Stabilising Capital Flows to Developing Countries*

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1 Introduction

The deep integration of developing countries into the global economy has many advantages and positive effects. In particular, capital flows to developing countries have clear and important benefits. These are especially clear for foreign direct investment (FDI), which is not only more stable, but also brings technological know-how and access to markets. External flows can also lower the cost of capital and complement domestic savings, although this is less important where domestic savings are already high.

However, large surges of short-term and potentially reversible capital flows to developing countries can have very negative effects. Firstly, these surges pose complex policy dilemmas for macroeconomic management, as they can initially push key macroeconomic variables, such as exchange rates and prices of assets like property and shares, away from what could be considered their long-term equilibrium. Secondly, they pose the risk of very sharp reversals, which – particularly if they lead to currency and financial crises – can result in very serious losses of output, investment and employment, as well as increases in poverty.

In the case of the Asian crisis, the reversal of private capital flows has been dramatic. According to figures from the Institute of International Finance, the five East Asian countries hardest hit by the crisis (South Korea, Indonesia, Malaysia, Thailand and the Philippines) experienced a turnaround of US$105 billion in a single year, reaching more than 10 per cent of the combined GDP of these economies; the shift was from an inflow of capital of + US$93 billion in 1996 to an estimated outflow of US$12 billion in 1997 (see Table 1). Most of this dramatic swing originated from commercial bank lending (which fell by US$76.8 billion), whilst FDI remained constant.

This massive and sudden withdrawal of capital flows in itself caused a dramatic reduction in

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Table 1: Five Asian economies' external financing (US$ billion)

	1996	1997	Change between 1996 and 1997
External financing, net	92.8	15.2	–77.6
Private flows, net	93.0	–12.1	–105.1
Equity investment	19.1	–4.5	–23.6
Direct equity	7.0	7.2	+0.2
Portfolio equity	12.1	–11.6	–23.7
Private creditors	74.0	–7.6	–81.6
Commercial banks	55.5	–21.3	–76.8
Non-bank private creditors	18.4	13.7	–4.7
Official flows, net	–0.2	27.2	+27.4

Source: Institute of International Finance 'Capital flows to emerging economies', 29 January 1998, Washington D.C.

absorption, as well as currency crises. In Asia, violent devaluation and large increases in interest rates implied that the currency crises interacted with banking crises, which led to contraction of bank lending. Often, in developing countries (with Mexico in 1994–95 providing another good example), currency crises spill over into domestic financial crises and vice-versa, whereas this does not happen very often in developed countries (Akyuz 1998).

The combination of the reversal of capital flows, currency and domestic financial crises in East Asia led to a very severe economic crisis in countries that had been growing extremely rapidly for a very long period.

Within present arrangements, the volatility and reversibility of some categories of capital flows and their very negative effects implies that the costs of these flows to countries' development are seen as higher than their benefits, at least during important periods of time. As a consequence, there is growing consensus that important changes need to be made in the international monetary system as a whole – and in recipient country policies – to avoid costly crises, as well as to manage them better if they do occur. Important economic authorities like Alan Greenspan, Chairman of the US Federal Reserve, (*Financial Times*, 28 February 1998) and Joseph Stiglitz, Chief Economist of the World Bank (Stiglitz 1998a and b) as well as several important analysts, have called for such changes.

It seems urgent to:

(a) identify the possible changes required to achieve this result
(b) evaluate the potential economic effects of such changes
(c) define institutional developments that would be required to implement those changes.

This article attempts to contribute elements to the on-going important debate on this issue. Section 2 will explore further the causes of the East Asian crisis, focussing on those more relevant to the central issues of this article. Section 3 examines measures for crisis prevention. More emphasis will be placed on international measures, like better surveillance by the International Monetary Fund (IMF) and better regulation of capital by source countries and internationally; however, some of the market-based policies that may need to be taken by recipient countries to discourage excessive surges of short-term capital flows are also evaluated. Section 4 examines the measures to better manage international crises if they do occur, including the expanded role of the IMF as a lender of last resort and better debt workout mechanisms. Section 5 concludes and summarises.

2 Causes of the Asian Crisis

A large literature is emerging emphasising from different perspectives the domestic causes of the Asian crisis. It is beyond the scope of this paper to examine these. Three key points are, however, worth

stressing (Stiglitz 1997). First, the current account deficits in East Asia reflected private sector deficits. Second, the Asian crisis was a consequence of overinvestment (some or much of it misallocated) and not of overconsumption. Third, the most important cause of the crisis was a sharp deterioration in confidence, not of macroeconomic fundamentals, which were mostly extremely strong.

What seems most disturbing about the Asian crisis is that it happened to countries that had been so successful for a long period, not just in terms of economic growth but also in terms of great dynamism in their exports, low rates of inflation, high rates of savings and rather equitable distribution. Even though several of these countries had high current account deficits, this had been seen as acceptable for quite a long time both by analysts and markets, for two reasons; first, these deficits were financing very high investment rates; second, the current account deficits did not originate in fiscal deficits – on the contrary, the Asian economies had fiscal surpluses – but were caused by private sector deficits.

So what went wrong? Clearly there were problems in the Asian economies, including serious weaknesses in their domestic financial systems and in their governance (see below). However, there is another causal factor, which relates more to the international dimension, and in particular to the behaviour of international capital flows. This explanation is based on certain imperfections of international capital markets that have always been there, but whose impact has increased due to technological developments, which allow the wheels of international finance to turn far faster than before.

The negative effects of highly mobile capital can, paradoxically, be strongest for economies that either are – or are perceived as about to become – highly successful. We could call it the curse of the successful economy; more technically, we could call it 'financial Dutch disease'. A successful economy offers high yields and profits to international investors. If these investors can find ways to enter these economies, or if their entrance is facilitated by capital account liberalisation, they will rush in. This surge of capital inflows will affect key macroeconomic variables. Exchange rates tend to become greatly overvalued; the prices of key assets, like shares and land, tend to rise significantly and quickly. As a result there is both an increase in real income (as imported goods become cheaper) and an increase in perceived wealth (as asset prices become at least temporarily higher), as well as a perceived increase in future income. Banks can increase lending, lifting liquidity constraints. As a result of these factors, individuals consume more; also private companies increase their investment.

The sum of these individual decisions has macroeconomic implications. The current account of the balance of payments deteriorates, often quite rapidly, as both consumption and investment rise. Initially, this is not seen as a problem, as foreign lenders and investors are happy to continue lending/investing, given high profitability combined with the perception of low risk, as they are going into what is broadly seen as a successful economy. Then, something changes. The change may be domestic or international. It may be economic or political. It may be an important change or a relatively small one. The key element is that this change ***triggers a sharp modification in perceptions, leading to a large fall in confidence in the economy among internationally mobile investors***; these can be both foreign investors in the country or nationals able and willing to take their liquid assets out of the country.

The change of perceptions tends to be both large and quick. A country that was perceived as a successful economy or a successful reformer – for which no amount of praise was sufficient – suddenly is seen as fragile, risky and crisis prone. The change of perception tends to be far larger than the magnitude of the underlying change warrants. The frightening aspect is that there is a very strong element of self-fulfilling prophecy in the change of perception. Currency crises happen to a significant extent because lenders and investors fear they can happen. The fact that they first stop lending and investing and then pull out contributes greatly to make their worst nightmares come true. As a result, there can be much overshooting. Exchange rates can collapse, as can stock markets and property prices. Governments or central banks are forced to raise interest rates to defend the currency. As a result, banking systems become far more fragile than they were before, as previous weaknesses are magnified and new ones emerge.

An additional problem is contagion. Countries in the same region, or with weaknesses seen to be similar as the crisis country, can also suffer from a parallel change of perception by investors. The crisis spreads to other countries, including to those with basically good economic fundamentals. The latter may suffer somewhat less, but may, if unlucky, be caught up in the whirlwind of deteriorating perceptions.

This pattern helps explain the currency and banking crises in the Southern Cone of Latin America in the early 1980s; it helps explain the Mexican peso crisis and the Tequila effect. It also provides important elements to understanding the 1997 Asian crises. Of course there are significant differences between these crises, and the previous ones throughout the centuries (Kindleberger 1996). But the boom–bust behaviour of short-term lenders and investors, driven not just by real trends (which they help shape), but by dramatic changes in perceptions is a common denominator to these different crises.

Capital and financial markets are special in that – though generally functioning well – they are prone to important imperfections. Factors like asymmetric information and adverse selection play an important role in explaining these imperfections, given that financial markets are particularly information intensive (Stiglitz 1994). Furthermore, as Keynes (1936) showed with his well-known metaphor of the beauty contest, there are strong incentives to follow the herd in financial markets, as each individual short-term investor, lender or fund manager tries to choose the investment or loan that he/she thinks likeliest to be chosen by other investors or lenders, as his colleagues' assessment will be a crucial determinant of short-term prices.

Also of relevance for understanding the Asian crisis is the concept of self-fulfilling attacks, that is crises arising without obvious current policy inconsistencies, see Obstfeld (1995) and Griffith-Jones (1998). In this model, speculative attacks are basically caused, not by bad fundamentals, but by future expected shifts of macroeconomic policies, which will be *caused* by the attack itself. In these models, the attitude of speculators and investors is crucial to whether an attack occurs. This implies multiple equilibria for exchange rates. The existence of self-fulfilling attacks and multiple equilibria implies that good macroeconomic fundamentals are a very important necessary but not sufficient condition for avoiding currency crises.

As Wyplocz (1998) rightly argues, there is at present limited understanding of what triggers self-fulfilling attacks. As a consequence, self-fulfilling attacks are fundamentally unpredictable. It is interesting that the main explanations given by market actors for different recent crises (e.g. Mexican peso crisis, crises in different Asian countries) tend to be rather different ones. As a result, developing countries' policymakers face the daunting task of 'playing to moving goal-posts', to avoid crises. Naturally there are conditions of vulnerability that can be identified (such as the ratio of short-term foreign exchange debts plus the stock of assets that can easily leave the country divided by the level of foreign exchange reserves, or high current account deficits). But such vulnerability indicators do not imply that a crisis will occur. Many countries have such high vulnerability indicators but do not have a crisis. On the other hand, some of these indicators may be relatively low and/or improving (e.g. the current account deficit was relatively low and improving in South Korea in 1997) and the country can still have a crisis.

Domestic policies – at the macroeconomic level, to the domestic financial sector, and the possible regulation of short-term capital inflows – can of course play an important role. However, they are difficult to implement perfectly. As a consequence, an international effort is also required to make costly currency crises in developing and transition countries less likely and to manage them better if they do occur.

In the nineteenth century, the rapid development of private banking implied frequent national banking crises. The establishment and development of national regulatory bodies and of Central Banks with lender of last resort facilities made such crises less frequent (Griffith-Jones and Lipton 1987). Similarly, the rapid development of global capital and banking flows in the latter part of the twentieth century implies the need for new measures of global governance to regulate those flows. These will include better regulation of international credit and portfolio flows, as well as improvements of the

lender of last resort facility and possible development of international debt workout procedures. We now turn to these options.

3 Crisis Prevention

Issues explored by the G-22

A number of proposals which aim to prevent crises are currently being discussed in the international community. In response to the Asian crisis the G-22, which comprises the G-7 countries and a range of emerging and developing economies, was established with working groups looking at three important areas: (i) Enhancing Transparency and Disclosure of Information; (ii) Strengthening Financial Systems, in National Economies and Globally; (iii) Appropriate Burden-Sharing in International Financial Crises. This section will focus on the first two areas, while the third will be discussed in the section on crisis management.

Enhancing transparency and disclosure of information

The Asian crisis has provoked calls for improvements to information disclosure, data dissemination and international surveillance. Financial markets, as well as policymakers, need timely access to reliable and comprehensive information. However, it is equally important that the information which is available is used effectively. Again, the Asian crisis shows that markets and ratings agencies were initially slow to respond to certain danger signals in Asian economies and then over-reacted once the crisis broke.

First, it is important to establish what types of information would promote more efficient and stable financial markets. In the Asian crisis, some of the significant data gaps and deficiencies were: information on foreign exchange reserves, including undisclosed forward positions; the maturity and currency exposures of the public and private sectors; and the health of the financial system, including information on non-performing loans. The question of accurate information is made even more complex due to the growing use of off-balance sheet transactions such as forward contracts and other financial derivatives.

Second, it is important to establish how information could best be generated. Attempts to implement greater transparency after the Mexican peso crisis revealed the difficulties involved. In order to encourage transparency in emerging market economies, it was proposed at the 1998 Spring meeting of the IMF and the World Bank that the Fund could delay the completion of its annual Article IV health check of a country's economy, if it were not satisfied with the information being disclosed. The IMF was also asked to encourage more emerging market economies to make public the results of these consultations with the Fund through the issuance of Press Information Notices (PINS) on the IMF website.

Thirdly, there is the question of how increased transparency can improve the effectiveness of IMF surveillance, and how multilateral institutions themselves could become more accountable. In the aftermath of the peso crisis the Fund established the Special Data Dissemination Standard (SDDS) and the Dissemination Standard Bulletin Board (DSBB) on the IMF website. The IMF is currently looking at ways in which the SDDS could be broadened and strengthened. The Asian crisis has led to requests that the IMF be obliged to inform the markets when it thinks a country is heading for a crisis. The dangers of 'whistle blowing' are clear: it could turn the Fund into a rating agency and seriously compromise its position as confidential advisor to member countries, and a public warning may provoke the very crisis that it is trying to prevent. However, the IMF's Interim Committee proposed developing a 'tiered response' whereby the Fund would give increasingly strong, and ultimately public, warnings to countries which it believed were heading for trouble.

Fourth, there is the question of how to promote the best use of available information by banks and other market participants in evaluating risks and making decisions. There is concern that even if information and transparency were greatly improved, it would not necessarily lead to better investment decisions, nor to the removal of the threat of market over-reactions. Moreover, while the focus of the current call for improved transparency and surveillance is at the recipient country level, it is clear that there is also a need for better surveillance of the market. Greater attention needs to be given to the risks posed by potential large reversals of capital flows, particularly the role of currency

traders and hedge funds in influencing currency and asset price movements.

Strengthening financial systems, in national economies and globally

The Asian crisis has highlighted the importance of strong financial systems in maintaining the stability of national economies, and international currency and capital markets. The G-22 working group is looking at ways to strengthen financial systems both domestically and globally. The G-22 will build on work already undertaken in the international community – for example, in fostering coherent international supervisory and regulatory arrangements, and in identifying an appropriate strategy for promoting financial stability in emerging market economies.[1]

The key areas being considered by the G-22 are: (i) the implementation of effective banking and securities regulatory and supervisory arrangements and the issue of financial sector surveillance; (ii) the development of institutional infrastructure needed for the efficient and stable operation of financial markets; (iii) the promotion of effective market discipline, including managerial responsibility and good corporate governance; and (iv) the promotion of capital account liberalisation, including appropriate sequencing and the amendment of the IMF Articles following the Interim Committee declaration in 1997.

First, there is the adoption of effective banking and securities regulatory and supervisory arrangements; the Basle 'Core Principles' (see Valpy FitzGerald, *Global Capital Market Volatility and the Developing Countries: Lessons from the East Asian Crisis*, in this bulletin) for the banking sector and the norms of bodies such as the International Organisation of Securities' Regulators (IOSCO) for securities. However, establishing sound regulatory and supervisory systems in all IMF member countries will be a lengthy and complex process. The well publicised failures in the financial systems of the advanced economies illustrate this; and, as Stiglitz (1998b) has noted, it is important to recognise that developing countries have less capacity for financial regulation and greater vulnerability to shocks.

There is also the question of the effective surveillance of the financial sector. The role of the IMF in the surveillance of domestic financial systems has come under scrutiny recently. It was proposed at the G-7 meeting in Canada that an independent international agency or a joint surveillance unit of the IMF and the World Bank (with the Bank of International Settlements (BIS) involvement) be established. Such a body would be responsible for designing financial sector reform strategies in crisis situations and for carrying out surveillance of national financial regimes in non-crisis countries. At the same time, efforts to build up surveillance discipline through greater cooperation among regional central banks and the application of 'peer pressure' at the regional level should also be considered.

Second, the G-22 working group is looking at the development of an appropriate institutional infrastructure needed for the operation of financial markets. Issues such as the development of deeper domestic financial markets, the design of deposit insurance arrangements, and the strengthening of payment and settlement systems will be examined. Third, the working group will review the promotion of effective market discipline and good governance. This includes mechanisms designed to foster arms length relations and a sound credit culture such as strictures on connected lending, and penalties for insider dealing and certain cross-holdings between financial and non-financial institutions.

Fourth, there is the issue of the promotion of capital account liberalisation. The G-22 will look at the question of the appropriate sequencing and the amendment of the IMF Articles. On the sequencing of capital account liberalisation, a number of minimum pre-conditions have been outlined including: a sound macroeconomic policy framework; reforms to the financial system; that the opening of the capital account should be phased to take account of the country's macroeconomic situation and the state of domestic reforms; and timely and accurate information disclosure. However, more work is needed on this issue. The Asian crisis has highlighted the problems that can result when fragile emerging market economies open their capital accounts. As noted above, a sudden change in market perceptions can

[1] See the Basle Committee on Banking Supervision 'Core Principles for Effective Banking Supervision', developed by a working group consisting of representatives of the Basle Committee and emerging market countries.

have deeply damaging effects on countries which have seen little change in their economic fundamentals. It is important that countries should be able to use market based measures, such as the Chilean reserve requirements (see below), to manage capital inflows.

The proposals examined above would all contribute to strengthening the international financial system. Shaping an effective crisis prevention strategy, however, will require sharper tools.

Regulating and/or taxing capital inflows

National measures

This section will focus more on suggestions for international measures to discourage excessive surges of short-term capital and debt flows. However, we will start by examining measures that recipient countries can take to discourage such surges. Indeed, some countries (e.g. Chile and Colombia) have implemented measures (such as taxes and non-remunerated reserve requirements on flows during a fixed period) to discourage excessive surges of short-term capital flows. Their aim has been threefold:

(1) To change the structure of capital inflows in order to increase the share of FDI and long-term loans within total capital flows, and above all to decrease the share of short-term and potentially reversible flows, by discouraging the latter. The lower level of short-term flows makes the country less vulnerable to currency crises.
(2) To increase the autonomy of domestic monetary policy, as measures such as non-remunerated reserve requirements allow the recipient country to maintain higher national interest rates than the international ones; this is useful for controlling inflation and curbing excessive growth of aggregate demand – without attracting excessive capital inflows.
(3) To curb large overvaluation of the exchange rate, caused by a surge, which discourages growth of exports and poses the risk of growing and unsustainable current account deficits.

Several studies in the mid-1990s (Ffrench-Davis and Griffith-Jones 1995; Khan and Rheinhart 1995) showed how measures to discourage inflows have been a contributory factor to a relatively more successful management of capital inflows. Furthermore, these measures are widely seen as one of several reasons (with prudent macroeconomic management being perhaps the main one) why Chile and Colombia were amongst the few countries in Latin America to be relatively unaffected by the tequila crisis in 1994–1995 and by the 1997–1998 Asian crisis. In the case of Chile, there is econometric and other evidence that the disincentives to short-term inflows have contributed fairly significantly to reduce the inflow of short-term, interest-arbitraging funds, and their proportion of total capital inflows (Agosin 1996; Budnevich and Le Fort 1997). Chilean policymakers saw as important that, at a time of declining US interest rates in the early 1990s and a booming economy in Chile, the Central Bank was able to increase rather than lower interest rates in order to maintain macroeconomic equilibrium.[2] There is also evidence that total capital flows to Chile were lower than they would have otherwise been (though a clear counterfactual is always difficult) and that as a consequence the resulting strengthening of the currency has been less than it would have been.

Two of the attractive features of the Chilean measures are: that they are market-based, rather than quantitative (Fischer 1997), and that they apply to practically all short-term flows, thus simplifying administrative procedures and reducing possibilities of evasion, even though some evasion is naturally inevitable. Colombia has a similar, though more complex, approach. Its measures are also broadly seen as successful, particularly in discouraging short-term flows and improving the term structure of total capital flows. It is interesting that the IMF (1995), the World Bank (1997) and the BIS (1995) have explicitly recognised that – though having some limitations and minor microeconomic disadvantages – market-based measures taken by recipient governments to discourage short-term capital flows do play a positive role, if they are part of a package of policy measures that include sound macroeconomic fundamentals as well as a strong and well-regulated domestic financial system.

[2] Personal communication with Ricardo Ffrench-Davis, then Chief Economist at the Central Bank.

This support for recipient countries discouraging short-term flows has grown since the Asian crisis (Stiglitz 1998, Wolf 1998, Rodrik 1998, Radelet and Sachs 1998). It would seem advisable for countries to implement such a policy during periods of surges, and for international institutions like the IMF to encourage countries adopting such measures, in a temporary way, at times when countries receive excessive inflows of short-term capital and when other key conditions, e.g. good macroeconomic fundamentals, are in place.

International measures

The question, however, needs to be asked whether measures to discourage excessive short-term capital inflows by recipient countries are enough to deal with the problem of capital surges and the risk of their reversal. There seem to be at least three strong reasons making complementary action by source countries necessary. First, not all major recipient countries will be willing to discourage short-term capital inflows, and some may even encourage them. A recent example of the latter are the tax and regulatory measures taken in Thailand to encourage the Bangkok International Banking Facility, which de facto encouraged short-term borrowing (Boorman 1998).

Second, even those recipient countries – like Chile, Colombia and Malaysia – 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.

Third, if one or several major emerging countries experience attacks on their currencies, which also result in difficulties to service their debt in full, it is far more probable than in the past that those countries will be forced to seek official funding to allow them to continue servicing their foreign exchange obligations in full, rather than being able to restructure such obligations. As the IMF (1995) pointed out, one important reason for the latter is the difficulty of restructuring securitised exposures owned by a diversity of investors. Because international official funding plays such a large role in providing finance during such crises, to avoid moral hazard, there is a clear need for international and/or source country regulation that will discourage excessive short-term capital inflows. If such international and/or source country regulation is not developed, international private investors and creditors will 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.

As a consequence, it is important to complete and improve international prudential supervision and regulation, to adapt it to the new scale and nature of private flows. Indeed, it is essential to fill existing regulatory gaps. Calls for improved supervision and regulation of capital flows to emerging markets internationally and/or by source countries began to be heard after the Asian crisis. For example Martin Wolf (1998) wrote in the *Financial Times* 'After the crisis, the question can no longer be whether these flows should be regulated in some way. It can only be how.' In the same spirit, the G-24 in their April 1998 statement called for the creation of a task force that, amongst other aspects, would examine: 'more effective surveillance of the policies of major industrialised countries affecting key international monetary and financial variables, including capital flows.' Soros (1997) has argued forcefully that international capital and credit flows need to be regulated.

There are two types of flows to emerging markets where additional regulation and supervision seems particularly necessary, as they seem insufficiently regulated and their surges, as well as outflows, have played a particularly prominent role in sparking off recent currency crises. One of these flows is short-term bank loans; the other is easily reversible portfolio flows.

As regards short-term bank loans, they played a particularly important role before and during the Asian currency crises, especially in some countries, such as South Korea. In principle, bank loans (including short-term ones) are already regulated by industrial countries' central banks or their other regulators; these national regulations are coordinated by the Basle Committee. Such regulations include requirements for provisioning against potential future losses on lending to emerging countries (with a particularly detailed methodology developed in the Bank of England with its provisioning matrix) and capital adequacy requirements. However, existing regulations were not enough to discourage excessive short-term bank lending to several of the Asian countries.

A key reason was that until just before the crisis most of these Asian countries (and particularly countries like South Korea) were seen by everybody, including regulators, as creditworthy (for evidence see Radelet and Sachs 1998). This was caused not just by asymmetries of information and disaster myopia (Griffith-Jones, 1998) but also by the excellent record of the East Asian countries described above. Another, perhaps somewhat secondary but also important reason, seems to have been current regulatory practice.[3] This implies that for non-OECD countries (which included South Korea until recently) 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. This introduces a regulatory bias that encourages short-term lending. A narrowing of the existing differential may therefore be desirable.

As regards portfolio flows to emerging markets, there is at present no regulatory framework for taking account of market or credit risks on flows originating in institutional investors, such as mutual funds (and indeed more broadly for flows originating in non-bank institutions). This is an important regulatory gap that needs to be filled urgently, both to protect retail investors in developed countries and to protect developing countries from the negative effects of excessively large and potentially volatile portfolio flows.

The need to protect retail investors from developed countries through regulation remains, in spite of important efforts being made to improve information by the regulatory authorities, especially in the US (see d'Arista and Griffith-Jones 1998). The key reason is that it is practically impossible to improve sufficiently information and disclosure for retail investors on risk/return for their investments in emerging markets, because of the conceptual complexities involved, and especially given that the problems of asymmetric information and principal agency are particularly large for this category of investments (Mishkin 1996).

As regards emerging market countries, the Asian crisis confirms what was already clearly visible in the Mexican peso crisis. Institutional investors, like mutual funds, given the very liquid nature of their investments, can play an important role in contributing to currency crises. It seems important to fill this regulatory gap and introduce source country regulation to protect their domestic investors (especially the less informed retail investors), and discourage excessive surges of portfolio flows to emerging markets. This could perhaps best be achieved by risk-weighted cash requirements for institutional investors, such as mutual funds. These cash requirements would be placed as interest-bearing deposits in commercial banks. It should be stressed that this proposal is in the mainstream of current regulatory thinking, which sees risk-weighting as the key element in regulation (for an authoritative statement from the US Federal Reserve Board, see Phillips, 1998).

Introducing a risk-weighted cash requirement for mutual funds (and perhaps other institutional investors) would require that standards be provided by regulatory authorities. In the United States, these standards would result from consultations among the Securities and Exchange Commission with the Federal Reserve Board and the Treasury. In the UK, the standards would result from consultations between the Securities Investment Board, with the Bank of England and the Treasury. Weight should be given to the views of market analysts such as credit rating agencies, as well as particularly to the views of international agencies such as the IMF and BIS, with a long expertise in assessing countries' macroeconomic performance. This would provide guidelines for defining macroeconomic risk and for its measurement in determining the appropriate level of cash reserves. Thus, cash reserves would vary according to the macroeconomic risks of different countries.

The guidelines for macroeconomic risk (which would determine the cash requirements) would take into account such variables as the ratio of a country's current account deficit (or surplus) to GDP, the level of its external debt to GDP, the maturity structure of that debt, the fragility of the banking system, and other country risk factors. Factors such as custody-related risks (which already greatly concern securities regulators) could be included where relevant. It is important that quite

[3] Communication with Colin Miles, Bank of England.

sophisticated analysis is used, to avoid simplistic criteria stigmatising countries unnecessarily and arbitrarily. The views of the Central Bank, the Treasury, the IMF and the BIS should be helpful in this respect, especially given the long experience of foreign exchange crises and their causes that the international community has acquired.

The fact that the level of the required charge would vary with the level of perceived 'macroeconomic 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 macroeconomic or financial sector fundamentals in a particular country deteriorate, investment in them would decline ***gradually***, which hopefully would force an early correction of macroeconomic policy, and, once this happened, a resumption of flows would take place; this smoothing of flows would hopefully discourage the massive and sudden reversals of flows that sparked off the Mexican peso and Asian currency crises, making such costly crises less likely. 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. Similarly, retail investors in developed countries could get slightly lower yields, but be assured of far lower risks and lower volatility. Given the dominant role and rapid growth of institutional investors in the US and UK, this proposal – a risk-weighted cash requirement capital charge on mutual funds – could be adopted first in these two countries without creating significant competitive disadvantages. However, once implemented in the major countries, like the US and the UK, efforts to harmonise such measures internationally would need to be given urgent priority for discussion at the global level by the IOSCO, so as to prevent investments by mutual funds being channelled through off-shore intermediaries that did not impose these cash requirements.

The suggested measures would follow a similar process as adopted first by G-10 Central Banks individually, on provisioning and capital adequacy on bank loans, which were then coordinated for all G-10 countries in the Basle Committee; the procedure would be similar, and the mechanism would be based on the same principle as capital adequacy, but would be clearly adapted to suit the institutional features of mutual funds, where shareholder capital backs 100 per cent of invested assets.

Finally, it is important to stress that additional regulation of mutual funds should be symmetrical with regulation of other institutions (e.g. banks) and other potentially volatile flows (e.g. excessive short-term bank credit). Emphasis on regulation of institutional investors, like mutual funds, is necessary because they are clearly under-regulated in comparison with other financial institutions, principally because their growth is so recent (particularly in relation to their increased investment in emerging markets).

It can be concluded that though better disclosure of risk is both difficult and very valuable, better information and disclosure needs to be complemented by other measures to both achieve better investor protection and diminish potential volatility of flows, which is particularly damaging for developing countries. A complementary measure to improve disclosure – risk-weighted cash requirements – has been discussed. Naturally other proposals, or variations of the present proposal, could be considered. What is clearly important is that meaningful measures should be taken to help stabilise capital flows to emerging markets. It is also important to stress that, given the evolution of the markets, past strategies, such as prohibiting investment in certain markets, are clearly no longer appropriate. Such prescriptive rules could have potentially negative effects on investors (who could lose profitable opportunities) and some emerging market economies, as their access to portfolio flows could be curtailed either in general, or – even worse – abruptly in times of macroeconomic difficulties.

It would seem desirable to complement measures for improving and completing international prudential supervision for credit and capital markets with a measure of international taxation. A measure that deserves attention is Tobin's proposal to levy an international uniform tax on spot transactions in foreign exchange. This proposal, initially made by James Tobin in 1972, has received much attention recently, particularly given turbulence on foreign exchange markets, both in Europe (1992) and in

the emerging markets. Kaul *et al.* (1996) explore the issues in depth; Kenen (1996) shows the practical feasibility of such a tax. Tobin's proposal is for a very low tax on all currency transactions. The aim would be to slow down speculative, short-term capital movements (which would be more affected, as by definition they cross borders often, and would be taxed every time), while having only a marginal effect on long-term flows.

This would achieve two objectives. Firstly, it would increase the autonomy of national authorities for monetary and macroeconomic policy, and increase independence from the effects of international money markets. Such an autonomy would be particularly valuable for LDCs, given that their economies adapt less easily to external shocks and because their thinner financial markets are more vulnerable to the impact of external capital inflows and outflows. The second objective (Tobin 1996) is to make exchange rates reflect to a larger degree long-run fundamentals relative to short-range expectations and risk. Volatility – in particular departures from fundamentals – would be diminished. So would the likelihood of currency crises.

This proposal is different from the others listed above, in that it may seem more radical. However, there is a widespread feeling, even in private sector circles, that financial liberalisation may have proceeded too far or at least too fast, and that financial liberalisation carried to the extreme may even risk damaging the far more important trade liberalisation whose benefits are more universally recognised. Furthermore, a new tax with potentially high yields would be attractive to fiscally constrained governments. Part of the proceeds could also fund public goods like poverty alleviation and environment spending, especially in poorer countries. The tax could be introduced on a temporary basis for a fixed period, for example five years. This would be consistent with the fairly widespread perception that financial fragility and systematic risk are particularly high in the current stage of 'transition' from regulated to freer financial markets.

It can be concluded that one or several measures need to be taken internationally 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 crisis 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, if they avoid discouraging more long-term flows, if the rules designed are simple and clearly targeted at unsustainable flows and if they are complemented by good policies in the emerging economies.

As in medicine, so with currency crises; prevention is far better than cure. Therefore, it seems desirable to particularly emphasise crisis prevention measures. However, if prevention fails and major currency crises do unfortunately occur, measures need to be in place to manage them as well as possible. It is to this that we turn in the next section.

4 Crisis Management

The lender of last resort

The first response when a large currency crisis starts unfolding in one or more countries is to activate quickly a sufficiently large 'international lender of last resort' to provide the important public good of stability. The key institution in this has been the International Monetary Fund, both through its own resources and its catalytic role in attracting other resources. A number of issues arise relating to the IMF's role as lender of last resort. The main ones seem to be: timing, scale, conditionality and ways to avoid moral hazard. We will discuss these briefly.

The issue of timing is crucial, as currency crises happen so quickly. Though the IMF and the international financial community have made important efforts to develop emergency procedures to speed up significantly the Fund's response in moments of currency crises, the response is still not fast enough. This implies that a currency crisis is able to unfold for a couple of weeks, before a financing package can be put in place. As markets move so fast and overact so much, a great deal of damage can occur in that period (e.g. there can be much overshooting of the exchange rate). Also, due to contagion the crisis can spread to other countries, adding to costs and problems.

The best solution seems to be to build on a suggestion made in a 1994 IMF paper ('Short-term

Financing Facility') and to institute preventive programmes; indeed, such a facility seems to have been established for the Philippines in early 1998. What this implies is that a request for a country's right to borrow from the IMF could be made before a crisis happens, for example during the time of the Fund's Article IV health check of a country's economy. The country would only draw on this facility if a crisis occurred, but could do so immediately when it started. This would, however, imply that the Fund would have a 'shadow programme' with the country, and therefore impose some policy conditionality, focussing on conditions that would make a currency crisis less likely. The Fund's conditionality would naturally be less tough than in the middle of a crisis, as far less draconian measures would be required.

The country would have to accept conditionality even while it was not receiving disbursements; however, the country would have the very important advantage of an automatic right to draw off a large credit (or at least a first tranche) immediately when a crisis started; naturally, the drawing of the credit would be accompanied by an immediate report to the Fund's board, but *no* need for board approval. This procedure would have the ***great advantage*** for the country (and the international community) that the immediate activation of the facility would reassure the markets more quickly, thus hopefully reducing the scale of the crisis and its cost.

A second crucial issue is the scale of the lending, by the IMF and others. Bagehot's (1873) classic advice on national lenders of last resort was that, to be effective in convincing markets, such a facility must be able to 'lend freely', that is virtually open-ended. The massive scale for an international lender of last resort, given the scale of assets in the private markets, poses a serious challenge for governments and central banks of the major countries. This challenge is made more difficult by the resistance of the US Congress to providing additional resources to the IMF, which are clearly necessary.

An additional serious problem, that has been insufficiently discussed, is that when such large volumes of IMF – as well as World Bank and Regional Development Bank – funding is channelled towards middle-income countries in crisis, funding available from those institutions for low-income countries can fall drastically. This is a very negative indirect effect of currency crises.

Two types of measures can help alleviate the pressure on the IMF and governments as international lender of last resort. The first is to reduce the likelihood of currency crises, by giving high priority to adopting measures along the lines discussed in section 3 above. The second measure to reduce the need for international public funding is to attempt to involve the private sector in providing some of the liquidity required for the lender of last resort facility. It is interesting that some countries (e.g. Argentina) have recently already themselves arranged stand-by facilities with international banks, only to be used in case of a currency crisis. This facility, however, has not yet been tested.

A final issue is the nature of IMF conditionality that should accompany the large financial packages, linked to currency crises. There have been a number of criticisms of IMF conditionality. For example, Feldstein (1998) has argued that IMF conditionality has been too intrusive and too comprehensive, trying to make dramatic changes in very short periods. Radelet and Sachs (1998) have further argued that the conditionality has not been appropriate in several important aspects, (e.g. bank closures, tightening of fiscal policy, excessive emphasis on full debt repayment) and even that some of these measures and their pace have 'added to, rather than ameliorated, the panic'. Their critique seems particularly strong on the abrupt shutting down of financial institutions without a more comprehensive programme for financial sector reform and no deposit insurance in place, which in Thailand and Indonesia only deepened the panic.

On macroeconomic policy, the key new challenge for IMF (and country) programmes is to design appropriate macroeconomic responses for currency crises that mainly originate in private sector imbalances and not, as IMF packages are accustomed to dealing with, public sector imbalances. The traditional IMF response – tightening fiscal policy – may either be totally inappropriate or insufficient. New elements need to be introduced, in the new context of private sector led deficits, like counter-cyclic macroeconomic policy; greater focus has to be placed not just on post-crisis macro-management,

but on prudent fiscal and monetary management during periods of abundant capital inflows. This could, for example, even include cyclically adjusted taxation to curb excessive growth of private spending. Domestic prudential regulation of the financial sector could also include anti-cyclical elements such as stricter prudential regulation of short-term foreign exposure by banks. It could also imply limiting the value of assets (e.g. real estate) allowed to be used as guarantees for loans, when the value of such assets can fall significantly if a currency and financial crisis occurs.

Orderly workouts

The Asian crisis has lent a sense of urgency to the search for ways to manage financial crises more effectively. The scale of capital flows in the 1990s means that public funds can no longer be relied upon to offset the private outflows during a crisis. In response to this situation, as well as to increased concern over moral hazard issues, there is a widely held view that a better means of burden sharing is required, with the private sector taking some of the responsibility for the ongoing provision of credit to borrowers in crisis countries.

The scale of the IMF-led rescue packages in Asia, together with that of the one put together for Mexico during the peso crisis, have led to increased concern over the issue of moral hazard. Moral hazard occurs when the party that assesses the level of risk of a given transaction receives the gains from, but does not bear the full costs of, the risks taken. Moral hazard is believed to be particularly strong on the lender's side, as lenders and investors are saved from having to bear the full risks of their investment decisions by IMF-led bail-outs. The knowledge that a bail-out would be likely should a country hit difficulties discourages investors and lenders from adequately assessing the risk of investing in emerging markets.

The need to reduce moral hazard, however, does not imply that policymakers should do nothing; the problems involved in collective action, and the risk of contagion are justification for official intervention in crises. The problems of collective action were clearly illustrated during the 1980s debt crisis, when the long drawn-out debt negotiations were an important factor in delaying recovery in Latin America. A further example is that of Indonesia in the current crisis, where it took six months for the country to reach agreement with foreign banks on a private-sector debt restructuring programme. During the intervening period, January to June 1998, the Indonesian economy deteriorated to the point where debt rescheduling may no longer be sufficient.

There is clearly a need for a system which can bring about the rapid resolution of crises, while limiting the problems of moral hazard. There is now a growing consensus that ways need to found to encourage a greater assumption of risk by the private sector, as well as to involve the private sector at an early stage in crisis resolution in order to achieve equitable burden sharing *vis-a-vis* the official sector. In a short-term liquidity crisis, as many now believe the Asian crisis to have been, at least at the outset, the timely provision of significant further credit could avoid the imposition of damaging austerity measures on affected economies. In such cases, the official sector, rather than bailing out private creditors, could bail them in by enforcing early debt negotiations. The private creditors could be encouraged to retain their exposure, and to restructure their short-term credits over a longer term, as a condition of official assistance. In cases of insolvency, the official sector could play a vital role in coordinating the debt workout, including compelling private creditors to write off debt where necessary.

In response to the Asian crisis, a G-22 working group has been set up to look at these issues under the heading of 'Appropriate Burden-sharing in International Financial Crises'. The working group will build on work undertaken by the G-10 on sovereign liquidity crises in the wake of the Mexican peso crisis, which examined the need to introduce new mechanisms to encourage a more efficient market-based resolution of debt crises.[4] The proposals being reviewed by the G-22 include: (i) changes in the provisions of loan contracts and bond covenants to facilitate restructuring; (ii) the use of a unilateral stay on payments; and (iii) the potential for lending into arrears by the IMF.

[4] The Group of Ten, 1996, 'The Resolution of Sovereign Liquidity Crises', Bank for International Settlements, Basle and International Monetary Fund, Washington.

The working group will look at proposals to include contractual provisions in bond contracts and loan agreements which could help to facilitate creditor decision-making and therefore the orderly resolution of crises. Such provisions could encourage dialogue between debtors and creditors, as well as among creditors, and prevent a minority of dissident investors from holding up settlement. Among such provisions are those that (a) provide for the collective representation of debt holders in the event of a crisis, (b) allow for qualified majority voting to alter the terms and conditions of contracts, and (c) require the sharing among creditors of assets received from the debtor.

The G-22 working group is also examining alternative ways of achieving standstill-type arrangements, including the use of official sanctions for enforcing standstills. The G-10 report recognised that, in exceptional circumstances, temporary payment suspensions may be a necessary part of the crisis resolution process. The threat of a payment suspension would encourage creditors to seek rapid debt renegotiation. If governments impose a standstill as part of a process of cooperative and non-confrontational debt renegotiation, creditors are unlikely to penalise them. The effectiveness of such an arrangement could be enhanced if the international financial institutions were to signal their approval by lending into arrears to countries whose policies and prospects are considered acceptable.

Objections to both informal and formal signalling methods are centred on moral hazard and contagion arguments. Moral hazard for borrowing countries would be limited by the painful experience of crises, and by the strict conditionality that the IMF would impose on lending in such circumstances. Furthermore, the possibility of a suspension of payments would reduce the moral hazard that encourages lenders to lend too much in the expectation that they will be bailed out by the IMF should things go wrong. The issue of contagion, however, is a more complex one as there are still large gaps in our understanding of how contagion works. Some argue that if markets get wind of a payments suspension in one emerging market economy, they may well pull out of other markets perceived to be 'similar' in some way. While this argument is feasible, the mechanisms currently in place have failed to limit contagion during the Asian crisis. Another question is whether the accepted use of payments suspensions during crises would raise the cost of capital to emerging markets generally.

The search for more effective ways to manage financial crises remains a priority as, although prevention is undoubtedly better than cure, crises will never be eliminated altogether. The orderly debt workout proposals discussed above offer possible ways to improve the existing mechanisms for dealing with crises, while minimising moral hazard and therefore reducing the likelihood of crises occurring in the first place. The current standard crisis response, which concentrates on imposing tough stabilisation measures on debtors, has had a particularly debilitating effect on the Asian countries affected by the present crisis, while the lengthy negotiations to agree debt restructuring in Indonesia provide a potent example of the failings of current arrangements. Valuable time was wasted, and crises which may well have been short-term liquidity crises at the outset became full-blown economic and financial crises, with serious social and political consequences for countries of the region.

5 Conclusions

The international community has been reflecting on lessons emerging from the Asian crisis and what steps need to be taken to improve crisis prevention and crisis management in the new globalised economy.

Section 3 of this article examined the key proposals being put forward by the IMF: improving the availability and transparency of information regarding economic data and policies to both the fund and the public, together with strengthening IMF surveillance; strengthening domestic financial systems, by improving regulation and supervision; and encouraging the orderly and properly sequenced liberalisation of capital flows. It was shown that, while these proposals represent necessary steps toward establishing a stronger international financial system, they would not be sufficient to prevent future crises. Key problems areas, such as the irrational behaviour of market participants and the difficulties of implementing financial sector reform in emerging market countries, represent major obstacles. Furthermore, while more prudent capital account liberalisation in emerging market countries would

undoubtedly be welcome, many now believe that these sometimes fragile economies need to be protected from the full force of international finance. This could be done by one or several measures that better regulate or tax short-term capital flows, nationally and/or internationally.

At a national level, there seems to be growing consensus that market-based measures to discourage excessive surges of short-term capital flows are desirable, as part of a package of measures of good management of capital flows, which clearly includes prudent monetary and fiscal policies, as well as a well supervised domestic financial system. The Chilean system of non-remunerated reserve requirements on inflows up to one year seems to work particularly well, even though they have some microeconomic costs.

Internationally, prudential regulation of short-term capital flows also may need to be improved and completed where gaps exist. In this context, two types of capital flows seem particularly relevant. One is short-term bank loans, whose regulation may need to be modified, as the current system provides strong regulatory incentives towards more short-term loans and less for long-term loans. Portfolio flows are at present totally unregulated by source countries, if they originated in non-bank institutions, like institutional investors.

Risk-weighted cash requirements for mutual funds in source countries – varying with macroeconomic evolution in developing countries – may be an appropriate way to smooth such flows, which will be beneficial for developing countries. An alternative mechanism – that would achieve a similar objective – is the creation of a guarantee institution, that for a fee would guarantee flows to emerging markets, up to a limit. Another idea worth considering is that of a very small international tax on all foreign exchange transactions (known as the Tobin tax – see above), that would also help discourage short-term flows without having any major effect on desirable long-term flows.

Though top priority needs to be given to crisis prevention, measures also need to be put in place to improve crisis management. These are explored in section 4. They include improving existing mechanisms – led by the IMF – for a lender of last resort. Improvements relate firstly to the necessary speed of such lending, given the incredible speed with which markets move; approval of shadow programmes before a crisis occurs, with loans activated as soon as one breaks out, may be an attractive option. The scale of existing facilities and IMF resources needs to be enlarged, given the large scale of private funds flowing through international markets. To enhance the scale of official facilities, the prospect of co-financing with the private sector, and particularly with private banks, needs to be explored. Finally, the issue of appropriate conditionality attached to financial packages needs to be revised, so that the conditionality is best targeted to restoring market confidence, with minimum damage to growth in the countries.

Also, there is now a general consensus among the international community that new ways need to be found to involve the private sector in crisis resolution in order to achieve equitable burden sharing with regard to the official sector, limit the problems of moral hazard and reduce the size of official financing required. Section 4 of this chapter outlined some of the proposals for orderly debt workouts currently being reviewed: the establishment of international bankruptcy procedures; changes in the provisions of loan contracts and bond covenants; and IMF-supported debt moratoria. Examination of the possible benefits and shortcomings of these proposals suggests that, despite the objections raised, international dialogue on these issues needs to be stepped up.

The policy debate in these areas needs to lead urgently to new policy measures and mechanisms, so as to avoid costly currency crises happening again and to manage them better if unfortunately they do happen. Given the complexity of the issues involved, the policy debate and actions needs to be underpinned by improved knowledge.

Further work is required to understand better than we currently do:

(a) How international capital and credit markets work. This will include for example, better understanding of how decisions are made by different categories of bankers, fund managers and other actors to enter and leave countries. What explains domestic investors behaviour? Are

some foreign investors/lenders more volatile than others? What determines whether contagion from one country to others occurs? What explains the path of contagion?

(b) What policy mechanisms could best be deployed nationally and internationally to prevent currency crises in developing countries? This would include more detailed study of the measures outlined above, but could also include others, like self-regulatory mechanisms within the financial industry and changes to the in centive systems of fund managers. The costs and benefits of different mechanisms need to be carefully assessed, together with the complex issues of implementation.

(c) Finally there is the question of which existing international institutions are best suited for carrying out the different tasks, and whether there are any institutional gaps to be filled. How can coordination – between international institutions themselves, and between them and national authorities – best be improved? How can coordination between international public and private institutions most fruitfully be improved?

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