows. Indeed, often one of the indicators used to assess success of reforming economies has been whether they attract more capital flows post reform. This analysis was based on the assumption that the more capital flows of any type a country could attract, the more beneficial this was for the country's growth and development.

The highly problematic experience with capital flows in the 1990s, and much of the recent literature on the subject (Radelet and Sachs, 1998; Rodrik 1998; Bhagwati, 1998) raise the clear possibility that, for certain categories of capital flows (easily reversible ones) and especially if those flows enter on a very large scale, their long-term net growth and development benefits may be negative. While the high costs of reversals of these flows are evident, the benefits of inflows are less clear. On the other hand, there is growing empirical evidence (Borensztein, De Gregario and Lee, 1995, Ffrench-Davis and Reisen, 1998) that foreign direct investment contributes to long-term growth. This is for three reasons: a) it is on the whole more stable, b) it is complementary with domestic investment, both in production and through positive spill over effects and c) it stimulates growth through the embodied transfer of technology and efficiency, as well as facilitating access to foreign markets.

If correct, this analysis implies a complex relationship between reforms, capital flows and growth. Reforms in general tend to, ceteris paribus, attract more capital flows of all categories. It would seem that specific reforms – such as a certain type of capital account liberalisation – tend to contribute more to attract larger amounts of potentially volatile capital flows which can often undermine rather than contribute to the additional growth that other reforms, e.g. trade liberalisation, are generating in the economy. Furthermore, other reforms – such as privatisations and labour market reforms – contribute to attract FDI, which as discussed above, seems to have clear net beneficial effects on growth. Also, on the positive side, it may be the case that those countries which have undergone a complete set of reforms (including aspects such as development of long-term capital markets and proper regulation of the domestic financial sector as well as the first generation of liberalising reforms), may be somewhat less vulnerable to large reversals of capital flows and – above all – may recover access to capital and credit markets somewhat more easily. Indeed, it is also interesting to note the contrast between the early 1980s and 1994-95, when international debt or financial crises originated in Latin America, with 1997-99, when the international financial crisis originated in other parts of the world. Less encouraging is the fact that Latin American countries are still being hit fairly severely by currency crises and contagion, in spite of their important efforts at structural reform and at improving macro-economic policies.
The policy implications of these more complex relationships have to be more nuanced, than were those emerging from the conventional analysis that existed in the past, which was based on the almost theological assumption that international capital and credit markets were always efficient. The new realities seem to imply the need for far more careful and possibly more limited capital account liberalisation until policies are in place, both nationally and internationally, to avoid recurrent costly currency crises; it also implies the need to combine domestic financial liberalisation with simultaneous proper regulation of the financial sector; indeed, for small open economies, in a world of volatile capital flows, new forms of regulating the domestic financial sector may be appropriate, which may include larger protective cushions than in developed economies, with for example higher capital adequacy ratios for banks, as well as introduction of counter-cyclical elements into the regulatory process, to moderate boom-bust patterns of behaviour (Ocampo, 1999). It may also imply the need for accelerating and deepening reforms and policies (such as privatisations, labour market reforms, and especially more investment in human capital and infrastructure) that encourage more FDI, since it does seem to have clear net positive effects on growth and development. These measures at the national level need to be complemented by international measures, that encourage greater stability in capital flows to developing countries. As pointed out, above, we discuss international measures in great detail in section c.

The importance of policies at the national and international level to encourage far greater stability in capital flows is particularly important for reforming economies. There seem to be two stages in the implementation of reforms. The first stage – linked to rationalisation of existing capacity – leads to high unemployment and inequality, even when there is rapid growth. Only in the second stage, new investment is undertaken, which leads to improvements in employment and equity. To reach the second stage, stable capital flows are not only important to help finance the new investment (and if in the form of FDI to facilitate embodied transfer of technology) but also to avoid the major disruptions to output and investment that sharp declines – or worse – major reversals of capital flows can cause. Financial and currency crises not only seriously restrict availability of credit and foreign exchange for both working capital and investment; they may also undermine confidence for a relatively long period of time, of both domestic and international companies to invest, as we discuss in more detail below.

In assessing the impact of foreign financial flows on Latin America, it is crucial to look both at the broad pattern of total flows, as well as at different categories of inflows, their conditions and their volatility. This section will begin by looking at the general pattern of financial flows to Latin America over the last three decades, and how the recent trend in flows fits into that overall picture of high volatility. It will then examine the links between capital flows and growth. It will then go on to look at each major category of flows, foreign direct investment (FDI), portfolio flows, and bank lending, examining the trends of the flows and the terms and conditions on which they enter the region.
The Volatility of Capital Flows to Latin America

Measuring the volatility of international capital flows as a percentage of GDP to various regions between 1970 and 1992, Haussman and Gavin (1996) found that developing countries in general experience greater volatility of capital flows than industrialised countries. In Latin America, the study found that the standard deviation of capital flows as a share of GDP measured 2.8 for the 1970-92 period, while the corresponding figure for the industrialised countries was only 1.7 (see Table 1).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VOLATILITY OF CAPITAL FLOWS AND GDP IN SELECTED COUNTRIES</strong></td>
</tr>
<tr>
<td>Standard Deviation (1)</td>
</tr>
<tr>
<td>Capital flows as % of GDP</td>
</tr>
<tr>
<td>Real GDP growth</td>
</tr>
</tbody>
</table>

(1) Calculated over the period 70-92
Source: Hausmann and Gavin (1996a)

Figure 1 shows the very high volatility of capital flows to Latin America from the 1950s to the present.

Based on IMF data, Figure 1 shows net private capital flows to Latin America in constant 1990 US dollars between 1968 and 1998. Private flows were very high in the 1976-82 period; they became negative between 1983 and 1990; they grew rapidly till 1993, before falling in 1994 and 1995, due to the peso crisis. In 1996 and 1997, net flows picked up again. By 1998, as a result of the Asian crisis and its spread, capital flows declined again. Between 1975 and 1998 it is therefore possible to define three periods of eight years each (1975-1982, 1983-1990, and 1991-1998); the first period has positive net inflows, the second is the “lost decade” of the debt crisis, and the third is the return of capital flows in the 1990s.

The level of the net private capital flows in constant prices shows that Latin America experienced very similar levels of net private capital flows in 1981 and 1996-97. The high levels experienced before the peso crisis (especially 1993) were also similar to those preceding the debt crisis (see Figure 1).
Figure 1

(billions of 1990 dollars)*

* Data have been deflated by the US CPI index.

Note:
For the 1975-1995 period, data have been retrieved from the IFS database. They are aggregated data from the financial accounts of the 36 Western Hemisphere countries as categorized by the IMF. Data from 1996 to 1998 come from the World Economic Outlook (1998) and correspond also to the Western Hemisphere financial account. The 1998 figure is an estimate. All data have been deflated by the US CPI index. They are in 1990 constant billions of US dollars.

Table 2 shows the mean, standard deviation and coefficient of variation for each of the eight year sub-periods, and for the period as a whole, based on the data provided in Figure 1.

Table 2
TOTAL FLOWS TO LATIN AMERICA IN US$ BILLIONS, ADJUSTED FOR INFLATION

<table>
<thead>
<tr>
<th>Years</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Coefficient Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975-98</td>
<td>23</td>
<td>32</td>
<td>1.39</td>
</tr>
<tr>
<td>1975-82</td>
<td>37</td>
<td>18.50</td>
<td>0.50</td>
</tr>
<tr>
<td>1983-90</td>
<td>-15</td>
<td>7</td>
<td>-0.43</td>
</tr>
<tr>
<td>1991-98</td>
<td>48</td>
<td>19</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Source: own calculations based on IMF data

Figure 1, together with the calculations shown in Table 2, show that both the volume of capital flows to Latin America have risen in the 1990s, in relation to previous periods and that flows have also become somewhat more volatile. Indeed, the standard deviation for flows in 1991-98 is 19, compared with 18.5 for the previous inflow period 1975-82. This shows that in
the 1990s, there are on average somewhat higher flows ($11 billion in real terms), even though the peak years (1981 and 1997) have very similar levels; in the 1990s capital flows have a slightly higher volatility (as measured by the standard deviation). However, volatility is higher in the sense that the cycles of surges and declines are far more frequent in the 1990s than they were in the 1970s and 1980s. On the positive side, the recoveries of flows after crises seem also quicker (see Figure 1).

It can be hypothesised that technological and institutional developments – that may reflect secular trends – are explaining the increase in volatility of capital flows during the 1990s. Clearly the development of information technology has increased the speed with which capital can flow in and out of countries, and more generally the speed and ease with which financial transactions can be made and reversed. Furthermore, it has been argued that the growing importance of institutional investors and the increasing international diversification of their assets, the risk and reward structures of delegated portfolio fund managers - and the resulting growing appetite for liquid, transferable securities which can be easily sold – may be further contributing to volatility of capital flows to developing countries.

One factor is the sheer massive scale of institutional investors’ assets which surpass $40 trillion, (see, for example, Griffith-Jones 1998 and World Bank, 1997). This contrasts with the relatively small size of many recipient markets. This asymmetry highlights the potential for volatility as marginal portfolio adjustments by institutional investors can lead to massive changes in the level of capital flows to individual countries. According to BIS (1998) estimates, a hypothetical shift of 1% of equity holdings by G-7 institutional investors would be equivalent to over 66% of the Latin American equity markets.

A second factor is linked to risk/reward structures of fund managers, and in particular to the frequent (every three or even every one month) evaluation of fund managers’ investment performance against market benchmarks or against peer performance. As a result fund managers fear underperformance, because it can imply loss of business and therefore lower fees; this discourages positions different from benchmarks or from the average of their peers; there is evidence that these incentives contribute to herding, and therefore to high volatility of capital flows.

A third, broader factor may be linked to the fact that capital market financing is more rapidly affected by changes in market sentiment, as securities investors have looser relationships with borrowers and are more influenced by daily price movements – as they mark to market their assets – than commercial banks (BIS, 1999). This would help explain why fund managers withdrew earlier than commercial banks in East Asia (BIS, 1998, op. cit.). However, evidence on this point is not totally clear-cut, as various types of intermediaries – especially large ones – have adopted similar risk management systems. Nevertheless, the fact that different actors (e.g. banks, pension funds, mutual funds) have highly correlated strategies may contribute to an aggravation of capital flow volatility and of the scale of asset price movements. Combined with the asymmetries of scale – between total assets globally and size of Latin American economies – this opens the possible danger that in the future high capital flow volatility will remain or even
increase, particularly if effective measures are not taken nationally and internationally to counteract this volatility.

**Capital flows, their volatility, and their link with investment and growth**

The volatility of capital flows is important because it can have serious negative effects on the real economies of recipient countries. Economic downturns, and particularly financial crises - which often result from, or are aggravated by - volatile financial flows, have a negative impact on growth and often result in reduced investment in both physical and human capital. The experience of Mexico during the peso crisis of 1994/95 showed how a financial crisis can result in serious disturbances to production and investment. Mexican GDP fell by 7 per cent in 1995, many firms had to close, investment and consumption levels fell dramatically, and the country’s banking system was severely weakened.

Table 3 shows that, not only is volatility of capital flows higher in Latin America than in developed economies, but its cost is also higher. The table compares the cost in terms of lost output of the banking and currency crises in emerging economies to industrialised economies. In general, resolution costs of banking crises in industrialised countries have been held at under ten percent of GDP, whereas in several emerging market countries, particularly Latin America, the costs have been much larger (IMF, 1998).

<table>
<thead>
<tr>
<th></th>
<th>Number of Crisis</th>
<th>Average Recovery Time (in years)</th>
<th>Cumulative Loss of Output per Crisis (in percentage points)</th>
<th>Crises with Loss (in percent)</th>
<th>Cumulative Loss of Output per Crisis with Output Losses (in percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Currency crises</strong></td>
<td>158</td>
<td>1.6</td>
<td>4.3</td>
<td>61</td>
<td>7.1</td>
</tr>
<tr>
<td>Industrial</td>
<td>42</td>
<td>1.9</td>
<td>3.1</td>
<td>55</td>
<td>5.6</td>
</tr>
<tr>
<td>Emerging market</td>
<td>116</td>
<td>1.5</td>
<td>4.8</td>
<td>64</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Currency &quot;crashes&quot;</strong></td>
<td>55</td>
<td>2.0</td>
<td>7.1</td>
<td>71</td>
<td>10.1</td>
</tr>
<tr>
<td>Industrial</td>
<td>13</td>
<td>2.1</td>
<td>5.0</td>
<td>62</td>
<td>8.0</td>
</tr>
<tr>
<td>Emerging market</td>
<td>42</td>
<td>1.9</td>
<td>7.9</td>
<td>74</td>
<td>10.7</td>
</tr>
<tr>
<td><strong>Currency and banking crises</strong></td>
<td>32</td>
<td>3.2</td>
<td>14.4</td>
<td>78</td>
<td>18.5</td>
</tr>
<tr>
<td>Industrial</td>
<td>6</td>
<td>5.8</td>
<td>17.6</td>
<td>100</td>
<td>17.6</td>
</tr>
<tr>
<td>Emerging market</td>
<td>26</td>
<td>2.6</td>
<td>13.6</td>
<td>73</td>
<td>18.8</td>
</tr>
</tbody>
</table>

1 Average amount of time until GDP growth returned to trend. Because GDP growth data are available for all countries only on an annual basis, by construction the minimum recovery time was one year.

2 Calculated by summing the differences between trend growth and output growth after the crisis began until the time when annual output growth returned to its trend and by averaging over all crises.

3 Percent of crises in which output was lower than trend after the crisis began.

4 Calculated by summing the differences between trend growth and output growth after the crisis began until the time when annual output growth returned to its trend and by averaging over all crises that had output losses.

5 Currency «crashes» are identified by crises where the currency component of the exchange market pressure index accounts for 75 percent or more of the index when the index signals a crisis.

6 Identified when a banking crisis occurred within a year of a currency crisis.

Source: IMF (1998)
Highly volatile capital flows, and the costly currency and banking crises which are often associated with them in developing countries, can have a serious negative impact on growth rates. Between the mid 1970s and the present, not only have capital flows to Latin America been highly volatile, but GDP growth in the region has also been highly volatile. Latin America as a whole has experienced more, and deeper, recessions than most other regions of the world (Haussman and Gavin, 1996).

Figure 2 plots the data on capital flows to Latin America as a share of GDP shown in Figure 2 against the growth rate of GDP in Latin America over the same period.

Figure 2

LATIN AMERICA AND THE CARIBBEAN:
NET CAPITAL FLOWS* AND GDP GROWTH RATES, 1976-98

As a share of GDP
Source: ECLAC, on the basis of official data

Figure 2 shows that there is a very strong correlation between the growth rate of GDP in Latin America and capital inflows to the region. During the inflow period 1976-1981, the region grew at an average of around 4.5 per cent per year, while receiving capital flows at a similar share of GDP. During the period of capital scarcity, between 1982 and 1990, growth fell to less than 1 per cent per year, while capital flows to the region became negative at -1.7% of GDP. During the 1990s, GDP growth and capital inflows have continued to follow a very similar pattern. Both capital inflows and growth rose considerably in the years immediately preceding the Mexican peso crisis, with GDP growth peaking at 5.8 per cent in 1994; growth fell sharply in 1995, while capital flows also fell as a result of the peso crisis and its tequila effect. There was then a marked parallel recovery in both capital inflows and growth during the 1996-1997 period, when GDP growth in the region averaged 4.4 per cent, before the decline in both flows and growth which have resulted from the international financial crisis.
The relationship between GDP growth and capital flows is partly non-causal, as both are affected by other economic variables. Fluctuations of GDP growth in Latin America is a result of a number of factors, both domestic and external, of which volatile capital flows is only one, though clearly a very important one. Moreover, the causality between flows and growth to some extent runs both ways as high rates of growth are one of the factors which attract foreign finance to developing economies. However, the relation between GDP growth and capital flows in Latin America, clearly illustrated in Figure 2, and described above is extremely striking. It is safe to conclude that capital inflows contribute to higher levels of growth in Latin America, and that the sharp reductions or reversals in flows (especially if leading to Balanced Payments and financial crises), have a strong contractionary impact on the region's economy.

The effect of changes in levels of net capital flows on GDP growth occurs in the first instance via the impact of flows on imports, though a number of other mechanisms – such as variations in levels of bank lending – are also important. Thus, large inflows enable higher imports, which first permit an increased use of existing productive capacity, that – facilitated by higher aggregate demand – leads to growth of output and employment. In a second moment – if capital flows continue, spare productive capacity is used up and confidence of private actors increases – flows may increase levels of investment which would increase the likelihood of leading to more sustainable growth (Corden, 1990).

In this scenario of sustained growth, all sorts of positive effects of the capital flows could interact with positive impacts from the reforms; these include the transfer of embodied more efficient technology which increases productivity, as well as more dynamic responses from entrepreneurs, who see their efforts at investing and innovating rewarded by higher profits and growth.

There is also a less rosy, and unfortunately more common scenario. When capital flows decline or are totally reversed, this leads in the first instance to a sharp contraction of imports (as exports are slower to respond); the contraction in imports leads to falls in growth (see again figure 2). These links operated particularly clearly for Latin America in the 1983-89 period, when the sharp reversal of capital flows – and the large increase in debt servicing – were major factors explaining the dramatic fall in imports (of around 40% in the first instance), which was a major factor in explaining Latin America's extremely poor growth performance during those years. However, also in the 1990s, sharp declines or reversals of flows have lead to lower imports and lower growth.

As Devlin, Ffrench-Davis and Griffith-Jones (1995) argued, several pre-conditions need to be met, for capital flows to lead to sustained growth, that is for a virtuous "debt cycle" to take place. These include: a) a high proportion of the inflows should go into investment b) the additional investment should be efficient c) a large proportion of the increased investment should go into tradeables, so as to help create a trade surplus that would help service the flows in the future and d) creditors and investors must be willing to provide stable and predictable capital flows on reasonable terms. As experience has shown, these conditions are difficult to meet simultaneously in practice. Furthermore, after the East Asian crisis we have learned that there is
an additional condition that needs to be met for capital flows to contribute to sustainability growth, which is that increases in investment, particularly in exports, should not be in sectors where there is risk of global overproduction (Kaplinski, 1998).

It is unfortunately both difficult and rare, at least in recent Latin American economic history, for large surges of capital flows to lead to sustained growth. This may relate to the fact that the above listed pre-conditions are difficult to meet. Furthermore, some of the effects on the domestic economy induced by the initial surge of capital unfortunately make it more difficult for flows to be maintained, and thus to contribute to sustainable growth (Reisen, 1999)

Large surges of capital flows tend to contribute to overvalued exchange rate, whatever the exchange rate regime adopted. This overvaluation discourages investment in tradeables, and especially in exports which are meant to be one of the most dynamic sectors in a reformed economy; there is also evidence that overvalued (as well as volatile) exchange rates discourage all investment. More broadly, volatility in key macro-economic variables, such as not only exchange rates but also domestic credit levels, asset values, and interest rates – as well as in the rate of growth itself – have a negative effect on investment levels, via business expectations, as they increase uncertainty about future profitability of investment. As investors have the option of delaying investment until more information arrives, there exists an opportunity cost of investing now rather than waiting (Dixit and Pindyck, 1994). Therefore, increased volatility in macroeconomic variables – which augments uncertainty – requires a far higher expected rate of return in order to justify investment. As a result, increased macroeconomic uncertainty reduces the level of private investment, as various empirical studies have show. This will be negative for future growth.

Overvalued exchange rates also for obvious reasons, encourage growth of current account deficits. As this trend continues, and as foreign exchange liabilities (especially short-term) increase, the likelihood increases of a reversal of capital flows and of a currency crisis. Such a currency crisis (or a major over-shooting of the exchange rate, to imply a devaluation much larger than required by fundamentals) will increase the risk of a banking crisis. Both phenomena have tended – in Latin America – to cause short-term declines in output and to discourage investment, which discourages future growth.

Another negative interaction between capital flows and sustainable growth operates via the impact on the fiscal balance and public investment (Fitzgerald, 1999). With a surge of short-term capital inflows, there is a change in market perceptions to what they accept as sustainable public debt ratio. As this increases, the “permitted” fiscal deficit can rise quite sharply for a transition period, given the space opened by the higher debt ratio and higher expected growth rate. However, once foreign creditors and lenders see the cumulative effect of their individual decisions, sentiment can change back suddenly, possibly even to a lower public debt ratio than before the initial favourable change of perception. The market then requires that a large fiscal surplus is generated, to finance repayment of existing stock to reduce rapidly the debt ratio. As tax is difficult to increase rapidly, and current spending is more difficult to cut, public investment tends to adjust most. Sharp fluctuations in public investment are very negative, as efficiency is
lost both when projects are started too rapidly and ongoing ones are frozen or delayed once started; also the volatility and resulting inefficiency of public investment negatively affects private investment, because there often are strong complementarities between both.

A final – external – reason why it is difficult for surges of short-term capital to contribute to sustained growth is related to the volatile nature of capital flows themselves, which, as discussed above, seem to have become moreaccentuated in the 1990s. Rather than faithful companions, capital flows are fair weather friends. Their love of a country may quickly change, either due to a deterioration in key variables (such as current account deficits, fiscal deficits and/or short-term foreign liabilities to reserves) which they themselves partly contributed to create and/or due to external factors, such as variations in developed countries’ interest rates (Mexico, late 1994) or contagion from currency crises in other emerging markets (Brazil, early 1999).

A key determinant of capital flow volatility is the term structure of net inflows. Figure 3 shows the breakdown of private capital flows to Latin America between 1990 and 1998 (according to IMF data) into foreign direct investment, portfolio flows, and other investment; the latter is largely made up of bank lending and other investment flows such as trade credits. The figure shows that both portfolio flows (bonds and equity), which tend to be more liquid, and bank lending, around 50 per cent of which was short-term in this period, have been more volatile during the 1990s than foreign direct investment.

**Figure 3**

**LATIN AMERICA AND THE CARIBBEAN: COMPOSITION OF NET CAPITAL FLOWS, 1990-98**

*(Billions of dollars)*

Figure 3 shows that net portfolio flows rose significantly between 1991 and 1993 and remained at roughly the same level in 1994. In this period, Latin America relied heavily on these portfolio flows, with the value of net FDI flows rarely reaching half their value.

This pattern changed after 1994. Portfolio flows to Latin America declined sharply in 1995, as a result of the peso crisis in Mexico, and FDI flows remained steady. In 1996, portfolio flows showed a significant recovery and have remained fairly steady till 1998. However, they are likely to decline significantly in 1999. FDI flows have continued to increase steadily, making up an increasing share of total flows to the region. According to IMF figures, in 1997 FDI made up 61 per cent of net capital flows to Latin America, portfolio flows represented 43 per cent, while other net investment was negative.

Composition of Flows to Latin America

Foreign Direct Investment

Global levels of FDI flows have increased significantly during the 1990s, reaching nearly US$400 billion in 1997. In recent years, the distribution between countries has also been shifting with developing countries receiving an increasing proportion of these flows and Latin America's share of these flows increasing to around 44% of FDI flows to developing countries in 1997.

In 1997, Latin America and the Caribbean received FDI flows of US$58.5 billion. This figure represents a significant increase compared with the levels of FDI flows in previous years (see Figure 4).

Figure 4
LATIN AMERICA: NET FDI FLOWS, 1990-1998
(billions of dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Others</th>
<th>Mexico</th>
<th>Brazil</th>
<th>Argentina</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-94</td>
<td>12.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>24.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>37.83</td>
<td></td>
<td></td>
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<tr>
<td>1997</td>
<td></td>
<td>55.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td>59.46</td>
<td></td>
</tr>
</tbody>
</table>

Others: Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.
Source: ECLAC, on the basis of official and IMF figures.
As well as the increasing levels during the 1990s, another important feature of the FDI flows to Latin America is their stability during periods of turmoil as is evident by looking at Figure 3. Whereas both portfolio flows and bank lending have been shown to be very sensitive to market disruptions and therefore extremely volatile, FDI has remained stable throughout the turbulent 1990s. Not only is FDI more stable in itself, but it can also help to stabilise the current account over time by expanding capacity in the tradable goods sector. In 1997, FDI represented around 60 per cent of total private flows to the region and this figure is expected to increase in 1998 to around three fourths of total flows. FDI as a proportion of total flows to Latin America had reached similar levels in 1995, following the peso crisis.

Returning to the distribution of FDI flows within the region, Figure 4 shows the increasing importance of Brazil as a recipient of FDI inflows during the 1990s. In 1996, Brazil took over from Mexico as the main recipient of FDI in Latin America. In 1997, Brazil received 30 per cent of FDI flows to the region, followed by Mexico and Argentina, with 19 per cent and 10 per cent respectively, and Chile, Colombia, and Venezuela also received around 10 per cent of flows. These six countries, together with Peru, are the most important FDI recipients in the region.

FDI flows in 1998 are expected to fall only marginally, with a heavy concentration in Brazil continuing. Despite the knock on effects of the international financial crisis, especially in Brazil, foreign investors have been attracted by opportunities arising from the Brazilian privatisation programme in 1998.

The three main mechanisms for FDI inflows are the acquisition of private assets, the privatisation of state assets, and investment in new assets (ECLAC, 1998a). In the first half of the 1990s, the privatisation of state owned enterprises was the main avenue for FDI inflows to Latin America. Then, in the period 1994-96, an increasing proportion of FDI inflows were dedicated to new investment, with the restructuring and modernisation of existing foreign owned companies in the region as well as of recently privatised state industries. Then, in 1997, the transfer of assets, both public and private, again took over as the primary reason for FDI flows to Latin America. This trend is particularly strong in the larger economies, such as Brazil, Argentina, Mexico, Colombia, Venezuela and Chile. In those countries were the privatisation process is in its later stages, such as Argentina, Chile, Mexico and Peru, the sale of private assets is more important than privatisation.

The USA is the source of the largest proportion of FDI flows to Latin America, followed by Europe. Regional trading agreements have encouraged FDI flows to the countries of the region involved, such as NAFTA (Mexico) and MERCOSUR (Brazil and Argentina). In Mexico in the early 1990s there was a boom in foreign direct investment following the announcement and ratification of the NAFTA agreement, together with the far-reaching economic reforms in that country. Later in the decade, Brazil took over in importance as economic reforms and the privatisation process brought FDI receipts flooding in.

Privatisation has been an extremely important source of revenue for Latin American countries; between 1985 and 1992, more than 2,000 publicly owned firms (public utilities, banks, airlines, etc.)
were privatised throughout the region (ECLAC, 1998a). Early privatising countries included Chile and Argentina, while Mexico and Peru have also carried out major privatisation programmes. More recently, Brazil has become the region's most important privatising country; in 1998, Brazil counted privatisation receipts of around US$6 billion (including from the sale of Telebras).

Brazil's privatisation programme has been part of a 'second wave' of privatisation in Latin America. This has involved the sale of state assets, often though concessions, allowing private sector activity in areas previously considered preserves of the State. These include the opening of new markets, such as that for mobile telephones, and private investment in sectors such as mining and petroleum. Foreign investment in these sectors have often taken the form of joint ventures, with local companies. While this type of investment does not increase the productive capacity of the recipient country, it does serve to improve the quality of services (mainly in energy, telecommunications, and transport) and increase competitiveness. Privatisation, in general, also acts as a springboard for further FDI flows.

**Portfolio Investment**

**Bonds**

Before 1989, Latin America and the Caribbean only had limited access to the international bond market. Since then, however, the region has enjoyed extensive access to this market and the importance of bond financing as a source of external finance to Latin America rose significantly. Figure 6 shows that the volume of international bond issues in Latin America and the Caribbean rose from US$2.8 billion in 1990 to a peak of US$54.4 billion in 1997.

![Latin America: International Bond Issues, 1990-1998](image)

**Source**: ECLAC, on the basis of official and IMF figures.
Figure 5 shows that international bond issues by Latin American countries fell off during the peso crisis in 1994 and 1995, before rising again rapidly to record levels in 1996 and 1997, but falling again in 1998, trend which is expected to continue. The countries most active in the bond market have been Mexico, Brazil, and Argentina followed by Venezuela, and then Chile and Colombia. In 1997, Argentina and Brazil made issues amounting to around US$15 billion, Mexico to about US$14 billion, and Venezuela issued bonds to the value of around US$5.5 billion.

As well as the growth in the volume of bonds issued in Latin America, the size of new bond issues has also increased during the 1990s. Bond financing is relatively expensive for Latin America; bond margins for Latin America have been high, particularly in Brazil and Argentina. Moreover, spreads, which had been falling since the peso crisis, rose sharply as a result of the international financial crisis, with spreads on Venezuelan and Brazilian bonds most affected. This trend increased following the Russian devaluation and debt moratorium in mid August 1998. Figure 6 shows how the international financial crisis affected the conditions facing international bond issuers in Latin America.

**Figure 6**

**LATIN AMERICA AND THE CARIBBEAN: TERMS AND CONDITIONS FOR INTERNATIONAL BOND ISSUES**

![Graph showing changes in bond spreads and maturities](image)

Source: ECLAC, on the basis of official and World Bank figures.

The crisis has also reversed the previous improvement in the average maturities of Latin American bond issues. Average maturities had remained steady at around 3-4 years from 1989 until 1995, before increasing significantly to 8 years in 1996, and again to 15 years in 1997. This was seen as a very positive shift as the longer maturities reduced the potential volatility of bond flows, which make up a large share of total flows to the region. As we can see in Figure 6, maturities fell in the last quarter of 1997 to 7.6 years. On the previous trend of rising maturities of Latin American bonds, it is worth noting that the share of bonds issued with options had also increased in the same period. As options allow the lender to pull out before the official maturity date, the apparently less potentially volatile bond flows may have actually been little better than
in previous years. The impact of bond options has been particularly dramatic, in the case of Brazil, where the share of bonds issued with options increased sharply after 1996. Furthermore, Weston Group has estimated that of $7.5 billion due in 1999, almost half (around $3 billion) will originate in the exercise of put options (Financial Times, March 18, 1999).

**Equity**
International share issues have also been an important source of capital for Latin American countries in the 1990s, although to a much lesser extent than bond issues. Share issues rose from US$4 billion in 1991, to nearly US$5 billion in 1994. However, issues fell sharply as a result of the Mexican peso crisis and unlike bond issues, recovered only gradually in 1996 failing to reach pre-crisis levels.

**Bank Lending**
The importance of bank lending in total private capital flows to Latin America is significantly less in the 1990s than it had been in the 1970s.

Figure 7 shows the steady growth in the outstanding claims of BIS reporting banks to Latin America from around US$200 billion in 1993/94 to US$295.7 billion in mid 1998. The financial turbulence following the Asian crisis did not stop the growth of outstanding claims of BIS reporting banks to Latin America in the first half of 1998. However, IMF figures suggest that while foreign banks may have been increasing their exposure to Latin America during the first half of 1998, net bank lending flows to the region were in fact negative for 1998.

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1 Source: ECLAC.
The share of short-term claims (up to one year) on Latin America has increased somewhat during the 1990s, from around 37 per cent in 1991 to around 55 per cent in the first half of 1998. This rise can mostly be accounted for between 1991 and 1993, when the share rose to about 50 per cent. The share of short-term claims on lending to Latin America compares quite well to the share for lending to Asia, where the figure remained at over 60 per cent between 1992 and 1997.

As regards the sectorial composition of claims, there has been a gradual shift away from interbank lending and in favour of direct non-bank exposure.

We can conclude that (except for FDI, which has been a growing proportion of flows to Latin America, and has provided a source of stability to the region), all other capital flows to the region are very volatile. Not only are their levels very volatile (which is the most problematic feature), but also their conditions (both in terms of maturity and cost) fluctuate very strongly. Furthermore, some of the fluctuations in conditions (e.g. maturity) are difficult to detect statistically, as formal maturities may remain the same, but de facto ones can fall due to financial engineering mechanisms such as put options.

**Brief Conclusions**

Capital flows to Latin America have reached very high levels in the 1990s. Though their average level (in real US$ terms) is somewhat higher in the 1990s than in the previous surge during the 1975-82 period, it is interesting that their level in real terms in the peak year in the 1990s (1997) is very similar to that in the peak year (1981) of the 1975-81 surge. In the last twenty-five years, there has been a very strong correlation between levels of capital flows and growth in Latin America.

Private capital flows to Latin America are very volatile, much more than capital flows to developed countries. This volatility of capital flows, transmitted to volatility of macro-economic variables, is very negative both for growth and investment. A number of mechanisms explain the negative link between volatility and growth; the main long-term one seems to be that the increased uncertainty caused by volatility significantly undermines private sector confidence, and therefore discourages investment.

It would be desirable if capital flows were more stable, as this would allow virtuous interactions to develop. If capital flows in for a significant period, and it finances mainly efficient investment with an important proportion in tradeables, it will generate sufficient growth, savings and trade surpluses to allow for the servicing of the inflows in future years. Such a virtuous circle worked well for example in the US in the 19th Century.

A virtuous circle of relatively stable capital flows would be particularly valuable and essential for reforming economies, where new and increased investment is essential to allow the economy to adapt to important changes in relative prices and in the overall context of economic policy, and to generate increased growth. However, very volatile capital flows – by increasing
uncertainty, and by causing currency and banking crises – may be particularly harmful for reforming economies, by undermining the ability of the economy to generate the increased growth that could result from the reforms, there is the risk that they could even undermine political support for the reform process itself.

At present the outlook for capital flows to Latin America, and more broadly to emerging markets is uncertain. Three key questions and concerns arise. Firstly, will capital flows return to the average high levels that prevailed in the 1990s? Secondly, if so, what will be their composition, that is will they be dominated by more stable FDI or other flows, or by more volatile flows? Thirdly, overall, will capital flows to the region be as volatile as they have been in recent years?

It seems crucial that policies are designed – nationally, regionally and internationally – to help attract more long-term flows and discourage potentially volatile as well as reversible capital flows. In particular – as regards reforms – emphasis should be placed on those reforms which encourage more stable flows such as FDI, whereas reforms which encourage more volatile flows should be significantly postponed.

In the next part, we will now turn to the discussion of policies, mainly at the international level, to try to prevent crises and to make them less likely if unfortunately they do occur.
II. BETTER INTERNATIONAL POLICIES

Recent currency crises – and their extremely high development costs – have raised a very serious concern about the net development benefits for developing countries of large flows of potentially reversible short-term international capital. While the high costs of reversals of those flows are evident, the benefits are less clear. This is in sharp contrast with foreign direct investment (FDI) and trade flows, where the very large developmental benefits clearly outweigh the costs. As a result, volatile short-term capital flows emerge as a potential Achilles’ heel for the globalised economy and for the market economy in developing countries. If the international community and national authorities do not learn to manage these flows better, there is a serious risk that such volatile flows could undermine the tremendous benefits that globalisation and free markets can otherwise bring.

The current functioning of the international financial system is clearly unsatisfactory, particularly because it leads to recurrent financial crisis, with very high development costs especially implying increases in poverty for developing countries. It thus risks undermining the development achievements of the otherwise broadly successful market reforms.

As a result of the Asian crisis – which spread to other emerging markets – a broad consensus has emerged on the need and the urgency for reforming the international financial system. Though quite important progress has been made, there is however lack of agreement and precision in proposals on the exact nature of the changes required. This part aims to contribute to the discussion, by making more precise and comprehensive proposals, both for country prevention and for better crisis management. It also aims to introduce the perspective of developing countries and the need for those countries growth far more strongly into the discussion.

Section II looks at improved transparency and information on developing countries, as one way to deal with currency crises; however, the limits of this approach are also analysed, as well as the need for improved transparency on international financial markets. Section II deals with better regulation. It examines the need to fill global regulatory gaps, as well as discussing the recently created Forum for Financial Stability. Section III deals with the appropriate scale, timeliness, modalities and conditionality in the provision of official liquidity in times of crisis, including a discussion of the recently created Contingency Credit Line. Section IV deals with involving the private sector, both in crisis prevention - for example via private contingency credit as well as in crisis management, for example via amendment of bond clauses or via standstill arrangements. Section V concludes.
Improved transparency and information

**Actions taken**

One of the areas defined initially by the G-7 countries and the IMF as central for future crisis avoidance was enhancing transparency and disclosure of timely and reliable information, basically on developing countries, so as to make it available to market actors. The assumption was that insufficient information had contributed significantly to the Asian crisis (for a critique of this assumption see below).

A flurry of activity in improving information followed, as reflected in the fact that the first of the three working groups of the G-22 (which included G-7 countries and a range of emerging economies) was devoted to Enhancing Transparency and Disclosure of Information. Amongst some of the key significant data gaps and deficiencies identified were: 1) information on foreign exchange reserves, including undisclosed forward positions, and any other claims against them 2) maturity and currency exposures of the public and private sectors and 3) the health of the financial system, including information on non-performing loans.

A number of steps have already been taken, of which the main ones are Public Information Notices (PINs) by countries and strengthening by the IMF of the Special Data Dissemination Standard (SDSS). (For details of these and some of the other main measures of progress on transparency and standards, please see Appendix 1.)

The PINs are prepared yearly by all countries after their Article IV consultation with the IMF, and countries are encouraged to release them speedily. The IMF has also started a pilot programme for voluntary release of Article IV staff reports.

Of particular importance has been the strengthening, in the areas of international reserves and external debt, of the SDSS, the information standard that the IMF had already established in 1996, after the Mexican peso crisis. Particularly significant is that these will incorporate full details on reserves, and any claims against them (for all countries), from April 1999 (Summers, 1999).

Besides information standards, a number of other standards are being defined (by the IMF and the BIS, in collaboration with institutions like the World Bank and the OECD) which are meant to provide codes of good practice for economic, financial and business activities. The IMF will help in the dissemination of these standards and the monitoring of their implementation, by different measures including having them as conditions for IMF lending. These standards will include creating Codes of Good Practices on Fiscal Transparency, and in monetary and financial policies, improving the quality of banking supervision, as well as developing standards relevant for the functioning of financial systems, including on accounting and auditing, bankruptcy, corporate governance, insurance regulations, payment and settlement systems, and securities market regulations.

Though many of these standards and their implementation may have very positive effects - e.g. on strengthening financial systems - three rather serious concerns need to be raised and
addressed. Firstly, is the definition of "desirable standards" sufficiently participatory, that is, do developing countries which will be asked to implement these standards in their own economies have enough participation in the definition of these standards? Should developing countries just be encouraged to adopt these standards, rather than them being part of IMF conditionality? These concerns could be summarised in the phrase "No standardisation without participation". Secondly, will implementing these standards be really effective in significantly improving the resilience of developing countries for avoiding crises, and making them less acute if they do happen? Thirdly, will implementing these standards not impose excessive administrative and other burdens on developing country governments, especially the poorer ones, which have more limited resources and expertise? To help deal with the third problem, appropriate technical assistance - particularly for the poorer countries - is essential.

**Limits of this approach, due to inherent problems of asymmetries of information**

Clearly, improved information, along the lines of the changes described above, will be welcome and useful, contributing to a better market performance. However, improved information on developing countries will not by itself avert crises. First, information available to financial markets will never be perfect and information asymmetries will always exist. Secondly it is not clear that better information will be sufficient for financial markets to function well, as the key issue is how information is processed and acted upon. Phenomena such as euphoria and herding (see for example, Griffith-Jones, 1999) imply that "bad news" are ignored in periods of "boom" and magnified in periods of "bust", with the reverse being true for "good news". Thirdly, better information on developing countries has to be complemented by equally important improved information on international financial markets.

As regards the first point, there is both clear theoretical analysis and practical experience which shows that information will always be imperfect, and that this may cause or contribute to financial crises. A clear forerunner of much of the imperfect information literature was Keynes, who in Chapter 12 of the General Theory stressed "the extreme precariousness of the basis of knowledge on which our estimates of prospective yields have to be made". The seminal contributions in modern analysis of asymmetries of information and their particular significance for financial markets, have come from Stiglitz. Most recently, Eichengreen (1999) has rather strongly summarised the limits of improved information for crises prevention: relying excessively on improved transparency "underestimates the extent to which information asymmetries are intrinsic to financial markets.... It is unavoidable that borrowers should know more than lenders about how they plan to use borrowed funds. This reality is a key reason why banks exist in market economies Bank fragility is inevitable. The advocates of information-related initiatives mislead when they assume the problem away".

Indeed, sophisticated and increasingly informed financial markets have continued to be extremely (and even increasingly) volatile. This has occurred even in some of the most developed economies in the world, where serious problems and even crises have occurred in

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2 I thank Gerry Helleiner for this point.
3 See, for instance, the classic paper by Stiglitz and Weiss (1981).
their banking systems, even though they had the highest ratings on transparency, as illustrated by the banking crises in Scandinavian countries (Bhattacharya and Miller, 1999; Stiglitz and Bhattacharya, 1999).

One very important reason for imperfect information is the fact that much of the relevant information to which the market reacts comes only with a lag, and depends on macro-economic conditions not entirely known in advance (even though the changes in macro-economic conditions may be partly or largely determined by the aggregate effects of the behaviour of financial agents). For example, some of the lending or investment decisions made in East Asia before the 1997 crisis may have been unsound, but the magnitude of the losses associated to them were even more determined by the major macro-economic shocks that these regions experienced, whose large magnitude was probably unpredictable and indeed these shocks were largely unpredicted. Increasing information that may thus be relevant to improve micro-economic market efficiency may do little to reduce macro-economic volatility (Ocampo, 1999). Particularly as regards macro-economic information, markets are necessarily imperfect when time is involved, as the information necessary to correct such “market imperfections” will never be fully available.

Secondly, there are problems as regards the processing of information. As pointed out above, the key issue is that increasingly investors (and lenders) are concerned, not with what an investment is really worth to a person who buys it for keeps, but with what the market will value it at in a few hours or days. The concept behind this was perhaps best captured by Keynes’ “beauty contest”, in which each actor tries to interpret what the average opinion in the market is. To the extent that this is true, available information on developing countries will be less important than how the average of the market is likely to perceive it. The interrelation of the “information” that financial actors manage at any particular time – or rather, of the opinions and expectations that are formed from such information – is central to the rich contemporary literature on self-fulfilling booms and busts.

Micro-economic factors, on how financial firms and banks operate, reinforce such problems. This may be related both to costs and to firm organisation. A board of a financial institution deciding to invest or lend to a particular country may not be able (or willing) to take account of the rich information available in the research departments of that institution⁴. Smaller banks, with small research departments, tend to rely even less on their internal expertise, and follow even more decisions of other banks. As a result, changes in the opinions of those investors that are considered to be “informed” may lead to overreactions by non-informed ones, who rely on the formers’ lead to make their decisions (Calvo, 1998).

A key problem is that changes in opinion can occur without any significant change of underlying fundamentals; this occurs because basically the same information about a country may be interpreted totally differently at different times, due to factors such as the “mood of the

⁴ A recent survey of banks by the Bank for International Settlements showed that most of them took decisions without taking much notice of information available in research and other departments even within their own bank.
markets”, events in other economies, etc. Also, “small news” that do not alter fundamentals, may affect market perceptions dramatically. The importance of “small news” and its potential impact on changes in market perceptions is magnified in a world of dramatically improved communications and 24-hour trading.

Some concern has even been expressed that, in some cases, information disclosure could lead to more, and not less, variability in the price of an asset (Stiglitz and Bhattacharya, 1999). Lack of information may serve to "average" good and bad news; as a consequence, it could even be the case that improved capabilities of processing and transmitting certain information could increase volatility. However, empirical evidence on this is inconclusive, and further research is required.

Overall, we can conclude that, though on the whole very helpful and important, improved information on developing countries will by itself be necessary but clearly not sufficient to prevent future crises, and that far stronger actions are required. This is increasingly – though slowly – being recognised by the international community. A third problem is that, as pointed out above, better information on developing countries has to be complemented by better information on international financial markets available to policy-makers.

Providing additional information on markets to developing countries
Indeed, particularly during the crisis that started in Asia, emerging country policy-makers (and specifically emerging country Central Banks) have found important limitations in the essential information available on the functioning of international capital and banking markets. The type of information required is both on more long-term structural changes in these markets, but particularly on almost day to day changes in the functioning of markets – and their key actors – globally and regionally.

In the same way that the IMF has led the way in improving information – and its dissemination – on emerging market economies, particularly useful to markets, a parallel symmetric effort needs to be done to gather and provide timely information on market evolution to emerging market policy-makers; this task should perhaps be led by the BIS, and coordinated by the newly created Forum for Financial Stability, though inputs from other institutions, e.g. the IMF, the private sector (e.g. Institute of International Finance), would be very valuable. Though possibly not giving it sufficient emphasis, suggestions in the October 1998 G-22 Report of the Working Group on Transparency and Accountability did provide important elements for this task. These suggestions relate not just to better statistics on international banks’ exposures, but also on “compiling data on international exposures of investment banks, hedge funds and other institutional investors”; the latter would include presumably pension funds and mutual funds. Furthermore, the growth of financial innovations, such as over-the-counter derivatives, while designed to facilitate the transfer of market risk and therefore enhance financial stability, have also made financial markets more complex and opaque. This has created difficulties in monitoring patterns of activity in these markets and the distribution of risks in the global

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5 Interview material; own experience
financial system for regulators, central banks, market participants and other authorities, including particularly in developing countries.

In response to this situation, the Euro-Currency Committee at the BIS has drawn up a framework for the regular collection of statistics on over-the-counter derivatives markets on the basis of reporting by leading market participants. Such efforts to improve transparency, particularly in relation to derivatives, and on highly leveraged institutions (such as hedge funds), are widely welcomed. However, this sector is constantly evolving and there is a concern that regulatory reporting will never be able to keep pace with this complex and dynamic markets. Difficulties are made greater by the fact that there are already many gaps in reporting derivatives and activities of institutions like hedge funds; it would seem appropriate for major Central Banks and the BIS to attempt to improve registration of derivatives and institutions like hedge funds, by making it obligatory. It seems essential that developing countries – including representatives from the poorer countries – should participate in the relevant Working Groups where information needs are discussed and decided, so that their information needs on markets are also fully considered.

Given the speed with which markets move, it seems particularly important that the frequency with which relevant data is produced is very high (and possibly higher in times of market turbulence, when it becomes particularly crucial), and that dissemination is instant to all countries’ Central Banks. Indeed, a special additional service could be provided by the BIS, in which it would play the role of clearing house of information. For this purpose, it could draw not just on information it can gather directly from markets, but by collecting and centralising information on their markets that individual Central Banks have, and where the aggregate picture is not easily available to any individual Central Bank. This could possibly include both quantitative and qualitative information. Via the internet, the BIS could standardise the information requirements, collect the information, aggregate it, and disseminate it rapidly to all central banks, as well as to other relevant institutions. Such a service would be of the greatest usefulness to developing country policy-makers, especially immediately before and during crises; however, it would naturally also be very valuable to developed country policy-makers and international institutions (including the BIS itself) in handling crisis prevention and management.

To summarise, crucial information on capital and banking markets available to policymakers, especially in LDC’s is clearly insufficient, especially just before and during currency crises.

The BIS (and the Forum for Financial Stability) seem well placed to build on the useful information they already provide, and their network of links with central banks, securities’ regulators and markets by expanding it in two directions: i) broadening coverage, for example to include more information on institutional investors and in rapidly growing instruments, such as derivatives and ii) increasing significantly frequency of information, to provide timely inputs to policy-makers on rapid changes in banking and financial markets’ trends.

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6 Interview material.
This exercise would be in some ways symmetrical to the efforts being led by the IMF to improve information available on developing countries, mainly of use to markets; the proposed activity would improve information on markets, mainly for the use of country and international policy-makers.

If approved, a meeting or a set of meetings, including representatives from LDCs, working with BIS staff or the appropriate BIS Committees, seems appropriate for effective implementation. Representatives of LDC’s Central Bank could for example appropriately present initial ideas on desirable additional information, especially from a developing country perspective, that the BIS (or more broadly the Forum for Financial Stability) could provide, its frequency, etc. The feasibility and value of such additional information could then be explored.

Better regulations, nationally and internationally

National regulations

The experience of developing countries at different levels of development indicate that the management of capital account volatility requires: a) consistent and flexible macroeconomic management; b) strong prudential regulation and supervision of domestic financial systems; and c) equally strong “liability policies”, aimed at inducing good debt profiles, public and private, domestic and external. Moreover, despite the traditional emphasis on crisis management, the focus of authorities should rather be the management of booms, since it is in the periods of euphoria from capital inflows and trade expansion and terms of trade improvement that crises are incubated. Crisis prevention is thus, essentially, an issue of adequate management of boom periods.

Regulation of capital inflows may also be essential to avoid unsustainable exchange rate appreciation during booms, particularly in the face of improved terms of trade in commodity-exporting countries. Some appreciation may be inevitable and even an efficient way to absorb the increased supply of foreign exchange, but an excessive revaluation may also generate irreversible “Dutch disease” effects. Regulations of capital inflows thus play an essential role in open developing economies as a mechanism to allow monetary and domestic credit restraint, as well as to avoid unsustainable exchange rate appreciation during booms. The macroeconomic role of regulation of inflows has, unfortunately, received much less attention in discussions than the issue of regulation on outflows during crises; they are, however, more important, as they are associated to the essential issue of crisis prevention.

The experience of many countries indicates that strong domestic prudential regulation and supervision are essential to avoid costly financial crises. The experience of both developing and industrialized countries indicates that financial crises are, indeed, very costly, both fiscally and in terms of economic activity, particularly if they are mixed with currency crises (the so-

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called “twin” crises). Given the role of the domestic financial system in the intermediation of external lending, prudential regulation and supervision also play an essential role in managing the risks associated to capital account booms.

The essential role of domestic financial regulation and supervision is to guarantee the solvency of domestic financial intermediaries, by guaranteeing capital requirements adequate to the risks that financial intermediaries face, avoiding excessive risk taking, including an excessive concentration of risks, and requiring that loan losses are adequately accounted for. However, it has become increasingly clear that in the face of financial volatility, domestic financial regulation and supervision should also guarantee an adequate liquidity of financial intermediaries, as the link between liquidity and solvency problems are stronger than traditionally perceived. Thus, avoiding significant mismatches between the term structure of assets and liabilities, and establishing higher reserve or liquidity requirements for the short-term liabilities of the domestic financial system also play an essential role in domestic financial management.

Prudential regulation and supervision must take into account not only the micro but also the macroeconomic risks typical of developing countries. In particular, due account should be taken of the links between domestic financial risk and changes in key macroeconomic policy instruments, notably exchange and interest rates. The risks associated to the rapid growth of domestic credit, to currency mismatches between assets and liabilities, to the accumulation of short-term liabilities in foreign currencies by financial intermediaries and to the valuation of fixed assets used as collateral during episodes of asset inflation must be adequately taken into account. Moreover, given these macroeconomic links, prudential regulations should be stricter in developing countries, and should be strengthened during years of financial euphoria or terms of trade improvements to take into account the increasing risks in which financial intermediaries are incurring. These links also imply that contractionary monetary or credit policies during booms, particularly higher reserve or liquidity requirements and ceilings on the growth of domestic credit, may be strongly complementary to stricter prudential regulation and supervision; indeed, this would imply counter-cyclical elements in both monetary and regulatory policies are desirable for small economies, subject to large trade or capital account shocks.

In the case of the public sector, direct controls by the Ministry of Finance are the adequate instrument of a liability policy. More indirect tools are necessary to induce a better private debt profile. Again, direct exchange controls may be the appropriate instrument. An interesting alternative are reserve requirements on capital inflows, such as those used by Chile and Colombia in the early 1990s; indeed, as in both countries reserve requirements can be substituted for a payment to central banks of the opportunity cost of the said requirement, they are in effect a tax on inflows. A flat tax has a positive effect on the debt profile, as it induces longer-term borrowing, for which the tax can be spread over a longer time frame. This has been generally recognized in recent controversies. The effects of this system on the magnitude of flows have been subject to a more heated controversy. In any case, to the extent that elusion is

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8 See, in particular, IMF (1998), ch. IV.
costly and that short and long-term borrowing are not perfect substitutes, the magnitude of flows is also affected.\textsuperscript{9} If this is the case, the system operates both as a “liability” and a macroeconomic policy tool. A basic advantage of this instrument is also that it is targeted at capital inflows, and it is thus a preventive policy tool.

Simple rules such as the Chilean-Colombian system can also play a very positive role. Any such system must also meet an additional requirement: it must have the adequate institutional backing. A permanent dynamic system, which is strengthened or loosened throughout the business cycles is preferable to the alternation of free capital movements during booms and quantitative controls (e.g. prohibitions on outflows) during crises. Indeed, the latter system may be totally ineffective if improvised during a crisis, simply because the administrative machinery to make it effective is not operative and thus leads to massive evasion or elusion of controls. Such a system is also procyclical and leaves aside the most important lesson learnt on crisis prevention: avoid overborrowing during booms and thus target primarily capital inflows rather than outflows.

\textbf{International measures}

Clearly an important part of the responsibility with discouraging excessive reversible inflows – as well as managing them – lies with the recipient countries. However, the large scale of international funds – compared to the small size of developing country markets - leads us to question whether measures to discourage excessive short-term capital inflows by recipient countries are enough to deal with capital surges and the risk of their reversal. Three strong reasons make complementary action by source countries and internationally necessary. Firstly, not all major recipient countries will be willing to discourage short-term capital inflows, and some may even encourage them. Thus the tax and regulatory measures taken, for example, to encourage the Bangkok International Banking Facility, encouraged short-term borrowing. Secondly, even those recipient countries which have deployed a battery of measures to discourage short-term capital inflows have on occasions found these measures insufficient to stem very massive inflows. Thirdly, if major emerging countries experience attacks on their currencies, which also result in difficulties to service their debt, they will be forced to seek large official funding. As a consequence, there is a clear need for international and/or source country regulation that will discourage excessive reversible capital inflows. If this is not developed, international private investors and creditors might continue to assume excessive risks, in the knowledge that they will be bailed out if the situation becomes critical. This is the classical moral hazard problem.

The Asian crisis - and its repercussions worldwide - clearly demonstrated that it is necessary to strengthen source country regulations, coordinate them globally and fill important regulatory gaps.

The crisis also provoked a serious debate on how supervision and regulation of the international financial system could be strengthened in order to help prevent economic crises of

this sort happening again in the future. The debate has partly focused on whether existing arrangements should be extended and improved, or whether there is now a need for new institutions to cope with the increasingly globalised financial system, so as to achieve better the necessary improvement of international financial regulation and supervision.

At the more institutionally radical end of the scale, there have been proposals for the creation of a new international body such as a World Financial Authority (Eatwell and Taylor, 1998) or a Board of Overseers of Major International Institutions and Markets (Kaufman, 1992). Such a body would have wide-ranging powers for the oversight of regulation and supervision globally.

The other approach has been to develop and build on existing institutional arrangements. The virtues of this approach was the greater ease, both technically and especially politically, to move forward on this. Indeed, the Forum for Financial Stability, which is described below, has been created and has started to operate, with impressive speed; this seems one of the most positive steps towards a new international financial architecture.

Both the Canadian and the British government put forward proposals based on this approach in 1998. In the autumn of 1998, Chancellor Gordon Brown and Secretary of State Clare Short proposed a standing committee for global financial regulation to coordinate the multilateral surveillance of national financial systems, international capital flows and global systemic risk. It was proposed that the committee would bring together the World Bank, the IMF, the Basle Committee of the BIS and other regulatory bodies on a monthly basis to develop and implement ways to ensure that international standards for financial regulation and supervision were put in place and properly coordinated.

a. The Financial Stability Forum

In October 1998, the G-7 finance ministers and central bank governors approved this idea in principle and asked Hans Tietmeyer, then president of the Bundesbank, to develop the UK proposal and more generally consider the cooperation and coordination between the various international regulatory and supervisory bodies and to make recommendations for any new arrangements. Tietmeyer’s report, released in February 1999, outlined areas where improvements to current arrangements were necessary, but stated that ‘Sweeping institutional changes are not needed to realise these improvements’ (Tietmeyer, 1999). Instead it was proposed that a Financial Stability Forum, which would meet regularly to discuss issues affecting the global financial system and to identify actions needed to enhance stability, be convened. The Forum was formally endorsed by finance ministers and central bank governors from the G-7 at their February meeting in Bonn, and met already for the first time in the spring of 1999.

The Tietmeyer report had correctly outlined three main areas for improvement to current arrangements which have been highlighted by recent events in international financial markets: a) identify vulnerabilities in national and international financial systems and sources of systemic risk and to identify effective policies to mitigate them b) ensure that international rules and
standards of best practice are developed and implemented, and that gaps in standards are identified and filled and c) improved arrangements are needed to ensure consistent international rules and arrangements across all types of financial institutions.

The Financial Stability Forum will be limited in size to 35 members, in order to allow for an effective exchange of views and decision making. Each G-7 country will have three representatives on the Forum, from the finance ministry, central bank and supervisory authority. The G-7 stated that while the Forum will initially be limited to G-7 countries, it is envisaged that other national authorities, including from emerging market countries, will join the process at some stage. The International Monetary Fund (IMF) and the World Bank will have two representatives each, as will the Basle Committee on Banking Supervision, the International Organisation of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS). The Bank for International Settlements (BIS), the Organisation for Economic Co-operation and Development (OECD), the two BIS Committees will all have one representative on the Forum.

The Forum will be chaired by Andrew Crockett, general manager of the BIS, for the first three years and it will have a very small secretariat in Basle. The Forum will initially meet twice a year, beginning in the spring of 1999. One of the key aims of the Forum will be to better coordinate the responsibilities of the national and international authorities and supervisory bodies, and to pool the information held by these various bodies, in order to improve the functioning of markets and reduce systemic risk. Subsequent to its meeting in Washington on 14th April, the Financial Stability Forum has defined three ad hoc working groups, to tackle recommendations on three subjects defined as key:

a) to recommend actions to reduce the destabilising potential of institutions employing a high degree of leverage (HLIs) in the financial markets of developed and developing economies; this group will be chaired by Mr Howard Davies, Chairman of the UK Financial Services.

b) to evaluate measures in borrower and creditor countries that could reduce the volatility of capital flows and the risks to financial systems of excessive short-term external indebtedness; this group will be chaired by Mr Mario Draghi. Reportedly, amongst developing countries, Chile and Malaysia will participate.

c) to evaluate the impact on global financial stability of the uses made by market participants of financial offshore centres, and the progress made by such centres in enforcing international prudential standards and in complying with cross-border information exchange agreements. As regards offshore centres, reportedly an assessment will be made of the additional efforts required to avoid under-regulation or inappropriate disclosure in offshore centres contributing to global financial instability. This group will be chaired by Mr John Palmer, Superintendent of Financial Institutions.
It is important to stress that the working groups comprise officials of developed and developing market economies, international financial institutions and supervisory groupings, and will draw on work completed or under way in various public and private sector forums. It is interesting that senior officials from developing countries have been included, where their expertise is seen as particularly relevant. For example, the group that will study measures to study volatility of capital flows includes senior representatives from Chile and Malaysia, two countries that have implemented measures to curb inflows and outflows (Malaysia for both, and Chile for inflows).

The setting up of the Financial Stability Forum is clearly a very necessary, and valuable first step towards improving the coordination and cooperation of the various bodies which work towards improving the way markets work in order to improve global stability. The question lies, however, in whether the Forum, as it has been proposed, will be a representative enough and strong enough body to address all these complex issues.

First, the omission of any developing country authorities in the initial years of the Forum itself appears to be an important error. It has been increasingly accepted, especially since the Mexican peso crisis and the current international financial crisis, that international finance is more and more globalised, that developing countries are important actors in this globalised financial system, and that currency crises in LDCs pose both systemic threats to the international financial system and threats to their development prospects. The experiences of developing countries, will not be directly represented at the Forum itself. Representation of developing countries on the Forum would be desirable for both legitimacy reasons, and because it would provide the body with a wider range of expertise and perspectives. However, the representation of developing countries in the as-hoc Working Groups is clearly a positive development.

Ways could easily be found to include developing countries in the Forum without making it too large. If three developing countries representatives were included, the membership of the Forum would rise from 35 to 38, that is by less than 10%. Developing country representatives, from countries with large levels of private capital inflows or who have major financial centres could for example be chosen on a regional basis; there could be one Asian, one Latin American and one African. This would ensure also that the interests of poorer countries would also be represented. These representatives could be appointed for a fairly short period (e.g. 2 years) and then rotated. This type of representation by developing countries has been working rather well in other contexts, for example in the Boards of the Bretton Woods institutions. It has also been suggested that not all G-7 countries would need to be included if it was felt that size needed limiting. For example, all G-7 countries, which have large financial centres, could be included as permanent members; other G-7 countries could be rotated.

The Forum for Financial Stability is a very important initiative, that hopefully will reduce vulnerabilities in the international financial system, by promoting coordination and cooperation among G-7 regulators, central bankers and international financial institutions. Adding a small

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10 Interview material
representation from developing countries to the Forum would increase those countries’ commitment to its aims, as well as add valuable insights to its decision-making process. It would seem to be beneficial to all involved.

Second, doubts have been voiced over the institutional strength of the new Financial Stability Forum. With a very small secretariat in Basle (currently it has only three staff members), meeting only twice yearly, and no power of enforcement, will the Forum have the sufficient institutional muscle to deal with the tasks that have been identified? Can its response be speedy and agile enough to a rapidly changing international private system? The setting up of the Forum represents a significant enhancement of the system of global regulation by agreement and peer pressure that has been shown to work reasonably well in the context of the Basle Committees of the BIS (Griffith-Jones, 1999). International cooperation at the BIS has always been based on home country control, where sovereignty remains at the level of the nation-state, and agreements are reached through negotiation and then implemented, where necessary, through national legislation or regulation. Countries which are not represented at the Basle Committee have also adopted some of their directives (most notably, the capital adequacy standards). However, in the medium term, in a world of open financial markets, an international body whose Board meets regularly and has the power to make and enforce policy may well be needed (Eatwell, 1999). This would point towards a body more akin to some kind of World Financial Authority, which would be endowed with executive powers along the lines of a WTO for finance.

In the meantime, however, the Financial Stability Forum is a very important step in the right direction. Time will tell whether this body is sufficient to promote international financial stability, and to fill the important gaps in financial regulation which undermine such stability.

b. Filling regulatory gaps

There are three categories of flows and institutions to emerging markets where additional international and/or source country regulation and supervision may be particularly necessary, as these flows seem insufficiently regulated and their surges, as well as outflows, have played a particularly prominent role in sparking off recent currency crisis; the latter would seem to occur particularly because they are reversible. One of these are short-term bank loans (particularly important in the Asian crisis); the second are easily reversible portfolio flows, made by institutional investors, such as mutual funds (especially important in the Mexican peso crisis but also important in East Asia); the third are activities by hedge funds and more generally highly leveraged institutions, relating in particular to different types of derivatives.

As discussed above, the Forum for Financial Stability (FSF) will examine in its Working Groups issues relating to short-term bank loans and to highly leveraged institutions. However, it would also be desirable for the FSF to examine issues relating to easily reversible portfolio flows made by institutional investors such as hedge funds.
Bank loans

International bank loans (including short-term ones) are already regulated by industrial countries’ Central Banks; these national regulations are co-ordinated by the Basle Committee. However, existing regulations were not enough to discourage excessive short-term bank lending to several of the East Asian countries, whose reversal played a major role in triggering of crises in those countries. A key reason for such high short-term bank lending to East Asia was that till just before the crisis most of these East Asian countries (and particularly countries like South Korea) were seen by everybody including regulators as creditworthy. Another, important reason has been current regulatory practice, which has a bias in favour of short-term lending. For example, for non-OECD countries, loans of residual maturity of up to one year have a weighting of only 20 per cent for capital adequacy purposes, whilst loans over one year have a weighting of 100 per cent for capital adequacy purposes. This was done to reflect the fact that is easier for individual banks to pull out from renewing short-term loans. However, as a result of this rule, short-term lending is significantly more profitable for international banks. Therefore, to banks’ economic preference for lending short-term, especially in situations of perceived increased risk, is added a perverse regulatory bias that also encourages short-term lending. The initial intention was to protect banks, and their liquidity, by encouraging more short-term lending. An overall increase in short-term loans, however, makes countries more vulnerable to currency crises and therefore, paradoxically, banks more vulnerable as well, to risk of non-payment of short-term loans.

It is interesting that soon after the Asian crisis (around April 1998), clear proposals emerged (Greenspan, 1998, see also Griffith-Jones with Kimmis, 1998) to increase the capital charge through the assignment of a higher risk weight to short-term interbank credits than the 20 per cent assigned under the Basle Capital Accord, so as to reduce the excessive incentive towards such short-term loans. However, even though this change seemed to have very broad support, progress was not made for a year on it as a stand-alone proposal (IMF, 1999; interview material). Instead, a review on this issue was placed within the context of a comprehensive reassessment of Basle treatment of credit risk, for which a special task force was created. Unfortunately, a totally separate issue (linked to the capital adequacy required for mortgages lent by German banks) delayed overall agreement for at least a year, on revision of capital adequacy rules (Financial Times, May 14, 1999). Questions need to be raised, therefore, not just on appropriate technical measures to build a new international financial architecture, but on mechanisms for speeding up the process through which decisions - especially those on which there is agreement - can be quickly taken. This should be particularly so for the case where clear institutional mechanisms already are in place (in this case the Basle Committee of Bank Supervisors) that should allow rapid decision-making to take place.

Portfolio flows

As regards portfolio flows to emerging markets, there is an important regulatory gap, as at present there is no regulatory framework internationally, for taking account of market or credit risks on flows originating in institutional investors, such as mutual funds (and more broadly for flows originating in non-bank institutions). This important regulatory gap needs to be filled, both to protect retail investors in developed countries and developing countries from the negative effects of excessively large and potentially volatile portfolio flows.
The East Asian crisis confirms what was particularly clearly visible in the Mexican peso crisis (Borio, 1998; Griffith-Jones, 1998). Institutional investors, like mutual funds, given the very liquid nature of their investments can play an important role in contributing to developing country currency crises. It seems important, therefore, to introduce some regulation to discourage excessive surges of portfolio flows. This could perhaps best be achieved by a variable risk-weighted cash requirement for institutional investors, such as mutual funds. These cash requirements would be placed as interest-bearing deposits in commercial banks. Introducing a dynamic risk-weighted cash requirement for mutual funds (and perhaps other institutional investors) is in the mainstream of current regulatory thinking and would require that standards be provided by relevant regulatory authorities or agreed internationally. The guidelines for macro-economic risk, which would determine the cash requirement, would take into account such vulnerability variables as the ratio of a country’s current account deficit (or surplus) to GDP, the level of its short-term external liabilities to foreign exchange reserves, the fragility of the banking system, as well as other relevant country risk factors. It is important that quite sophisticated analysis is used, to avoid simplistic criteria stigmatising countries unnecessarily. The views of the national Central Bank and the Treasury in the source countries and of the IMF and the BIS should be helpful in this respect. The securities regulators in source countries would be the most appropriate institutions to implement such regulations, which could be co-ordinated internationally by IOSCO, probably best in the context of the Forum for Financial Stability.

The fact that the level of required cash reserves would vary with the level of countries’ perceived “macro-economic risk” would make it relatively more profitable to invest more in countries with good fundamentals and relatively less profitable to invest in countries with more problematic macro or financial sector fundamentals. If these fundamentals in a country would deteriorate, investment would decline gradually, which hopefully would force an early correction of policy, and, a resumption of flows. Though the requirement for cash reserves on mutual funds’ assets invested in emerging markets could increase somewhat the cost of raising foreign capital for them, this would be compensated by the benefit of a more stable supply of funds, at a more stable cost. Furthermore, this smoothing of flows would hopefully discourage the massive and sudden reversal of flows that sparked off both the Mexican and the Asian crises, making such developmentally costly crises less likely.

Given the dominant role and rapid growth of institutional investors in countries such as the US, the UK and France, this proposal – for a risk-weighted cash requirement on mutual funds – could possibly be adopted first in those countries, without creating significant competitive disadvantages soon after international harmonisation would have to be introduced. However, an alternative route would be for such measures to be studied and implemented internationally being discussed initially within IOSCO, and/or in the broader context of the Forum for Financial Stability. International coordination of such a measure would prevent investments by mutual funds being channelled through different countries, and especially off-shore centres, that did not impose these cash requirements (the latter point draws on communication with the Federal Reserve Board).
Such IOSCO international guidelines would be formulated through international consultations similar to those employed by the Basle Committee in developing the “Core Principles for Effective Banking Supervision”. The guidelines could be developed by a working group consisting of representatives of the national securities' regulatory authorities in source countries together with some representation from developing countries, in the context of IOSCO. Due account should be taken of relevant existing regulations, such as the European Commission’s Capital Adequacy Directive.

Finally, it is important to stress that additional regulation of mutual funds should be consistent with regulation of other institutions (e.g. banks) and other potentially volatile flows.

**Highly leveraged institutions**

Further urgent study is required to detect and cover any other existing monitoring and/or regulatory gaps, e.g. as relates to instruments such as derivatives and institutions such as hedge funds. Careful analysis – both technical and institutional – is required on how hedge funds and other highly leveraged institutions can best be regulated to reduce their impact on magnifying volatility of capital flows, exchange rates and stock markets in developing countries, and the negative effect that this volatility has on development and on poverty. It is encouraging that there is a growing consensus, as reflected for example in the January 1999 Report by the Basle Committee on “Banking Supervision, on Banks’ Interactions with highly leveraged Institutions, (HLIs)”, that HLIs can pose important risks both to direct creditors and, under certain market conditions, to the financial system as a whole.

An additional crucial concern – of the impact of HLIs on magnifying volatility in developing countries – has not yet been sufficiently studied and accepted, nor have measures designed to deal specifically with this issue been proposed internationally. However, policy responses to address risks posed by HLIs to creditors and the financial system as a whole will also help reduce negative impact on developing countries.

It is firstly important to stress that the problem does not just relate to hedge funds, but to other highly leveraged activities or institutions, such as proprietary desks of investment banks. HLIs can be defined as having three characteristics: a) they are subject to little or no regulatory oversight, as a significant proportion operate through offshore centres, b) they are subject to limited disclosure requirements, and often their operations are very opaque, c) they take on significant leverage.

There are three sets of responses that can be used to address risks posed by the HLIs. Often, they are presented as alternatives. However, it would seem better to consider them as complementary.

The first response is indirect, through the major counter-parties of HLIs (mainly banks and securities houses). This can be done by promoting sounder practices in the way banks and securities houses assess risks when they deal with hedge funds and other HLIs. However, further actions by supervisory authorities also seem desirable. In particular it seems desirable for
supervisors to impose higher capital requirements on lending or other exposures of banks to HLIs, to reflect the higher risks involved in such exposures, due to HLIs' opacity, high leverage and the fact they are not regulated. It may also be desirable for supervisors to either formally or informally, prohibit banks from lending to a particular class of risky counter-party. Such measures may not only protect banks, but could also possibly stimulate HLIs to manage risks in a more responsible way.

A second avenue, which is clearly complementary with the first, is to increase transparency on total exposures to HLIs by all financial institutions. One possibility would be an extension of the concept of a credit register for bank loans (along the model of the French "central des risques", which provides banks access to the aggregate amount of bank lending to each company). Such a register would collect, in a centralised place total exposures (both on and off balance-sheet positions) of different financial intermediaries to single counterparties, such as major hedge funds. Counterparties, supervisors and central banks (both of developed and developing countries) could then get information about total indebtedness of such institutions, which would help them assess risks involved far more precisely. For this purpose, the information would have to be both timely and meaningful (especially to take account of rapid shifts in HLIs positions). It would seem best if such a register would be based at the BIS itself or at the Basle Committee on the Global Financial System (formerly the Euro-Currency Standing Committee) which already has experience in similar information gathering.

A third avenue is to directly regulate hedge funds and other highly leveraged institutions. Such direct regulation could take a number of forms, including licensing requirements, minimum capital standards and minimum standards for risk management and control. In its recent report, the Basle Committee on Banking Regulation has argued that such a regulatory regime should focus on the potential to generate systemic risk by HLI activities due to their excessive size and risk-taking, which could endanger financial stability. However, if as seems probable, HLIs also have additional negative effects on increasing volatility of exchange rates in developing countries, this concern should also be addressed in attempts at their regulation.

There is at present more support for the first two forms of dealing with HLIs and relatively less support for their direct regulation, even though the latter would deal with the problem in a more direct and straightforward manner.

The opposition to such direct regulation is presented as based on practical grounds. For example, it is argued that HLIs could restructure themselves so they escape any regulatory definition that may exist. However, this problem can be overcome by an appropriate system of monitoring and policing; its costs would surely outweigh the benefits of alleviating large potential systemic risks, as well as risks of currency instability in developing countries! The most frequent argument against direct regulation of hedge funds is that they would be able to circumvent such regulations, because these institutions either are or could move easily offshore.

This problem can either be tackled by accepting the absurd existing status quo (and incurring continued high costs of risk of major instability) or raising the issue of extending that
and other regulation to offshore centres. Indeed, if global supervision and regulation is genuinely accepted as essential in today’s world of globalised financial markets, there can be no justification for “no-go” areas, where such regulations could be evaded or undermined. Both as regards provision of information, and as regards global regulation of institutions such as hedge funds, it is essential that off-shore centres comply with international standards. If the G-7 countries in particular backed this clearly, and if developing countries supported it, a political initiative in this respect should be both effective and useful.

More generally, further work is required to gain a better understanding of recent changes in global credit and capital markets, and – more specifically – of the criteria used by different categories of market actors – including banks, mutual funds, hedge funds and others – to go in and out of countries as well as the incentives that encourage particular patterns of market actors’ behaviour that contribute to speculative pressures on individual countries and to contagion to other countries. A better understanding of behavioural patterns and of trends in outflows could help design measures – to be taken by individual firms, by parts of the financial industry via self-regulation, by regulators and/or by governments (e.g. via tax measures) – to discourage market imperfections, like disaster myopia and herding, that contribute to currency crises.

It can be concluded that a package of measures need to be taken to make currency crises in emerging markets far less likely, and therefore ensure the efficient operation of the market economy in emerging markets, which should be a basis for sustained development. The objective of crises avoidance seems to require some discouragement and/or regulation of excessive and potentially unsustainable short-term inflows. Such measures would be most effective if they are applied both by source and recipient countries (though the main responsibility lies with recipient countries), if these measures avoid discouraging more long-term flows – which on the contrary need to be encouraged – if the rules designed are simple and clearly targeted at unsustainable flows and, particularly, if they are complemented by good policies in the emerging economies.

Provision of official liquidity in times of crisis

The role of IMF and other institutions in official liquidity provision

The need for liquidity provision in times of crisis is a well-accepted principle. It may be called the principle of the “emergency financier”, to differentiate it from the role that a central bank plays at the national level as a “lender of last resort”, which is not exactly matched by the IMF. Particularly, the Fund provides exceptional lending but certainly not liquidity, a fact which is reflected in the lack of automaticity in the availability of financing during crises. Such emergency financing role has led, as we saw in Section I, to the provision of anti-cyclical lending by the IMF, matched in some major “rescue packages” by bilateral financing from major countries, in addition to their contribution to IMF’s agreements to borrow. Some major advances during the recent international financial crises were the significant increase in IMF resources through: a) a new quota increase and the New Arrangements to Borrow, finally effective in 1998;

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11 This important distinction is made by Helleiner (1999).
b) the launching of the new window in December 1997, to finance exceptional borrowing requirements during crises; and c) the creation of the Contingency Credit Line (CCL) in April 1999 to provide financing to countries facing contagion. The CCL is analysed in more details in the following section.

**Timing of provision of official liquidity, the new contingency credit lines**

The CCL has responded to the strong demand for the IMF to leave aside the principles of “fundamental disequilibrium” of the balance of payments, on which it was built, to finance countries in difficulties before and not after international reserves are depleted. This is an essential requirement in the era of rapid capital outflows that can destabilize economies in a matter of days, a lesson that the international community learnt during the Mexican, Asian and post-Asian shocks. It is also, above all, a response to the request for new credit lines to finance countries facing contagion. Although this problem is certainly not new, it has reached unprecedented levels in the current decade, which led finally to a strong request for support to countries facing contagion.

The CCL has been widely perceived as a significant move from the IMF in the area of crisis prevention for countries victim of contagion. The facility was implemented by the IMF in April 1999 as part of its ongoing work on strengthening the architecture of the international financial system and as a response to the increased need for liquidity provision for crisis prevention. The facility is a “precautionary line of defence readily available against future balance of payments problems that might arise from international financial contagion” (IMF, 1999a). To qualify, the increased pressure on the recipient country’s capital account and international reserves must thus result from a sudden loss of confidence amongst investors triggered by external factors.

Early provision of liquidity should help reducing external constraints on domestic monetary policy, increasing the level of reserves available for currency defence and relaxing the constraints on interest rates. It is thus a very important and positive step further as it should, in principle, reduce the chances of entering into a crisis.

The CCL differs from the Supplementary Reserve Facility (SRF) mainly because of the timing of disbursement. Indeed, the SRF is designed for countries already facing a financial crisis whereas the CCL is triggered early on, in a precautionary manner, for countries not facing a crisis at the time of commitment but rather fearing to be affected by contagion. The cost of the credit line, 300 basis points above the rate of charge on regular IMF drawings with a penalty of 50 basis points every six months, has been set up to reduce moral hazard on the debtor side and is the same as for the SRF. It should prevent countries from drawing on the line in “good” times.

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12 The SRF was implemented at the end of 1997 as a response to the Asian financial crisis. It provides financial assistance for exceptional balance of payments difficulties due to a large short-term financing need resulting from a sudden and disruptive loss of market confidence. Up to now, SRF loans have been made to Korea, $2.8 bn, Russia, $0.9 bn and Brazil. The lending terms for the SRF are similar to those for the contingency facility.
The CCL’s crucial aim is thus to reduce the chances of countries to be caught by contagion. Its way of functioning, to give leverage of conditionality to the IMF early on, is such that, ideally, countries should not suffer from contagion and thus need not draw on the line. Put differently, the CCL provides a strong incentive for countries to make sound policy choices that provide a stable economic and financial environment. The facility works as a two stage process, very much like an option that is bought in “normal times”. Its cost is the country’s compliance with four sets of criteria:

Adoption of strong policies

Member countries should have implemented a combination of policies that provide a stable economic environment such that in the absence of contagion, no IMF financing should be required. Economic stability together with financial sustainability should be evident. Special attention is paid to an economic and financial programme to be implemented within the period of examination.

Macro-economic performance

The article IV consultation is used as a benchmark for economic performance. An ongoing assessment of the country is also carried out once the consultation is over. This monitoring is used to assess the countries’ willingness to - and effectiveness in - adopting policy suggestions.

Advances in adhering to internationally accepted standards

This is an area which is still evolving as some standards have not been finalised yet (notably the codes of transparency in monetary and financial policy). Other standards include the subscription to SDDS, the Basle Core principles for bank supervision, the code of transparency of fiscal policy (See above). Countries need not necessarily meet all the standards but should prove some progress in adhering to them.

Relation with the private sector

The IMF stresses the importance of “constructive” relations with private creditors. These relations encompass management of external debt (limiting external vulnerability) and a number of arrangements with private creditors. Examples of arrangements given by the Fund include private sector CCL, call options in debt instruments (allowing debtors to extend maturities), a modification of bond covenants (see section on involving the private sector below), and domestic bankruptcy laws.

The monitoring of external vulnerability through indicators of sustainability such as the level of international reserves, the ratio of short term external debt in relation to reserves, and the exchange rate regime also are conditions. These conditions should help prevent Asian style crises in the future and therefore are very positive.

Once the above criteria are met and the CCL agreed, the country can exercise the option at any time but with one further restriction. An “expeditious” consultation is carried out by the Board to verify if the country is still eligible, before funds are disbursed.
However, the new credit line raises a number of issues, at least in five areas:

First, the question of the scale of liquidity provision. Formally, the size of the CCL is unlimited. This is imperative as very large amounts of liquidity might be required in times of major loss of confidence. The rationale of this argument is based on Bagehot’s rules, namely that, to perform well in a crisis, a Lender of Last Resort should lend quickly, freely and readily. However, in practice because of financial constraints, the Fund has disclosed a range of disbursement from 300 to 500% of member nation’s IMF quota\textsuperscript{13}. This limitation is problematic, as in a crisis it is the unlimited nature of contingency financing which is crucial. A limited facility could, in certain circumstances, accelerate outflows, as creditors "rush for the door" for fear it may close, if revenues run out.

Estimates from April 1999, based on the upper ceiling of 500% of quota, evaluate the CCL to be of an order of $20 bn for Brazil, $11 bn for Korea and $7.4 bn for Thailand. Non-affected countries like Argentina would receive up to $14 bn, Chile $5.8 bn, Mexico $17 bn, Hungary $7 bn and $12 bn in the case of South Africa (Davitte, 1999 and Chote, 1999). These amounts appear quite low and could turn out to be insufficient to fully absorb external shocks. For example, Brazil which accessed a financial package in some ways similar to the CCL but before its formal implementation, received more than twice the amount it is eligible for at present.

At the time of writing, no country had officially declared applying to the scheme although some policy makers had expressed their opinions on it. Mexican officials, for example, fear not to be eligible due to their current involvement with the IMF through a stand-by loan facility. Others have underlined the paradoxical situation of “good” countries not willing to be labelled with the CCL while countries in potential difficulty finding it very hard to comply with too stringent conditions.

Second, the special “activation” review by IMF Board - as the CCL is today structured - does not look necessary. Indeed, the eligibility conditions have been designed so that the CCL is drawn as rarely as possible. As a matter of fact, the implementation of strong macro policies and the adherence to international standards together with the building up of sound relationships with private creditors should, by themselves, protect countries from financial crisis triggered by the deterioration of domestic factors. If a given country complies with these criteria, then, the only possible reason why it could face a financial crisis is because of contagion.

Furthermore, the automatic triggering is critical to the good functioning of the CCL as it would give instantaneous access to new liquidity. Indeed, as seen recently in several cases, a loss of confidence can have major impacts in a very short period of time. A few hours or days might then have a determinant impact on the outcome of the crisis. The approval required by the Board,

\textsuperscript{13} In April 1999, the Fund had $76 bn in uncommitted resources plus $46 bn available under pre-arranged credit lines.
even if it were expeditious, would still not be fast enough and could allow large outflows of funds.

The automatic disbursement, if implemented, could be associated with a shorter repayment period, possibly six months. Countries that experienced liquidity crisis in the past usually required fairly large amounts of liquidity, extremely rapidly but for a brief period.

Third, it is still not very clear what will be the potential signalling effect on private investors of countries applying for the CCL but failing to meet the criteria or of countries losing their access to it. A certain degree of confidentiality could possibly dampen this effect. For example, information could only be disclosed on countries that have been accepted but not on those applying for it.

Fourth, as already mentioned, the facility is not open to countries with current or expected regular IMF financing. It could thus eliminate access to this type of financing to countries which are in a strong process of recovery from a past crisis but still have pending IMF credits.

Fifth, although the conditions defined by the IMF for pre-qualification should on the whole help avoid crises, there is a danger that some policy actions, specifically targeted at strengthening investors confidence might discourage rapid growth. And finally, there could be the risk that countries receiving a CCL would have too large a in inflows, due to excessive confidence from private investors.

So, despite significant advance, in practice the approved credit lines will continue to lack the full stabilizing effects that are expected from IMF interventions during crisis, as the negotiation process will continue to be cumbersome and funds may not be available to all countries that require them at the appropriate time and in adequate quantities. Equally important, funds available to the IMF for exceptional financing will continue to be short of the amounts required, as the experience of the 1990s indicates. This is obviously a crucial issue, as stabilizing effects will continue to be absent to the extent that the market judges that the intervening authorities are unable or unwilling to supply funds in the quantities required to stabilize speculative pressures. Moreover, under these conditions, national authorities may be forced to overreact, adopting a pro-cyclical stance, in an effort to generate confidence in private markets. For the world economy as a whole, this would be reflected in enhanced deflationary biases.

Well-funded IMF contingency financing is obviously the sine qua non of any reform effort. As bilateral financing and contributions to the IMF will continue to be scarce, the best solution could possibly be to allow additional issues of SDRs under critical financial conditions, to create the additional liquidity required. These funds could be destroyed once financial conditions normalize. This procedure would also create an anti-cyclical element in world

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liquidity management and would give SDRs an increasing role in world finance, a principle that developing countries advocated in the past and should continue to do so. Though technically very attractive, this proposal may face significant opposition, particularly as several of the major countries have been opposed to any issues of SDRs at all, which has implied that no issues have taken place for a very long time. A second best alternative would be to allow the IMF to raise in the market the resources needed to adequately fund contingency financing or to rely on Central Bank swap arrangements, arranged either by the IMF or the BIS.

The role of private sector involvement in preventing and resolving crises

A number of proposals have been put forward for ex-ante measures directly involving the private sector, to be designed and put in place before crises occur (for a very useful recent overview of such measures, see IMF, 1999), these would not only help diminish severity of crises should they occur, but also (for example by improving the pricing of risk) diminish the likelihood of crises occurring.

Measures involving the private sector can a) help limit moral hazard, that arises when lenders and investors are repeatedly bailed out, b) imply fairer burden-sharing between the official and private sector, should crises occur and c) most importantly, contribute to fairer burden-sharing between capital-recipient countries and their creditors and investors. Indeed, the standard crisis response in situations like East Asia - where creditors and investors suffer only fairly limited losses and the people of the capital-recipient countries see their country's growth undermined and suffer large increases in unemployment and poverty - clearly needs modifying.

However, measures to involve the private sector (particularly in burden-sharing) need to be carefully designed, so as to avoid excessively discouraging desirable private flows to emerging markets, or too sharp increases in their cost. The views of developing countries therefore need to be carefully considered.

In what follows we will review some of the main measures under discussion, briefly evaluating their costs and benefits.

Contingent financing arrangements from commercial banks

At the heart of currency and financial crises is the issue of provision of sufficient liquidity in times of distress, particularly for countries that are potentially creditworthy in the long-term. Indeed, if sufficient liquidity is not provided in a timely fashion, there is a risk that liquidity crises can be turned into solvency problems, which increases the costs to all involved, and particularly to debtor countries.

An important reason for contingent financing arrangements is the existence of multiple equilibria (Stiglitz and Bhattacharya, 1999). Individual lenders and investors, who believe that others are going to withdraw their money, do so for that reason. The provision of temporary funds can limit a liquidity crisis, and stop it becoming a solvency crisis. Even better, the belief
that there are funds available eliminates the incentive to pull out; as a result, the liquidity crisis can be avoided.

We have discussed above contingent finance provided by the IMF and other official bodies, and in particular, the recently created CCL. It seems important that such official facilities are complemented by private contingent credit lines. Indeed, one of the possible preconditions for an IMF CCL is for the country to have "in place, or be putting in place, contingent private credit lines or similar arrangements" (IMF Summing Up by Chairman of Executive Board Meeting 99/48, available on IMF website).

An important operational issue is how private-IMF credit levels would be coordinated if a CCL is approved. One possibility would be for the IMF to approve a CCL in broad terms, for private financing then to be sought, and for levels of contingent IMF credit to be finalised afterwards. Though this could reduce the scale of IMF lending, and improve burden-sharing, between the official and private sector, it could have the problem of indeterminancy. Therefore, it may be easier for countries to arrange, for example, a full CCL first (including the actual levels of contingency lending) and then approach the private sector for complementary contingency lending.

It is interesting that Argentina, Indonesia and Mexico have already arranged such lines of credit with private banks, to be drawn upon in the event of difficulties. These arrangements - though having different modalities - all include a regular commitment fee. The Indonesian and Mexican lines have been drawn; it is interesting that Mexico's creditor banks initially argued against the drawing, even though as IMF (1999, op. cit) rightly argues, Mexico had adhered strictly to the arrangement. However, the loan was disbursed when Mexico requested it. Mexico's Finance Minister Gurria\textsuperscript{15} argued, the creditor banks resented disbursing loans at the low spreads that had been pre-committed, at a time when spreads for Mexico and other emerging market countries were much higher. A possible way to overcome such problems could be to for example link the loan spread, when arranging the loan, to bond market yields prevailing at the time (Gray, 1999). This could encourage creditors, but could - in times of crisis - increase the cost of such borrowing. The Argentina line has not been drawn, but its existence may have helped forestall market pressures.

This seems clearly an appealing mechanism. However, several questions remain. Firstly, would banks be willing to provide this kind of financial to a broad range of countries, including for example poorer ones. Secondly, do these facilities really provide additional financing in times of crisis, or do they partly crowd out other lending? Even more seriously, could banks involved in extending credit lines adopt dynamic hedging strategies to offset their exposure, and as a consequence leaving their overall exposure to the country the same? This would clearly neutralise the positive impact of such an arrangement.

\textsuperscript{15} Presentation in May 1999 at HSBC, London; personal communication.
Restricting derivatives in debt contracts
To reduce risk of loans, creditors like to introduce put options, which give them the option (but not the obligation) of shortening the contractual maturity of loans of bonds. For example, a five year loan - statistically recorded as such - can have a one year put, which allows the creditor the option of asking for repayment in a year, increasing his/her flexibility. Debtors accept such put options because it allows for somewhat lower spreads; however, in doing so, they often underestimate the risk that conditions may deteriorate significantly - as a result they may lose market access - and the put may be exercised.

Put options have become an important additional source of vulnerability for developing countries, - including some low-income ones - as these countries have increasingly accepted puts in the last years, as derivatives became more widespread and as the risk of crises increased (for example in Brazil, the share of "putable" bonds increased significantly as the crisis approached). According to the IMF (1999, op. cit), a minimum estimate of $20 billion in loans and bonds is "putable" in 1999 alone, which is a very high figure.

It is therefore very important for countries to be far more careful than in the past about accepting or using derivatives, such as put options, as well as other such investments when these increase countries' vulnerability to crises. It is also important to improve transparency and understanding of such modalities and issues, as the operations of financial intermediaries are often both complex and opaque. This may be particularly urgent for low-income countries, where there may - as yet - be less familiarity with such instruments. Technical assistance (from the IMF, World Bank, BIS or others) could thus be very valuable, and particularly so for poorer countries.

Amending sovereign bond clauses
There is an urgent need to have flexibility in debt contracts for the case of unpredictable shocks arising. In a national context, this can be achieved by bankruptcy proceedings. Whilst this option is not yet available internationally (even though there have been several interesting proposals to establish one), a good "second best" is to have internationally state contingent contracts, that is to have flexibility for changing contracts if unforeseen circumstances arise.

After the Mexican peso crisis, the discussion of such changes has been particularly applied to international bonds, possibly because emerging bond finance has rapidly grown, with gross flows of bond placements increasing from $6 billion in 1992 to over $40 billion in 1997 and 1998; this also leads to rapidly growing amortisation of bond finance. Particularly true for Latin America). Indeed, it is unclear to what extent changes in the bonds contracts would have had a significant impact on the East Asian crisis, where the greatest part of the problem related to short-term bank lending and not to bonds.

Specifically, Eichengreen and Portes (1995) proposed changing the contractual provisions governing sovereign debt to allow for: a) collective representation of bondholders in the event of a crisis, b) qualified majority voting on changing the terms and conditions of the debt contract and c) sharing of proceeds received from the debtor among creditors. These
clauses would facilitate a more orderly resolution of crises, for example by preventing a minority of dissident investors from holding up settlement. More broadly, it would help overcome problems associated with lack of creditor coordination, particularly the creditor "grab-race", whereby actions taken by individual creditors in pursuit of their self-interest can disrupt orderly debt workouts, and thus reduce the potential resources available to all creditors and help create a situation of panic.

The ideas for modifying bond contracts were supported by the 1996 G10 Deputies report (after the Mexican crisis), by the G22 Working Group on International Financial Crisis (after the East Asian crisis) and has been both supported and developed further in the 1999 IMF document on Involving the Private Sector, quoted above. However, little concrete progress has been made to date.

This lack of progress has two main reasons. On the one hand, most creditors are reluctant (see, for example, IIF, 1999), though some creditors especially in Europe, see possible advantages in modifying bond clauses (for an interesting discussion, see Gray, 1999). On the other hand, debtors are concerned that such clauses could restrict future access, in terms of volume, or at least in terms of cost. This concern needs to be evaluated seriously as long-term bonds are an important mechanism for funding development. However, the view can also be taken that, once the market has accepted these changes, the clarifying of the "rules of game" could actually improve market access.

In any case, it does not seem appropriate for international institutions like the IMF to impose, as part of conditionality, modifications to bond contracts on developing countries, has been recently suggested. A very positive way forward would be for G-10 sovereigns to include in their new bond issues the new contractual terms discussed above. This would have two positive effects: the G-10 would lead by example and they would help define a new market standard. If the completely creditworthy G-10 countries would modify their new bond contracts (which would be extremely unlikely to increase their spreads), this would imply that it would become far more acceptable for developing countries to do so, and that negative effects on availability and cost of new loans for them would deteriorate far less than if they did it on their own. However, there seems to be some resistance amongst G-10 governments for them to undertake such changes. The reasons given are purely technical, the problems raised seem relatively small, so they could be easily overcome if political will was there. One problem is that not all G-10 countries are currently active in international markets; this could be overcome either by modifying bond clauses only for those G-10 countries currently issuing bonds or by G-10 countries issuing bonds beyond their normal funding program. Another, highly technical objection, is that modifying bond clause covenants, for those G-10 countries where secondary markets are very liquid and where parts of the bonds are "stripped", could lead initially to some fragmentation of that strips market.

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16 Interview material
It is important to point out that the problems for restructuring bonds do not apply to all types of bonds. Indeed, British-style bonds contain a number of important characteristics that facilitate an orderly restructuring. This is because they include provisions for the debtor, bondholders or the trustee (if there is one, see analysis below) to call bondholders meetings, and for a qualified majority of bondholders represented to agree to changing the terms of the bonds for all holders. Furthermore, under one of two categories of British-style bonds (called Trustee Deeds) individual bondholders are generally prohibited from accelerating the bonds and initiating litigation. As IMF (1999, op. cit) points out with British-style bonds it may be fairly easy to achieve high participation rates, as creditors that are reluctant to participate in changing conditions will know that they face the alternative of a modification of terms that can be imposed by a majority of bondholders. In the case of Trustee Deed bonds, the limits on individual creditors to initiate litigation provides further incentive to participate in an orderly restructuring.

However, there are difficulties in achieving an orderly bond restructuring after market access has been lost for countries with debt structured in the form of American-style international bonds - the most prevalent bonds issued by developing countries - or by German-style bonds. Those instruments do not include provisions for majorities to modify terms of bonds, and impose those changes on minority holders. Furthermore, in case of a default, the bonds have few limits on individual bondholders to start - and benefit from - litigation.

It is interesting that up to now there is no premium in favour of US-style bonds, that is investors have not discriminated in favour of those more "protected" instruments, possibly because they have not noticed the difference\textsuperscript{17}. This is rather encouraging, as it would imply that drawing on the precedent of UK-style bond clauses and generalising them would not increase the cost of borrowing for developing countries. However, reportedly, some of the major rating agencies have started to examine the terms of specific sovereign debt obligations, with distinctions being placed on technical nuances of different debt issues, which could possibly lead to differential pricing. Perhaps a problem has been the excessive publicity given to the possibility of amending conditions on developing country bonds (without actually doing it), which has focussed too much attention on this issue. A more effective way could have been to modify the terms of new bonds - to make them similar to UK-style ones - without so much public discussion of the matter.

There is a second, more technical difficulty, for rescheduling bonds. Currently, these bear the modality of bearer bonds, which makes it far harder to get bondholders together, so they can agree restructuring or other changes. This problem can, however, be remedied for new issues by the appointment by the issuer of a single trustee, who is empowered to act for bondholders. Such trustees can: a) prevent bondholders taking unilateral action and b) provide a useful channel for communication and possible negotiation between bondholders and the debtor\textsuperscript{18}.

\textsuperscript{17} Interview material
\textsuperscript{18} I thank Robert Gray for this point
The modification of bond terms has attracted a lot of debate and attention, and could have important positive effects in that in the medium-term it could contribute very significantly to orderly debt-workouts, and to a more level playing field amongst different categories of instruments. The initial impact on modifying debt servicing would be restricted by the fact that these changes would apply to new bonds only, and would not provide flexibility in the event of payments difficulties for the large existing stock of bonds. Furthermore, as discussed above, particularly if these changes were introduced only by developing countries, they could - especially initially - limit access and increase cost for them to this important source of funding.

There has also been growing international consensus on the need to create internationally sanctioned standstill provisions, though these proposals have been less well worked out by institutions like the IMF, especially on the legal aspects. However, it is important that the G-22 report had examined alternative ways of achieving standstill-type arrangements, including ways in which the international community might be able to signal its approval for standstills in exceptional cases. Though countries should make every effort to meet the conditions of all debt countries in full and on time, in certain cases - the G-22 report accepted - a temporary suspension of payments could be a necessary part of the crisis resolution process. The preventive suspension of debt service and agreed rescheduling would help to solve the coordination problem, typical when creditors panic and rush for the door, and thus to help avoid some of the worse effects of such outflows. As a result, in a context of potential multiple equilibria, such a practice could lead to an equilibrium with higher output, less bankruptcies and - probably - less long-term disruptions to capital flows.

The G-22 report went further in recognising that there may be extreme cases when an orderly and cooperative restructuring process would be aided by "an enhanced framework for future crisis management", that would allow the international community to signal its approval of a temporary payments suspension by providing financial support for the crisis country. The G-22 supported the IMF decision to extend its policy of lending to countries in arrears on payments to private creditors. According to the G-22, this signal (and the explicit support which the IMF would give thus to the standstill) would only be provided where the international community believed the government's decision to suspend debt payments was the only reasonable course open to it, that it was implementing a strong programme of policy reform, and that it was making every effort to reach agreement with creditors. The IMF would be signalling confidence in the debtor's policies and long-term prospects, and indicating to creditors facing temporary standstills that their interests would best be served by reaching quick agreement with the debtors. A standstill imposed as part of such a cooperative and non-confrontational process would hopefully be less penalised by creditors.

UNCTAD (1998), which has provided one of the most forceful and detailed defence of the standstill mechanism, has suggested a possible second alternative procedure to implement standstills. This would allow countries to unilaterally call the standstill, but then to submit it for approval to an independent international panel within a specified period, whose sanction would then give it legitimacy. Such a procedure would be similar to WTO safeguard provisions allowing countries to take emergency actions. A third complementary possibility (Ocampo,
1999) would be to draft ex-ante rules under which debt service would be automatically suspended or reduced if certain macroeconomic shocks are experienced; such rules have sometimes been incorporated into debt renegotiation agreements (e.g. Mexican Brady bonds).

A problem may be that crises have both common - but also different - features, which may make it more difficult ex-ante to define the macro-economic shocks.

As regards any of these three alternatives, it can be argued that they would increase perceived country risk, and therefore could increase cost and limit access to international capital flows for developing countries. On the contrary it may be argued that such a mechanism would only legally recognise default risks that already exist, and that it could actually reduce the default risk for individual operations. Alternatively, it could be argued that if especially initially there was some increase in interest rates - especially by short-term foreign lenders - this could be good as it would make those lenders focus more clearly on the risks involved in such lending; these risks extend beyond the parties to the transaction, to innocent bystanders - workers and small businesses - repeatedly hurt under existing financial arrangements (Stiglitz and Bhattacharya, 1999).

In some ways an even more radical proposal for a standstill has been made by Buiter and Sibert (1999); this suggest a universal debt roll-over option with a penalty (UDROP); all foreign currency lending - private or sovereign, long or short, marketable or not - would have to have such a roll-over option for a specified period (e.g. three or six months) at a penalty rate. The penalty rate would be high to discourage debtors using this option. In this proposal, the roll-over mechanism would be automatic, and activated only at the discretion of the borrower. As such it would be speedy. This proposal has the important attraction of simplicity, speed and universality (both for all debtors and all instruments). However, it has two problems. Firstly, it does not elaborate the legal and other mechanisms necessary to enforce it. Secondly, it seem somewhat unlikely that creditor countries’ governments would accept such a mechanism, as it could be unattractive to creditors.

To some extent of course some kind of concerted standstill for one key category of debt - short-term, cross-border interbank credit lines - have been fairly successfully implemented in the recent crises in South Korea and Brazil, even though the delays in arranging them led to fairly significant haemorrhaging of outflows before it was arranged. However, in South Korea, the concerted rollover of short-term bank lines was helpful in stabilising a critical situation and also facilitated a restructuring of interbank claims into sovereign guaranteed bonds. Also Brazil was able to secure agreement of international banks to maintain their exposure to Brazilian financial institutions. However, there is a widespread view that, particularly South Korea's success, reflected specially favourable circumstances - such as the problem being limited to short-term debt, with the rest of the capital account fairly closed - which would be difficult to replicate in other countries.
Furthermore, the fear has been expressed (IMF 1999) that concerted operations in one case could lead creditors to withdraw credit lines in advance of a crisis elsewhere for fear of a concerted rollover.

A broader standstill mechanism - than just concerted rollovers of short-term debt - seems very important to establish. However, the relative success of existing rollovers or partial standstills, provides a valuable precedent for a more structured standstill mechanism.

**Summary and conclusions**

It seems important to attempt to evaluate progress so far, as regards the reform of the international financial architecture. A positive feature is that a fairly important proportion of the proposals on the table by spring 1998 (for a review and analysis then, see for example, Griffith-Jones, 1998) have either been seriously studied or actually began to be implemented. This is particularly true for those proposals that do not require significant institutional innovation.

Amongst the most positive steps are the creation of the Forum for Financial Stability (FSF), the creation of new facilities of the IMF (including most recently and significantly the CCL), as well as improvements in information, particularly on developing countries. However, the way in which each of these have been implemented have serious limitations, which we discuss below. Furthermore, in the areas of amending bond clauses and internationally sanctioned standstill arrangements, little actual action has taken place, though the discussion has become increasingly more specific and certain consensus seems to be broadly emerging.

As regards progress in global regulation of private flows, the rapid creation and beginning in the operation of the FSF is an important step forward. However, the current lack of participation of developing countries in the decision-making Forum is a serious limitation, even though these countries do participate in the Working Groups, where important work is beginning. Participation of developing countries - including low-income ones - in this Forum is urgent, as they are the main victims of the volatility that this Forum is attempting to stem. Secondly, the Forum may need to be strengthened in its decision-making power, as its purely coordinating and consensus-seeking role may not be sufficiently strong in the future.

Thirdly, it is unfortunate that certain regulatory changes - on which very broad consensus has been reached - such as modifying capital adequacy rules to reduce regulatory incentives for short-term bank lending to developing countries, have taken so long to be made. Fourthly, the initial priority areas of work (highly leveraged institutions, offshore centres and curbing volatility of short-term flows) are extremely important; however, other areas - such as evaluating prudential regulation of other institutional investors, such as mutual funds, could be usefully added.

As regards the creation of the CCL, this is also potentially an important step forward to limit contagion, by encouraging countries to adopt policies that will discourage crises happening and by signalling to the markets that this facility is available. Both may help avoid crises
happening. However, there are several concerns about the way the CCL is being structured. Firstly, would the scale be sufficient to stem a crisis? Secondly, why is disbursement - in the stage of crisis threat - not automatic, for countries that have pre-qualified? Thirdly, why is the CCL not open to countries with current or expected regular IMF financing? Fourthly, will conditions be too restrictive, and thus make countries unwilling to negotiate CCL? Careful monitoring of evolution of the CCL and its use is required, as well as continuous analysis on the complex issue of how best official liquidity can be used in emergency financing.

Much useful progress has also been made on improving information on developing countries, which hopefully will help markets and policy-makers take better decisions. However, the possibilities and benefits of improved information have very important limits, both due to asymmetries of information and because of the significance of how information is processed. Furthermore, more limited progress has till now been made on the equally important issue of improving information on international financial markets. Much emphasis has also been placed on the development of numerous standards, and their implementation by developing countries. A source of concern is that developing countries - especially low-income ones - do not on the whole participate much in the definition of those standards, though they are being asked to implement them. Both meeting standards and enhancing information puts an important burden on developing countries, especially low-income ones. As a consequence, technical assistance in this field, especially to the poorer countries, is a priority.

As regards the issue of emergency measures involving the private sector during crises, some limited progress has been made, especially as regards broadening the power of IMF lending into arrears and the arrangement of concerted roll-over of credit for Brazil and Korea. However, the larger issues have not yet been tackled, both because of their complexity and because of different interests and perspectives involved. It is important that concrete progress be made on orderly debt work-outs, including particularly changes in bond covenants; interestingly UK-issued bonds already have more flexible clauses, and these do not as yet carry higher spreads; this provides a very important precedent for modifying clauses in US and German bonds. It is, however, important that changes in these clauses are introduced both by developed and developing country borrowers, to avoid stigmatising and marginalising developing country borrowers. In particular, modifying bond contracts should not be imposed by IMF conditionality on developing country debtors, as has been suggested. Whilst bond covenants are not modified for all countries - including developed ones - developing countries need to have the freedom to decide whether they want to modify them, assessing carefully costs and benefits of such a measure; the costs include possible reduction in access to bond markets and possible increases in spreads, whereas the benefits include greater flexibility and better burden-sharing in times of crises. As regards internationally sanctioned standstills, even less progress has been made, though a number of interesting proposal have emerged on mechanisms, modalities and institutional arrangements.

As the Peruvian poet, C. Vallejo, has said, "there is still much to do" on financial architecture. This is particularly so because recent crises have had an unacceptably high cost in terms of interrupting and - sometimes - reversing growth and development, increasing poverty,
and discouraging future private investment, both by national and foreign investors. These currency crises also distract the international official community from the crucial task of increasing and improving official flows to low-income countries, which need to play a continued role in helping their growth and in supporting poverty alleviation in them.

Though our report has focussed more on issues of international measures to prevent and better manage crises, clearly these need to be complemented by national measures, both in the prudential and capital account regulatory area and in macro-economic policy. Prudence in the liberalisation of certain categories of capital flows (the more volatile ones) is also an important area.

More generally, at a national level, the traditional emphasis on crisis management needs to be changed to the management of booms, since it is in the periods of euphoria from capital inflows and terms of trade improvement that crises are incubated. This implies introducing stronger counter-cyclical elements in a) macro-economic policy, b) strengthening as well as increasing counter-cyclical elements of financial regulation and supervision, to prevent excessive risk taking. Indeed, prudential regulation must take into account not only the micro but also the macro economic risks typical for developing countries in an increasingly globalised and volatile world. Firm, as well as total, debt exposures need to be carefully monitored, as well as their profiles, to prevent vulnerability to crises and c) if excessive short-term, potentially reversible, capital flows enter the economy, measures - such as Chilean style or Colombian style reserve requirements - clearly need to be taken.
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APPENDIX 1

1. Transparency and Standards

A. Transparency

**Basic Objective:** Help foster better decision-making and economic performance by further improving transparency in the policies and practices of member countries and international institutions.

**The IMF’s role:** Encourage member countries to be more transparent. Become more open about IMF policies and advice to members, while respecting legitimate needs for confidentiality and candor.

**Proposal:** Make available more information on IMF surveillance of member countries.

**Specific proposals:** Actively encourage members to release Public Information Notices (PINs) following Article IV consultations. Take steps to accelerate their release. Post PINs on the IMF external website. Allow the voluntary release of Article IV staff reports. Increase access to the Fund’s archives.

**Progress to Date**
Most steps agreed/reaffirmed by the Executive Board in July 1998 and/or March 1999 (See PIN 99/36). PINs were being released for about 70 percent of Article IV consultations, as of the latter part of 1998. The lag between the Board discussion and the issuance of the PIN has been shortened, and the number of modifications reduced. In March/April 1999, the Executive Board authorized an 18-month pilot project for the voluntary release of Article IV staff reports, and shortened the time limits for access to the archives.

**Next Steps**

**IMF:** Evaluate the Article IV staff report pilot project within 18 months. Review the archives policy in two years, with a view to possible further liberalization.

**National authorities:** Actively consider the release of PINs following Article IV consultations. Volunteer for the pilot project for release of Article IV staff reports.

**Proposal:** Make available more information on countries’ IMF-supported programs of economic reform and adjustment.

**Specific proposals:** Actively encourage members to release to the public the Letters of Intent (LOIs) and Policy Framework Papers (PFPs) underpinning Fund-supported programs, and post the released documents on the IMF external website. Publish the Chairman’s remarks following Board discussions of the use of Fund resources (UFR). Allow for the voluntary release of PINs and staff reports on requests for, or reviews of, the use of Fund resources.
Progress to Date
Release of LOIs/PFPs and posting on the IMF external website was begun in December 1997. In March/April 1999, the Board agreed on a "strong presumption" that LOIs and PFPs would be made public by member countries, and to proceed with the release of the Chairman's remarks in UFR cases.

Next Steps
IMF: Make new policy known to members. Revisit the question of PINs for UFR discussions and the release of UFR staff reports in six months. Review policies further after one year.
National authorities: Release LOIs and PFPs.

Proposal: Make available more information about IMF analyses of policy issues.
Specific proposals: Broaden the use of Public Information Notices (PINs) beyond Article IV consultations to inform the public of the Executive Board's conclusions following policy and regional surveillance discussions. Release more IMF staff papers on policy issues.

Progress to Date
The release of Summings Up on policy discussions was agreed by the Executive Board in July 1998, and the first policy PIN, on the Executive Board discussion of Special Data Dissemination Standard (SDDS) reserves data, was issued in March 1999. Various staff papers have been released, e.g., in January 1999, "IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment," along with the Chairman's Summing Up of the Executive Board's discussion of the report, and in April 1999, "Involving the Private Sector in Forestalling and Resolving Financial Crises" and "Experimental Case Studies on Transparency Practices."

Next Steps
IMF: Staff papers on policy issues along with the Summing Up/PIN to be released on a case-by-case basis. Finalize guidelines for the release of PINs on policy discussions. Review the PIN policy by March 2000.

B. Internationally Accepted Standards

Basic Objective: Foster the development, dissemination, and adoption of internationally accepted standards or codes of good practice for economic, financial, and business activities.
The IMF's role: Help develop or refine standards in its core areas of expertise (data dissemination, transparency of fiscal, monetary, and financial policies, and, in conjunction with others, banking supervision). Assist in the dissemination of standards, their adoption by members, and the monitoring of their implementation, including, as appropriate, standards in areas outside the Fund's direct operational focus, e.g., accounting and auditing, bankruptcy, corporate governance, insurance regulations, payment and settlement systems, securities market regulation, et cetera.
Proposal: Strengthen the *Special Data Dissemination Standard* (SDDS).

*Specific proposals:* Strengthen, in the areas of international reserves and external debt, the SDDS, the standard established by the IMF in 1996 to guide countries that have, or that might seek, access to international capital markets in the dissemination of economic and financial data to the public. Establish procedures for monitoring observance of the standard. Consider inclusion of "macro-prudential" indicators, variables that can indicate the health of the banking sector.

**Progress to Date**
The Executive Board in December 1998/March 1999 agreed to strengthen the SDDS in the areas of debt and international reserves, and to develop monitoring procedures (See PIN 99/25). The IMF is considering the advantages and disadvantages of incorporating macro-prudential indicators in the SDDS.

**Next Steps**

**IMF:** Establish monitoring procedures; consult with compilers; and draft operational guidelines on international reserves data.

**Official international bodies:** The BCBS to coordinate with the IMF on developing macro-prudential indicators. The Committee on the Global Financial System to collaborate with the IMF in the preparation of operational guidelines on reserves data.

**National authorities:** Contribute to the development of operational guidelines. Subscribing countries to comply with the provisions of the SDDS; others to consider subscribing to the SDDS or the *General Data Dissemination Standard* (GDDS), as appropriate, and take the necessary steps.

**Source:** IMF web site.