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Should Capital Controls Have a Place in the Future International Monetary System?[1]

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Capital account convertibility – the complete elimination of all capital controls – was often treated in the 1990s as an integral element of the market liberalization that was being urged on emerging markets. In the middle of the decade there was even talk of making it an objective of international policy that would be embodied (as a long-term target) in the IMF Articles. The Asian crisis brought sharp disillusionment, and since then opinion has tended to swing back to acceptance that emerging markets may be ill advised to seek the rapid elimination of capital controls. But that has not brought with it any consensus as to the future role of capital controls in the international monetary system.

The present paper aims to take stock of this debate. The first section (which is elaborated in an Appendix) reviews the main trends in the use of capital controls over the last decade. The second section discusses whether there is still a role for controls, and considers which forms of controls seem most apt under current world conditions of relatively free markets. The next section explores the possibility of developing measures aimed at promoting inflows to emerging markets in times of drought like the present. The paper concludes by sketching a set of proposals for international policy in this area in the coming years.

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Recent Trends in Capital Account Policy

Despite the loss of enthusiasm for propagating capital account liberalization, the trend has remained very much in the direction of liberalization over the past decade. Table 1 provides a summary description of the extent to which each of 28 developing countries[3] had liberalised its capital account as of 1990 and as of 2001, the most recent year for which exchange restrictions have been reported by the IMF. For each country, a country's capital account regulations were classified as implying capital flows that were either repressed (R), partly repressed (PR), largely liberalised (LL), or liberalised (L) in the years 1990 and 2001. Details of how this classification was undertaken are provided in the Appendix. It can be seen that 16 of the 28 countries had a more liberalised capital account in 2001 than they had in 1990, while no country had moved in the opposite direction.

Of course, there were a number of cases of countries imposing or intensifying controls within that period, although in every case they had liberalised again before the survey was made in 2001. The most famous is doubtless Malaysia, which took drastic actions to ban capital outflows on September 1, 1998. These restrictions were eased within a few months and largely lifted in less than the promised year. But there were also efforts to curtail capital inflows by imposing new regulations on the part of Chile, Colombia, Brazil, Malaysia (in 1994), and Thailand (which also imposed outflow controls in the early months of the Asian crisis in 1997). And Argentina imposed exchange controls on outflows in late 2001, after the information reflected in Table 1 was collected.

Malaysia is a country that has had a relatively open capital account for a long time, but that undertook important policy adjustments during the decade. In 1994 it, like many other emerging markets, recognised that it was suffering from a surfeit of inflows. The authorities therefore implemented a number of regulations intended to curb short-term inflows: they prohibited the sale by residents to non-residents of money market securities; they forbade commercial banks engaging in swap and forward contracts with non-residents; they imposed ceilings on banks' net foreign exchange open positions; and they decreed reserve requirements for foreign-exchange

[3] The countries are: Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela (Latin America); Cote d'Ivoire, Kenya, Nigeria, South Africa and Tanzania (Sub-Saharan Africa); Morocco, Tunisia, Egypt and Turkey (North Africa and the Middle-East); Bangladesh, India, Pakistan and Sri Lanka (South Asia); China, Hong Kong, Indonesia, Korea, Malaysia, Singapore and Thailand (East Asia).

Table 1. Degree of capital account liberalisation in 1990 and 2001

	1990	2001
Latin America		
Argentina[1]	PR	LL
Brazil	PR	LL
Chile	LL	LL
Colombia	PR	LL
Mexico	LL	LL
Peru	PR	L
Venezuela	LL	LL
Sub-Saharan Africa		
Cote d'Ivoire	PR	LL
Kenya	LL	LL
Morocco	PR	LL
Nigeria	PR	LL
South Africa	LL	LL
Tanzania	R	PR
Uganda	LL	L
North Africa & Middle-East		
Morocco	PR	LL
Tunisia	PR	LL
Egypt	PR	L
Turkey	LL	LL
South Asia		
Bangladesh	PR	PR
India	PR	LL
Pakistan	PR	LL
Sri Lanka	PR	PR
East Asia		
China	R	PR
Hong Kong	L	L
Indonesia	LL	LL
Korea	PR	LL
Malaysia	LL	LL
Singapore	L	L
Thailand	LL	LL

Source: authors' elaboration, based on information from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions, 1991 and 2002, and country reports, when available. R (repressed); PR (partly repressed); LL (largely liberalised); and L (liberalised).

[1] The score for Argentina in 2001 does not capture the restrictions the country adopted at the end of the year.

liabilities of commercial banks. Apart from the prudential regulations, these controls were lifted when the inflow pressures subsided. By 1998 Malaysia was suffering the opposite problem, of excessive capital outflows in the context of the Asian crisis. The authorities therefore closed down the offshore ringitt market, prohibited lending by residents to non-residents, and blocked the repatriation of non-resident portfolio capital for 12 months. The announcement of these measures was met by fervent

denunciations and declarations that Malaysia had excommunicated itself from the international capital market and would fail to make its measures work, but in the event the measures proved eminently enforceable, were relaxed ahead of schedule, and by now are widely regarded as having been an intelligent response to the pressures that confronted the country.

The Chilean controls became something of a *cause celebre* in the debate about capital account liberalisation. In 1991 the new democratic government found to its surprise that it was being embarrassed by large capital inflows to Chile, which were threatening to undermine the highly competitive exchange rate that had enabled Chile in the 1980s to recover from the collapse of 1982 that had been provoked by a reversal of the excessive capital inflows of the preceding years. Determined to avoid the errors that had been perpetrated in 1978-81, the government maintained a minimum period of residence for equity inflows and imposed an unremunerated reserve requirement (an *encaje*) on all loans contracted abroad, whether by banks or by corporations, so as to reduce the profitability of capital inflows and thus diminish their volume (for a given interest differential). Since the period for which the reserves had to be held was a year no matter what the duration of the loan, the requirement was disproportionately costly for short-term loans, and thus had a second effect of biasing the term composition of loans toward the longer-term, helping to curb the instability inherent in owing a mass of short-term debt. There evolved late in the 1990s a significant literature on whether the *encaje* had been effective in its first intended role of increasing monetary independence (everyone agreed that it had been effective in skewing the composition of capital inflows toward the longer term). Our view is that it was effective (see the analysis in Williamson 2000, pp. 37-45).

Brazil, Colombia, and Thailand also made efforts in the course of the decade to curb capital inflows. Brazil's efforts are not generally rated as having been very effective, because of the complexity of the regulations and the frequent changes in them. Colombia adopted controls much more similar to those of Chile, although with an explicit increase in the reserve requirement for shorter-term loans. As in the case of Chile, there is agreement that the regulations were effective in lengthening the maturity of the loans but controversy about whether they also reduced the size of inflows. (Those who argue that these regulations were ineffective in curbing the volume of inflows seem strangely reluctant to acknowledge that if they are right the encaje is an ideal—because completely non-distortionary—tax!) Thailand introduced

restrictions intended to reduce short-term inflows in 1995, but these were not enormously affective because they were at variance with the policies intended to encourage the Bangkok International Banking Facility, an attempt to establish Bangkok as an offshore banking centre that ended up by providing a conduit for short-term loans from the rest of the world to Thailand.

There are also some interesting instances of controls that have been maintained even in a liberal environment, such as the vestigial controls maintained by Singapore. Singapore has maintained regulations designed to prevent the emergence of an offshore market in Singapore dollars, notably by prohibiting residents holding Singapore dollars in foreign bank accounts and by requiring foreigners who borrow Singapore dollars either to spend them in Singapore or else to convert them immediately into foreign exchange. It also prohibits financial institutions lending more than S$5 million to any non-resident financial entity for speculation in the foreign exchange market, which is enforced by a requirement that the Monetary Authority of Singapore approve any loan by a Singapore financial institution to a foreign financial institution of more than S$5 million.

Finally, it should be mentioned that some countries have still not gone very far in liberalising their capital accounts. This is true in particular of the South Asian countries (though India and Pakistan have gone further than Bangladesh and Sri Lanka), and China. Many observers have argued that this caution served these countries well in avoiding contagion from the East Asian crisis in 1997. India is particularly interesting, for shortly before the crisis broke out the Tarapore Committee had recommended a ("gradual") 3-year program for moving toward full capital account convertibility. In the event India has made only modest further moves in the subsequent six years, although the Committee did lay down three preconditions (the establishment of fiscal discipline, an inflation target, and bank solvency) and it is clear that the first (and less unambiguously also the last) of these still remains unfulfilled. It could therefore be that it is not exclusively the change in the intellectual atmosphere produced by the East Asian crisis that has delayed the process of capital account liberalization in India, though one may suspect that this was the dominant factor.

The Role and Form of Controls

As observed above, the trend toward liberalisation of capital flows is unambiguous. We do not challenge the view that complete liberalisation is the natural end point for a developed country. When a country is trusted by the market, it is able to borrow more even in a difficult situation; it is most unlikely to find itself the victim of a "sudden stop". In the phrase of Reinhart, Rogoff, and Savastano (2003), such a country has a high level of "debt tolerance"; that is, it can be relied on to maintain debt service even when debt service payments are large. Because the market can rely on it to do that, lenders will be prepared to buy more of its paper without demanding a prohibitive increase in interest payments even when debt is high, so the phenomenon of the sudden stop is unknown. In that situation there is really only one motivation for maintaining capital controls that makes any sense (defence of the ability to tax interest from capital, see below), and so it is not surprising that countries eliminate the hassle of policing capital controls and take advantage of whatever efficiency advantages of free capital mobility there may be.

However, by no means all countries are in his happy situation. Most emerging markets are only too familiar with the phenomenon of the sudden stop, where they are unable to borrow more on any terms. Reinhart, Rogoff, and Savastano (2003) try to divide emerging markets into two groups, those with a history of default where the capital market limits severely what they can borrow, and those without a history of default, where the capital market is more trusting. But even the group that has never defaulted includes countries like Korea, Malaysia, and Thailand that were subjected to sudden stops in 1997. It is therefore the emerging market countries, particularly those with a history of default, about which one needs to worry, and ask whether it is wise for them to dispense with capital controls.

Should one really hold capital account liberalisation responsible for the series of crises that have dogged emerging markets in recent years? After all, there have been many other candidates proposed: the macroeconomic fundamentals (such as the fiscal balance and the rate of inflation), the exchange rate regime, the effectiveness of prudential supervision of the financial system, and crony capitalism. We would not wish to argue that any of these are irrelevant, and yet none of them seem to be as systematically associated with whether countries have succumbed to crisis as the question of whether they have abolished capital controls.

The macroeconomic fundamentals. The 1980s' debt crisis was widely held to be the result primarily of fiscal weakness, which was reflected inter alia in a high rate of inflation. Yet these were conspicuously not issues in some of the more recent crises, most notably the Mexican crisis of 1994 and the East Asian crisis of 1997. Some writers have argued that these countries had latent fiscal problems, in that if the banks went bust and had to be bailed out the result would be a jump in public sector debt that would make their fiscal position much weaker than appeared on the surface prior to the crisis. That is true, but it will also be true of any country that suffers a crisis that engulfs its banks, and decides to bail out the banks. The question is whether there was any reason for believing these countries to have been particularly susceptible to those dangers prior to their crises. We are not aware of those who have advanced this argument having given ex ante warnings of these countries' vulnerability.

The exchange rate regime. The proximate cause of many emerging market crises has been a run on a pegged currency. For a time there was a common view that this implied that every country should adopt a "corner solution" for its exchange rate regime, either a floating rate or a fixed rate that was firmly pinned down by a currency board arrangement. We agree that allowing the currency to float serves to avoid one important source of vulnerability and provides an extra shock absorber. It is difficult, for example, to believe that the Brazilian authorities would have succeeded in riding out the 2002 panic without a full-scale crisis had the real still been pegged, even within a wide band. On the other hand, it is not true that whether a country had a pegged exchange rate serves to distinguish those Asian countries that succumbed to crisis in 1997 from those that did not. Bangladesh, China, Indonesia, Hong Kong, Sri Lanka and Vietnam all had pegged rates, and it can be argued that India, Korea, Malaysia, Pakistan, Philippines, Taiwan, and Thailand had de facto pegged rates, yet some of both groups had crises while others did not. Singapore, which avoided succumbing, had a formal but unannounced band that was allowed to depreciate in response to the crisis. And Brazil came perilously close to a full-scale crisis in 2002 despite having floated in 1999.

The idea that a currency board serves to avoid the risk of crisis looks pretty silly after the Argentinean tragedy and the prolonged recession in Hong Kong. And

the success of Singapore in riding out the crisis with an intermediate regime intact ought to be the last nail in the coffin of the two-corners doctrine.

Prudential Supervision of the Financial System. This is once again a factor that one can reasonably expect to reduce crisis vulnerability. Had Thailand not had such weak banks in 1997, it would doubtless have found it possible to raise interest rates sooner, and that might conceivably have headed off the crisis that broke at the beginning of July. But this again seems an awfully poor discriminator of which countries succumbed to crisis in Asia in 1997. Prudential supervision in China and South Asia was surely weaker than in Malaysia and Hong Kong, yet it was the latter and not the former countries that suffered crises.

Crony Capitalism. Much the same can be said about crony capitalism. Surely this was part of the problem in Indonesia, Korea, and Thailand. But is there any reason for believing that crony capitalism was worse in those countries than in China or South Asia?

Capital Controls. Now apply the same test as was done above to the issue of whether the capital account had been liberalised. Using the same categories as in Table 1, Table 2 shows the status of capital account liberalisation in all of the Asian countries that have been mentioned above as of 1997, the year the East Asian crisis started. It can be seen that there is an almost-perfect fit, with countries that had liberalised (scored LL or L) being exactly the ones that succumbed to the crisis, with one exception. That is Singapore, a country with quite unusually strong fundamentals and a large international creditor position, and also—as pointed out in Section 1—with a vestigial capital control designed specifically to ward off speculative attacks. The Latin American countries that suffered speculative attacks were also ones that had liberalised capital flows. There is of course nothing surprising in this: a liberalised capital account means that money can flood in freely when the herd takes a fancy to emerging markets in general or a specific country in particular, and is then free to bolt again when some negative shock leads to a change of opinion. And because investors prefer holding short-term to long-term assets, a country without capital controls can expect to have a mass of short-term debt which is vulnerable to rapid withdrawal when market sentiment does change.

Table 2. Degree of capital account liberalisation in Asia - 1997[1]

	1997
Bangladesh	**PR**
India	**PR**
Pakistan	**PR**
Sri Lanka	**PR**
China	**PR**
Hong Kong	**L**
Indonesia	**LL**
Korea	**LL**
Malaysia	**LL**
Singapore	**L**
Thailand	**LL**

Source: authors' elaboration, based on information from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions, 1991 and 2002, and country reports, when available. R (repressed); PR (partly repressed); LL (largely liberalised); L (liberalised).
[1] Corresponds to the first half of 1997.

Two other potential functions of capital controls are worth acknowledging. One is to increase the scope for a country to pursue a monetary policy dedicated to domestic needs even if it is not prepared to treat its exchange rate with "benign neglect". It is a well-known theorem of international monetary economics that a country cannot simultaneously have a fixed exchange rate, an independent monetary policy, and perfect capital mobility. The usual conclusion is that countries should allow their exchange rates to float, with a minority view that it would be better to subjugate monetary policy to that in some centre country. But it is also possible to hold the view that a better way of squaring the triangle would be to keep some capital controls.

The other function is to preserve the domestic tax base, and specifically to avoid inordinate haemorrhaging of capital in response to an attempt to tax the income from capital. If some countries (like the United States) did not exempt foreigners from the obligation of paying taxes on the interest earned on assets held there, then it would only be countries that wished to tax interest more heavily than the others that would

need to worry about preventing erosion of their tax base. But the anti-social US action in 1984 of exempting foreign interest income from tax means that every other country now has to worry about the loss of its tax base. Many developed countries have bilateral tax information sharing agreements with the United States, which means that they can gain the information that will enable them to police whether their residents are in fact reporting their income on assets held in the United States. OECD countries also have the option of joining the OECD multilateral tax information sharing agreement, which gives them the same benefit of being able to police the payment of taxes on US income earned by their residents. But few emerging markets qualify on either ground. Hence if they want to continue to be able to collect tax on income from capital they do not have much option but to control capital outflows.

What about the arguments against capital controls?[4] Yes, some forms at least impinge very much on personal freedom, and some of us at least will take that to be an argument against those forms of controls (specifically, controls on the movement of personal capital). Yes, there is some evidence that capital mobility acts as a discipline on macroeconomic policy; just think of the experience of Lula's new government in Brazil. At the same time, capital inflows seem always to be either flood or drought, with none of that gradual build-up of pressure as policy deteriorates that one would look for in an efficient disciplinary mechanism. Another classic argument is that capital flows play a stabilizing role that helps to attenuate the impact of shocks. In developed countries, that is persuasive; but sudden stops tend to magnify shocks, not offset them, in emerging markets. Of course, the basic argument for capital mobility is that it allows savings and investment to be de-linked, thus permitting emerging markets to invest more than they save and grow faster as a result. But capital controls do not preclude a country borrowing on the international capital market and thus achieving this benefit. The question is whether *free* capital mobility yields benefits additional to those that can be reaped by controlled access to the international capital market. The empirical evidence has not so far been very favourable to the hypothesis that free capital mobility enhances growth; Quinn's (1997) finding of a positive relationship between liberalisation and growth is

[4] The argument here is based on the arguments against capital controls considered by Richard Cooper (1999).

adequately explained by the far more plausible hypothesis that *partial* liberalisation (e.g. of FDI and long-term capital) is beneficial to growth.[5]

We conclude that there is a case for maintaining some forms of capital controls in emerging market countries for a long time yet. We doubt whether this will amount to a case for keeping them permanently. Admittedly the Reinhart, Rogoff, and Savastano (2003) paper does argue that once a country has blotted its copybook by defaulting it is permanently condemned to the sudden stops that make free capital mobility such a dubious proposition. But we find it more plausible to hypothesize that countries can in time change their image in the market; after all, Chile and Mexico, two of the classic defaulters, are now rated investment grade. Similarly, one would hope that in due course the tax case for capital controls will be eroded, either by the spread of tax information sharing agreements, or by an international tax organisation taking on the provision of tax information as one of its major tasks, or possibly by a withdrawal of the US tax concession that largely created the problem.

If some forms of control should persist, what form should these take? What criteria should guide one in selecting between different forms of control?

An obvious first criterion is *effectiveness*: whether a control measure will actually influence the flow that is being regulated, or whether it would be so easy to evade as to leave flows largely unaffected, e.g. by re-labeling a flow. One should not doubt that some evasion will always occur; Nazi Germany did not succeed in eliminating all capital flight, even when it instituted the death penalty as punishment (Kindleberger 1987). The question is whether so much evasion will occur as to leave flows largely unaffected.

But capital controls have costs, in thwarting transactions that may be expected to improve welfare. A second criterion is that a control should minimize this cost for a given level of effectiveness. This means that one should ask whether a control is *market-friendly*, in the sense that it would allow investors to judge for themselves how much they value allowing a particular transaction to go forward. Some flows are inevitably more important than others, and a bureaucrat who has to judge between them has no way of knowing which are the more important ones. A price-based measure leaves investors to decide for themselves whether they attach sufficient

[5] See Williamson (1999, p.132) for a fuller discussion.

importance to a particular transaction for it to be consummated despite an alteration of incentives designed to influence the size of the total flow.

Third, there is the question of the *cost* of administering a system of capital controls. This means the cost to both the government and investors of complying with, or evading, regulations.

What sort of controls do these three criteria suggest? They suggest avoiding the imposition of different regulations on different forms of flow[6] that cannot be readily distinguished from one another or that can be readily substituted for one another. They suggest either covering a wide variety of different types of flow in the same way, or else focusing on those flows that are likely to have a particularly important effect, e.g. in contributing to speculative pressures. Controls should be limited and strategic rather than complex and widespread.

Consider how those principles apply to the principal forms of control that were initiated during the past decade, as revealed by Section 1. These are:

- Prohibition of withdrawal of foreign-owned assets (as in Malaysia in 1998).
- Prohibition of asset sales between residents and non-residents, or lending by one group to another.
- Alternatively, a requirement to seek a license for such transactions.
- Ceilings on banks' foreign exchange positions.
- Imposition of an additional reserve requirement on banks' foreign exchange liabilities.
- Closure or prevention of an offshore market in a currency.
- Imposition of a reserve requirement on foreign borrowing (an *encaje*).

The first of these is almost inevitably a temporary measure, since foreign investors would object strenuously to an attempt to lock them in permanently and could surely organise retaliatory action. As a temporary measure, the Malaysian experience suggests it can be effective, but it would certainly have to be judged as market-unfriendly.

The prohibition (or subjection to a licensing requirement) of all asset sales between residents and non-residents would appear difficult to police, since it involves an attempt to control a wide range of activities of individuals and small firms as well as large actors. It again scores badly on the criterion of market-friendliness. More

[6] A recent study (Begg et al. 2003, Table 1) distinguishes eight types of flow: direct investment, investment in real estate, stock market operations (alias portfolio equity), security and money-market operations, accounts with financial intermediaries, credits related to commercial transactions, financial loans, transfers in performance of insurance contracts, and personal capital movements.

limited prohibitions (or requirements to seek permission) that are directed at specific visible actors, as in Singapore, are less vulnerable to the critique of ineffectiveness.

Ceilings on banks' foreign exchange positions are easy to police, and are regarded by many advocates of a liberal capital account as acceptable since they can be presented as a form of prudential control. However, loans to domestic banks are easily substituted by loans to domestic corporations from foreign banks, meaning that this form of control is likely to be of limited effectiveness. Additional reserve requirements on banks' foreign currency liabilities are a more market-friendly version of the same type of control, and are therefore subject to a similar critique of limited effectiveness.

A central bank is unable to police what goes on in an offshore market, which is why a country that is unhappy with the prospect of its currency being used in ways it cannot control is obliged to prevent an offshore market entirely. The experience of Malaysia and Singapore shows that this is feasible; the potential primary depositors in such a market have to be prevented from depositing the currency in an offshore account, by prohibitions on residents holding offshore deposits and a requirement that foreigners have to convert their acquisitions of domestic currency into foreign exchange.

Although the financial markets periodically found new ways of evading the Chilean *encaje*, which the central bank had to combat by periodic additions to the regulations, the surprise is that it proved sufficiently durable that the financial market people still complained about it after 7 years. This would seem to point to the advantage of having a regulation that is relatively broad (treating all loans in the same way) but does not attempt to cover all the less important asset transactions as well. The *encaje* was a price-related measure that allowed investors to go forward with a loan to which they attached particularly high importance.

This brief review suggests that the most suitable measures for imitation would be the Chilean *encaje* and the Singaporean prohibition of foreign borrowing for purposes of speculating against the currency. Ironically, those are exactly the two controls that have been targeted for emasculation by the United States in the two bilateral free trade agreements that it has signed, with Chile and Singapore respectively.

Measures to Encourage Foreign Borrowing in Times of Drought

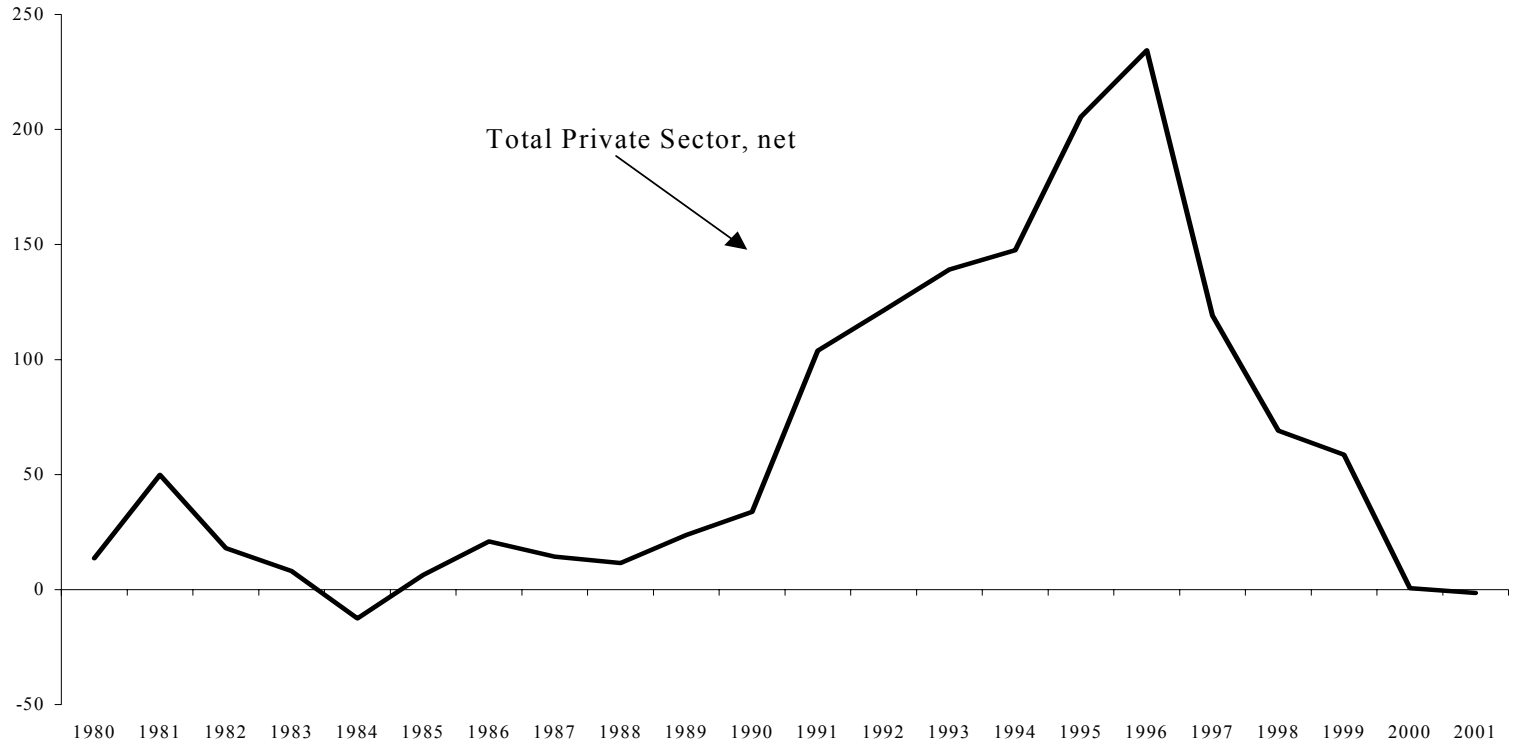
The agenda discussed above focuses on thwarting flows, either in or out, that private actors would wish to make out of consideration exclusively of their commercial interest. However, in the current situation it is not clear that this is the most urgent issue. Since the Asian crisis, net capital flows to emerging market economies have fallen very sharply, as can be seen in Graph 1; since 2000, net flows to emerging markets have been very close to zero or even negative. Net debt flows, in particular, have turned strongly negative, leading the World Bank (2003) to conclude that "the developing world has become a net capital exporter to the developed world." In the case of Latin America, one of the regions worst hit by sharp declines in capital flows, net private flows to the region are estimated by the IADB to have declined from around 5% of the region's GDP in 1996 to zero in 2002. Furthermore, net transfers to Latin America in 2002 (net flows minus interest payments and profit remittances), reached a large negative amount of US $39 billion!

There are reasons to fear that at least in part this sharp decline is due to structural changes that may not be reversed easily. For example, international banks have crossed the border by establishing subsidiaries or branches in developing countries, and therefore substituted foreign lending by domestic intermediation. And some portfolio equity investors feel that there are not many "sufficiently large" companies left for equity investors to buy in developing countries (Griffith-Jones, 2002). To the extent that these flows are determined by cyclical factors (linked for example, to general levels of risk aversion and more specifically, memories of recent crises in emerging markets), an important question is: how long is the relevant cycle? The sharp decline of capital flows to developing countries has already lasted for five years.

To the extent that the new trend towards a drought of capital flows to emerging markets is likely to last longer yet, the policy agenda needs to shift, both at the national and the international levels. The immediate problem is how to encourage sufficient private flows to developing countries. Here we will focus on measures to be taken internationally, and/or in source countries, though measures in developing countries are also important.

Graph 1

Private Capital Flows to Emerging Economies (in US$ bn)



Source: IMF

One of the novel problems that has arisen during and in the aftermath of recent crises is that *trade credit* has dried up. This is particularly problematic, as it inhibits the impact of the large depreciations that have typically accompanied crises on the expansion of exports, which is usually the key to post-crisis recovery. Argentina and Indonesia illustrate this problem; Brazil, even though it avoided a full-scale crisis, also saw a significant drying up of trade credit during the panic of 2002. This is a relatively new phenomenon; lines of trade credit were mostly maintained during the debt crisis.

At present, government institutions such as export credit guarantee agencies (ECAs) and multilateral development banks limit their activities (providing guarantees and credits) to longer-term assets. An important policy question is whether they should extend their activities to cover also short-term assets. In fact, the Inter-American Development Bank is currently exploring the creation of a guarantee mechanism specifically tailored to encourage trade finance provided by commercial banks. Such guarantees might be particularly useful for a country like Brazil in 2002 that was experiencing difficulties in accessing short-term trade credit, but not in a full crisis. One could of course go one step further, and have an institution like an ECA or the IADB grant trade credit in special circumstances, e.g. if a guarantee program failed to restore an adequate level of trade credit. Such a program for either guarantees or the direct provision of trade credits could be temporary, and be phased out once full access to trade credit from commercial banks was restored. The danger of such a solution is that it would relieve the commercial banks of carrying any real risk, since it would become easy for them to withdraw whenever a country faced difficulties, secure in the knowledge that public sector credit would take their place. It might end up with the private banks making most of the profits and the public sector banks carrying most of the risk; but this danger is inherent in any proposal for counter-cyclical lending by the public sector.

In the case of *long-term trade credit*, ECAs already play a large, even if declining, role in guaranteeing credits. An important issue is the extent to which ECAs and development banks should be willing to be counter-cyclical in the guarantees they grant. We hold the view that international financial markets tend to

overestimate risk in difficult times and underestimate it in good times[7], which implies that there is a strong case for introducing an explicit counter-cyclical element into risk evaluations made by export credit agencies. In times when banks and other creditors lowered their exposure, export credit agencies would increase or at least maintain their levels of guarantees. When matters were seen to improve by the markets, so that banks increased their willingness to lend, then export credit agencies could decrease their exposure, for example by selling export credit guarantees in the secondary market. This would avoid a greater counter-cyclicality of guarantees resulting in an increased average level of guarantees.

To the extent that ECAs are increasingly using models to estimate risks (as is the case of the UK ECGD), it is important that these models "see through the cycle". Such models should utilize measures of risk that are less affected by short-term variations than market-sensitive measures of risk typically are.

One possible way to increase the effectiveness of MDB guarantees in inducing private flows would be to guarantee only those risks that the markets are not prepared to cover (e.g. possibly covering only country risk and not commercial risk). It would also be possible to cover only initial maturities, and then roll over the guarantee once these initial payments have been made. Other mechanisms include reinsurance of guaranteed risk, whenever feasible, and introducing guarantees in local currency instruments. Alternatively, in some cases private actors may be willing to lend for early maturities and institutions like the IADB or World Bank may need to guarantee later maturities or provide co-financing for later maturities. This is particularly appropriate for infrastructure investments, which have high initial sunk costs and very long gestation periods before the project becomes profitable (see Gurria and Volcker, 2001, Griffith-Jones, 1993). Because of this, infrastructure projects often need financing for periods of up to 25-30 years, while the private market normally will only provide loans with significantly shorter maturities. This mismatch between financing needs, as well as the complexity of infrastructure projects and the shorter-term loans on offer from banks, make infrastructure projects a good candidate for partial public guarantees.

[7] Banks and other market participants' assessments of risk are often importantly determined by the state of global preferences for risk and by contagion between developing countries, and not much influenced by countries' fundamentals (for econometric evidence see Fitzgerald, 2003).

One suggestion is therefore to have public sector institutions play a much more consciously anti-cyclical role than has been customary. Our other suggestion is to urge a more pro-active role for *socially responsible investment* (SRI). Traditionally, SRI has tended to have a negative slant, focusing on restrictions on investing in undesirable activities, such as those that employ child labour, do not meet environmental or labour standards, or indulge "sins" like tobacco, alcohol and gambling. These restrictions can discourage investment in developing countries[8], since a feature of under-development is the existence of low wages and lower environmental standards than in rich countries (that is what it means to be poor, and it is precisely low wages that send the market a signal to make the investments that will allow a country to develop).

A new definition of SRI should specify that one of its central aims would be a *positive one*, to support *long-term* private flows to developing countries that *help fund pro-poor growth.* This would over time help to improve labour standards, both because incomes and especially wages would grow faster and because SRI foreign investors by being present and engaged in developing countries could have a positive influence on wages.

A change in the concept of what amounts to SRI, both by institutional and retail investors (where SRI has an important and growing presence), from a negative "anti-bad things" to an emphasis on pro-poor growth in developing countries, could potentially have a positive impact on both the level and stability of private flows to developing countries. In particular, pension funds could potentially provide more stable flows as their liabilities are on average very long term. In the UK, legislation introduced in 1999 required that all pension funds set out in their annual report the way that social and environmental factors were taken into account in their investment decisions. This facilitates the ability of pension fund trustees and members to examine the practice of their fund, and lobby for change if they wish. The change in the UK regulation was soon replicated in a variety of other European countries. Also in the United States there are large institutions, both pension funds and religious foundations, that have a tradition of socially responsible investment, whose

[8] A recent example of this is when the large US pension fund, Calpers, introduced a number of restrictions on their investment (e.g. minimum labour standards). This led to the withdrawal of their investments from several major developing countries.

investments could be in part channelled to emerging markets if they were intellectually convinced that this would help to improve the world.

An important challenge is therefore to influence SRI investors to expand their horizons and recognize their responsibility for helping to promote development. Note that this need not imply an inferior long-run investment performance, for there is evidence that the return/risk ratio of a portfolio that has a part of its assets invested in developing country equities will be higher in the long term than if it invests purely in developed countries. (See for example, Armendariz, Griffith-Jones, Gottschalk and Kimmis, 2002.) The potential is large, given the rapidly growing scale of SRI assets. For example, in the UK, Sparkes (2002) reports that the scale of these funds has increased ten fold in ten years to stand at US $326 billion in 2001. An estimate of global SRI assets (in Table 3), shows the very large scale, as well as the dominance of the US and UK.

TABLE 3

Global SRI Universe (2001)

(US $ billion)

United States	2332
United Kingdom	326
Canada	31
Rest of Europe	18
Total	2710

Source: Persaud (2003), based on Sparkes (2002)

It is not fanciful to hope that such a switch in the objectives of SRI investors could be achieved in coming years. In a recent survey of UK SRI investors' attitude, which questioned these investors about what they considered the most important issues to be, 97.7% cited "Third World people" as an issue of concern. This is not reflected in the current investment patterns of SRI funds: only a very small part of their money is at present invested in companies whose activities would promote growth and development in developing countries.

A natural complement to a policy of encouraging inflows is to avoid the introduction of measures that inappropriately discourage lending. A serious concern here is the current Basle capital accord proposals.

The Basle Committee of G-10 banking regulators has proposed a new Capital Accord, with the expressed aim of more accurately aligning regulatory capital with the risks that international banks face. Recent research shows clearly that the current Basle proposal would significantly overestimate the risk involved in international bank lending to developing countries, and would therefore result in an excessive increase in the capital requirements on such lending. This would be likely to lead to a sharp increase in the cost of bank borrowing by developing countries, and thus a significant fall in the supply of bank loans.[9]

This is particularly serious as in the last five years bank lending to the developing world has already fallen sharply. The current proposals are thus doubly problematic, both in terms of the Basle Committee's own aims (more accurate measurement of risk for determining capital adequacy) and due to their further discouragement of already insufficient bank lending to emerging markets.

The inconsistency with the Basle Committee's own aims arises because one of the major benefits of lending to – and investing in – developing countries is their relatively low correlation with mature markets. This hypothesis has been carefully tested empirically, and very strong evidence has been found – for a variety of variables, and over a range of time periods – that correlation between developed and developing countries is significantly lower than correlation only amongst developed countries. For example, spreads on syndicated loans – which reflect risks and probability of default – tend to rise and fall together within developed regions more than between developed and developing countries; similar results are obtained for the correlation of profitability of banks. Furthermore, broader macro-economic variables (such as growth of GDP, interest rates, evolution of bond prices and stock market indexes) show far more correlation within developed economies than between developed and developing ones.

These empirical findings imply that a bank that has a loan portfolio that is diversified between developed and developing countries will have a lower level of risk than one that is focussed exclusively on lending to developed economies.

[9] See a full analysis in Griffith-Jones, Segoviano, and Spratt (2003).

The current Basle proposals do not incorporate the benefits of international diversification, even though the capital requirements that Basle regulators determine are supposed to help banks cope with risk. This will incorrectly and unfairly penalize lending to developing countries unless the Basle Committee in its next (and almost final) revision of the proposed standards incorporates the benefits of international diversification. There are no practical, empirical or theoretical obstacles to such a change, which could potentially benefit the developing world at the same time as securing more accurate measurement of risk and capital adequacy requirements. It would be technically wrong, economically unwise and politically insensitive not to make this change.

Concluding Remarks

This paper has shown that the trend toward liberalisation of capital flows has continued in recent years, despite the loss of intellectual enthusiasm for rapid establishment of capital account convertibility in emerging markets following the Asian crisis. It is of course true that the issue of the moment is hardly preventing excessive capital inflows to these countries; on the contrary, they are currently suffering a prolonged drought of inflows. We have made several suggestions as to what might be done to alleviate this. One proposal is to have the multilateral development banks accept a novel role in guaranteeing, or if necessary providing, short-term trade credits where a shortage is provoked by cyclical pressures leading to a withdrawal of commercial banks from that role. Another is to persuade export credit agencies to incorporate a consciously counter-cyclical element into their policy stance toward medium-term trade credits, so that they would be more willing to increase their exposure in times of drought but might sell off some of their export credit guarantees in the secondary market when the markets are anxious to hold this type of paper. A third idea is to convince "socially responsible investors" that promoting development is an objective that they should embrace. In addition, it is important that the Basle Committee amend its proposals to avoid a technically incorrect penalty on bank lending to developing countries that is embedded in its current proposal.

However, there will be occasions when prudence will demand controls aimed at reducing the danger of new crises in emerging markets. We have argued that these controls should be limited and strategic rather than complex and widespread, focused

very clearly on the main justification for maintaining capital controls in emerging markets, which is minimizing the danger of speculative crises. We argued that two of the various types of control that have been utilized in recent years meet this criterion exceptionally well, namely the Chilean *encaje* and the Singaporean restriction on borrowing local currency for speculative purposes. Ironically, and tragically for the prospect of emerging markets becoming high-income economies without more unnecessary crises along the way, these are the very two controls that have been targeted for emasculation by the United States Treasury in U.S. negotiations for its first two bilateral free trade areas with non-neighbouring countries.

Appendix

Review of Experience since 1990

We have seen in Table 1 that most countries took measures to liberalise their capital accounts during the 1990s.[10] This was the case even among those countries that were relatively liberalised at the beginning of the decade, such as Mexico and Turkey. Typically, countries moved from a situation in which they were partly repressed to one in which they were largely liberalised.

Degree of liberalisation by regions

There are clear differences, however, by region.

Table A.1. Degree of capital account liberalisation - by region

	Averages				*Standard Deviation*	
	1990	**2001**	**1990**	**2001**	**1990**	**2001**
Latin America	2.43	3.60	PR	LL	0.57	0.19
Sub-Saharan Africa	2.62	3.31	PR	LL	0.50	0.65
North Africa & Middle-East	2.63	3.34	PR	LL	0.58	0.49
South Asia	2.03	2.50	PR	PR	0.24	0.45
East Asia	3.01	3.25	LL	LL	0.80	0.68
Total	2.59	3.26	PR	LL	0.64	0.60

Source: authors' elaboration, based on information from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions, 1991 and 2002, and country reports, when available. R (repressed): 1.00-1.75; PR (partly repressed): 1.76-2.75; LL (largely liberalised): 2.76-3.75; and L (liberalised): 3.76-4.00.

[10] To classify each country's capital account regulations as either repressed (R), partly repressed (PR), largely liberalised (LL), or liberalised (L), scores were assigned from 1 (R) to 4 (L) to the following items and sub-items of the countries' balance of payments: 1. FDI: direct investment and the liquidation of investment; 2. Portfolio flows: shares, bonds and collective investment securities; 3. Money market and derivatives: money market instruments, and derivatives and other instruments; 4. Credit operations: commercial credits, financial credits, and guarantees, surities and financial facilities; 5.Capital outflows by residents: FDI, lending, portfolio flows (shares, bonds and other securities), institutional investors, money market instruments and derivatives. The items' scores and the total scores are the simple average of the sub-items' and items' scores, respectively. The regional scores, in turn, are the simple average of the scores assigned to the region's countries. Since decimal values were obtained for the total scores, the following score ranges were established: repressed (R): 1.00-1.75; partly repressed (PR): 1.76-2.75; largely liberalised (LL): 2.76-3.75; and liberalised (L): 3.76-4.00. An item considered repressed usually means outright prohibition, and partly repressed, when authorisation is required. A largely liberalised item usually is subjected to market-based restrictions, such as unremunerated reserve requirements (URR), or ceiling limits and other quantitative/administrative restrictions.

In the year 1990, capital accounts were, on average, partly repressed in all regions with the exception of East Asia, where the capital accounts were already largely liberalised by then. During the 1990s, all regions showed some liberalisation, but the extent differed. According to our scores (which, of course, should be treated with caution), Latin America went the furthest towards full capital account convertibility. Sub-Saharan Africa and North Africa & Middle-East also undertook major liberalisation steps. The smallest change was observed in South Asia, a region that in 2001 was still classified as partly repressed. East Asia, while already fairly liberalised by the early 1990s, undertook modest additional liberalisation.

It should be noted that these regional patterns are based on our sample of countries; although we believe these countries are fairly good representatives of their regional neighbours, they may not necessarily reflect what happened in other countries of the regions. Still, the patterns observed are consistent with the view that the regions that liberalised most are those that have become most vulnerable to currency and financial crises. In contrast, South Asian countries, which by 2001 exhibited the lowest degree of capital account liberalisation, escaped unscathed from the financial crises that occurred in the last few years.

The degree of homogeneity concerning capital account liberalisation varies across regions. The highest degree of homogeneity (measured by the standard deviation of the score numbers assigned to the regions' countries - see Table A.1) can be found in South Asia in the 1990s, when all countries were fairly repressed, and in Latin America in 2001, when all countries were largely liberalised. By contrast, East Asian countries witnessed a relatively high degree of heterogeneity, both in the early 1990s and in 2001. This reflects the co-existence of contrasting economic models in the region.

Looking more closely within each region, a number of facts and trends are worth highlighting, regarding the types of capital account restrictions these countries used to reduce the volume of capital inflows in times of surges, and to limit capital outflows. Some of these, reported below, are not fully reflected in the scores above, as the latter are assigned for just two points in time, failing to fully capture what happened between 1990 and 2001.

Latin American countries

In Latin America, Chile, Mexico and Venezuela were already largely liberalised at the beginning of the 1990s, but that contrasted strongly with all the other countries, which were partly repressed, with Argentina and Peru being the most heavily repressed. This reflected the historical tradition of closed capital accounts and the debt crisis of the 1980s.

As the first country to reach a debt restructuring agreement under the Brady plan, Mexico took the first, and already by then very large, liberalisation steps at the end of the 1980s, almost a big-bang approach. At that time, the Mexican government allowed non-residents to invest in the stock markets, hold domestic bonds, including public ones, and acquire money market instruments (Griffith-Jones, 1996). The

country then undertook further liberalisation steps as it entered the OECD in 1994 (Griffith-Jones, Gottschalk and Cirera, forthcoming).

Argentina adopted a similar liberalisation strategy in 1991, liberalising its capital account quite rapidly and intensively. The country's degree of liberalisation is not fully reflected in its scores for 2001, however. This is because since it began suffering from the crises of the late 1990s, and particularly from the Brazilian devaluation of early 1999, it started re-imposing restrictions, which were intensified in late 2001 and early 2002 when it imposed major capital controls on outflows to stem massive capital flight. The country's score for 2001 does not capture these latest, more stringent, controls. After Mexico, Argentina had the most liberalised capital account in Latin America for most of the 1990s.

Like Mexico and Argentina, Peru adopted deep and fast liberalisation of the capital account, from an initial position of very restrictive controls. The exchange rate was unified and a free-floating regime adopted, FDI received equivalent treatment to domestic investment, capital could be freely repatriated, non-residents could acquire domestic securities, and residents and non-residents could open foreign-currency denominated accounts, although with high reserve requirements against such accounts (Ariyoshi et al., 2000).

Most of the other countries also started liberalising their capital account in the early 1990s. However, their policies had important elements of gradualism. Some of these elements took the form of restrictions to avoid excessive capital inflows during times of capital surges.

Chile (which had already largely liberalised by 1990) has been a paradigmatic case in the use of restrictions to reduce the volume of capital inflows and to influence their composition. In the early 1990s, the country experienced excessive capital inflows. To avoid excessive currency appreciation and other undesirable macroeconomic imbalances, in June 1991 the country's authorities adopted an unremunerated reserve requirement (URR) (the Chilean *encaje*), to reduce the volume of capital inflows and change their composition towards flows with longer maturity. This created a simple, non-discretionary and prudential mechanism, which penalised short-term foreign currency liabilities more heavily.

Initially, the URR was of 20% on foreign debts with maturity of more than one year, to be deposited at the Central Bank for one year, and for flows with maturity of less than one year, to be deposited during the whole stay period (or at least for 90 days - Ffrench-Davis and Tapia, 2001). FDI was subject to a minimum period of stay of three years. As pressures on the exchange rate continued, in May 1992 the URR was raised to 30%, and the minimum period of a one-year deposit was applied to all maturities. The stay requirement for FDI was reduced to one year.

In July 1995, the URR was extended to cover funds remitted from the sale of secondary ADRs, which were being extensively traded and putting pressure on the exchange rate (Ffrench-Davis and Tapia, 2001). In October 1996, foreign investment wanting to enter the country under Decree Law 600 (DL 600) started to be screened. Until then, speculative forms of investment were entering the country through the DL 600 door disguised as capital increases, investments in financial services and

'associated loans', and the purpose of the newly implemented screening system was to subject such investments to the deposit requirements (Griffith-Jones et al., 1998). In June 1998 the deposit requirement was lowered to 10%, and in September 1998 it was further lowered to 0%. This was a response to the change in the international scenario, in which capital flows to developing countries had dried up. Chile's restrictions were aimed at affecting both the volume and maturity of flows, and they could be modified in response to changes in circumstances, and in order to reduce loopholes. It should be noted that, in parallel to the restrictions on inflows, Chile liberalised capital outflows by residents gradually during the 1990s, although a few restrictions remain even today.

Restrictions on capital inflows in Chile achieved several goals, as has been widely recognised, even by the IMF. First, there is widespread consensus that the URR helped change the maturity structure of capital inflows towards longer-term flows (de Gregorio, Edwards and Valdes, 2000; Edwards, 1999; Gallego, Hernandez and Schimidt-Hebbel, 1999; and Ariyoshi et al., 2000). Second, due to this debt structure biased towards the long term, Chile survived better the effects of the Asian crisis, having experienced relatively mild volatility in the exchange and interest rates, and only a small loss of international reserves (Massad, 1998). Finally, there is some evidence that capital restrictions also contributed to reducing the overall level of net inflows (Gallego, Hernandez and Schimidt-Hebbel, 1999; Williamson, 2000), which in turn helped control the overheating of the economy that would have led to higher inflation and bigger current account deficits (Lefort and Lehman, 2000).

Other Latin American countries that were facing similar macroeconomic management problems as those in Chile due to large capital inflows - Brazil and Colombia - also adopted market-based restrictions to reduce the volume of capital flows and influence their composition.

Colombia adopted a Chilean-type deposit requirement. These deposits were applied for the first time in 1993 for foreign loans with maturity of less than 18 months, at a 47% level over one year. A particular feature of the Colombian measures was that they differentiated between maturities, having higher reserve requirements for shorter loans. Between 1993 and 1996, the maturity coverage expanded and the deposit rates increased. Rates were reduced after 1996 and totally removed in 1998 (Ariyoshi et al., 2000).

In Brazil, market-based controls took the form of an entrance tax on certain capital transactions, together with other restrictions. Restrictions were adopted mostly on short-term fixed income securities, with the government exercising varying degrees of control over time (Gottschalk, 2000; Prates, 1998). In times of surges, they restricted the entry of flows by raising tax and non-tax barriers, while at times of reversal, generally caused by crisis contagion, they reduced such barriers so as to encourage inflows. The decision to tax investment in fixed income and not stocks reflected the desire to influence the composition of capital flows and to reduce the monetary/public finance impact of flows channelled to government debt instruments (Garcia and Valpassos, 1998). Reportedly, the complexity of Brazil's regulations (and their frequent changes) undermined their effectiveness.

East Asian countries

As mentioned earlier, East Asian countries experienced some further liberalisation in the 1990s. However, the standard deviation in the region – our indicator of the degree of heterogeneity, or dispersion – both for 1990 and 2001 is the largest among all regions (see Table A.1). This means that the regional average conceals sharp differences among the countries of the region. Four types of countries can be found in East Asia. First, China, a very restricted country in 1990 which undertook little liberalisation during the 1990s. Second is Korea, a country with a starting position of partly repressed but that liberalised quite vigorously. Third is a group of countries that had already largely liberalised in the early 1990s (Indonesia, Malaysia and Thailand) that undertook some further liberalisation steps. Fourth are two city-states (Hong Kong and Singapore) that were already liberalised in the early 1990s.

The Chinese policy toward capital account liberalisation is closer to South Asian countries than to its sub-regional neighbours, in that it liberalised FDI first and kept strong restrictions on all other forms of capital flows, and then started to relax such restrictions only very gradually. By 2001, China was the most restrictive of all the Asian countries in our sample, according to our classification. Many transactions, such as the acquisition of domestic bonds by non-residents, are not permitted, while others (such as the issue of bonds abroad by residents) require prior approval. Transactions involving money market instruments and derivatives are mostly prohibited, and external borrowing is restricted, with a need for prior approval that is granted only under certain conditions.

Korea is the country that, starting from an initial fairly restrictive position, undertook the largest capital account liberalisation during the decade, to reach a fairly open stance by 2001. The country started out gradually, with residents being permitted to issue securities abroad and foreigners being allowed to invest directly in the Korean stock market (though limits existed on the latter). From 1993 until 1997, the process was accelerated with the lifting of barriers on short-term borrowing to different sorts of domestic activities previously restricted, investment by non-residents in public bonds, and permission to issue equity-linked bonds and non-guaranteed bonds by small and medium-sized firms, and non-guaranteed long-term bonds by large firms (Chang et al, 1998).

Some restrictions were maintained, however, particularly on some forms of capital inflows, due to concerns about surge of capital inflows, caused by interest rate differentials. These were mainly in the form of ceilings on foreign investment in domestic equity securities and borrowing from abroad by non-banks (Wang, 2000). However, the exceptions to these, which proved harmful, included the liberalisation of trade related short-term financing to domestic firms and short-term foreign currency borrowing by domestic banks (Shin and Wang, 1999).

Thailand, Malaysia and Indonesia, in turn, belong to a category of countries that had already many years of experience with a fairly open capital account.

Thailand's liberalisation was the most aggressive of these during the 1990s, particularly in the early 1990s with the creation of the Bangkok International Banking Facility (BIBF), which through tax privileges greatly encouraged external flows,

especially short-term ones (Johnston et al., 1997). In 1995, restrictions were imposed to reduce the volume of (mainly short-term) capital inflows, which became excessive in the first half of the 1990s. These restrictions included a 7 percent reserve requirement on non-resident baht accounts with a maturity of less than one year and on short-term borrowing of finance companies; limits for open short and long foreign currency positions (with lower limits for short positions); and reporting requirements by banks on risk control measures regarding foreign exchange and derivatives (Ariyoshi et al., 2000). However, capital continued to flow in large amounts by taking different forms (Siamwalla, Vajragupta and Vichyanond, 2003). In response to that, in 1996 the reserve requirements were extended to short-term borrowing by commercial and BIBF banks.

According to Ariyoshi et al. (2000), such controls on capital inflows succeeded in reducing the volume of inflows, lengthening their maturity, reducing the short-term debt to total debt ratio, and reducing the growth of non-resident baht accounts. However, these developments were not sufficient to avoid the reversal of capital flows the country experienced in 1997.

Like Thailand, Malaysia has been relatively open for years, and experienced a massive surge of capital inflows in the early 1990s. Until then, the limits on capital inflows consisted mainly of ceilings on foreign currency borrowing, beyond which approval was required. To further limit such flows, especially short-term ones, in 1994 the authorities prohibited the selling by residents to non-residents of money market securities, and commercial banks were forbidden to engage in swap and forward contracts with non-residents. Ceilings were imposed on banks' net foreign exchange open positions, and reserve requirements were decreed for foreign currency liabilities of commercial banks. Most of these controls were subsequently lifted, with only the prudential ones remaining in place. The assessment of Ariyoshi et al. (2000) is that such controls were effective both in reducing the volume and changing the maturity of flows.

During 1997 and early 1998 Malaysia suffered massive capital outflows. In response to that, in September 1998 the country's authorities adopted a number of restrictions on capital outflows. These included: prohibition of using domestic currency in trade payments and offshore trading, prohibition of credit facilities between residents and non-residents, and repatriation of non-resident portfolio capital, which was blocked for 12 months (Ariyoshi et al. 2000). Controls were later relaxed and then totally eliminated.

Indonesia greatly encouraged capital flows, especially FDI, from the start of the decade. Bank lending to the domestic corporate sector also became prominent in the 1990s. In the mid-1990s, there was an effort to prioritise FDI over other types of flows, with ceilings on foreign lending being used as an instrument, but with poor effectiveness (Gottschalk and Griffith-Jones, 2003).

Finally, Hong Kong and Singapore are among the few developing countries with almost totally liberalised capital accounts as early as 1990. Both countries remained open, though a few restrictions are in place. For example, in Hong Kong, the disclosure and position limits on derivative products are required, in addition to prudential limits on open foreign exchange positions and on certain forms of capital

outflows. In the case of Singapore, there are upper limits for foreign lending from residents to non-residents in Singapore dollars, and an obligation for non-residents to convert proceeds in Singapore dollars into foreign currency. These measures are aimed at discouraging the international use of the domestic currency. Also, there are certain prudential limits and restrictions on capital outflows.

South Asian countries

As mentioned earlier, South Asian countries have adopted a cautious approach to capital account liberalisation. FDI was liberalised first. In India, portfolio equity flows were selectively liberalised during the 1990s, and the liberalisation of external borrowing was very limited. The country relied extensively on quantitative and other controls. These included overall quantitative ceilings, approvals on a case-by-case basis, different degrees of restrictions according to the maturity of foreign liabilities, and end-use restrictions. Strong limits were imposed on short-term debt. In June 1997 – thus just before the East Asian crisis broke out – the Tarapore Committee recommended a timetable for further capital account liberalisation in India (Reserve Bank of India, 2000). The proposed liberalisation included both capital inflows and outflows; liberalisation was to be progressive, in three phases, over three years. However, these liberalisation steps were conditional on the country meeting certain pre-conditions. By 2001, India's capital account was still only partially liberalised, with strong restrictions remaining in place, particularly on capital outflows by residents.

Apparently due to this more cautious approach, and to its high level of foreign reserves, the country managed to escape the financial crises of the 1990s and even to avoid contagion effects during the East Asian crisis. In addition, it managed to maintain relatively strong economic growth during the 1990s, even during periods of major recessions in the crisis countries of the region (Ariyoshi et al., 2000).

Along side India, Pakistan is the other South Asian country that pursued significant liberalisation steps during the 1990s. In fact it went further than India, with most types of capital inflow liberalised. Most of the remaining restrictions are on capital outflows by residents, though lately some initial steps have been taken to liberalise outflows.

Although having undertaken some liberalisation steps, the capital account in both Bangladesh and Sri Lanka remains quite repressed. These two countries have maintained capital restrictions in the form of outright prohibitions (for example in the case of money market instruments and derivatives) and central bank approval (for example for commercial borrowing in the case of Bangladesh and long-term borrowing in the case of Sri Lanka). Capital outflows by residents are still strongly restricted, especially in Bangladesh.

North African and Middle-Eastern countries

In North Africa, Morocco and Tunisia moved from an initial position of partially repressed to largely liberalised capital accounts by 2001, although they were still more restricted than many other countries of the sample that reached the status of

largely liberalised. These were due to remaining restrictions mainly on inflows, related to the acquisition of money market instruments and derivatives, and capital outflows by residents, particularly portfolio flows.

Egypt and Turkey, in turn, liberalised fully all forms of portfolio inflows, leaving a few restrictions on some forms of capital outflows by residents (mainly lending to non-residents and outflows by institutional investors).

Sub-Saharan African countries

Sub-Saharan African (SSA) countries face a somewhat different set of issues as compared to the so-called emerging market economies. Most of them are poor, and tend to have large current account deficits, funded mainly by aid. If they liberalise the capital account, and private flows were to come in, then they would become very vulnerable to reversals of private flows on account of an external shock. Large outflows by residents, if permitted, might be an even more important source of vulnerability for SSA countries than reversals of private capital inflows, as the inflows are unlikely to be so large.

Yet, despite such considerations that would seem to advise for the adoption of a cautious approach, most Sub-Saharan countries covered in this study took major steps to liberalise their capital accounts in the 1990s. The exception was Tanzania, which proceeded very cautiously throughout the 1990s, though recently it too has initiated a bolder liberalisation strategy (see Griffith-Jones and Gottschalk, 2002).

Uganda is the Sub-Saharan country that liberalised it capital account most during the 1990s. It started to liberalise the current account in the late 1980s, and by 1992 had removed exchange control restrictions. In 1997, it achieved full capital account liberalisation, maintaining in place only a few prudential regulations in the financial system. The main purposes of the liberalisation reforms were to reduce the savings-investment gap, attract FDI and finance privatisation. Restrictions on the capital account that were until then in place were seen as ineffective in stemming capital flight (Kasakende, 2000). The main positive results associated with the reforms during the 1990s were an increase in FDI, and an increase in domestic private sector investment as well. On the negative side, Uganda experienced high exchange rate volatility, which has generated greater uncertainty.

Kenya was another fast liberalising country in the region. In a context of shortage of foreign reserves and large fiscal deficit, in 1991 the country embarked on a programme of reforms that included rapid current and capital account liberalisation. The latter included permission to hold foreign currency certificates of deposit, which could be traded by residents and non-residents, used for any foreign exchange transaction, and reclaimed at the Central Bank at face value. In addition, some companies could hold foreign currency denominated bank accounts abroad and domestically (Ayiroshyi et al, 2000). In 1994, the domestic currency became fully convertible, and in 1995 most of the remaining controls on foreign exchange transactions were removed (including access by foreigners to shares and government securities). Among the few exceptions, foreigners could hold portfolio equities up to 5% individually and 40% in aggregate. The overall result of capital account

liberalisation in Kenya in the context of broader reforms was macroeconomic volatility and increased capital flight (Ayiroshyi et al., 2000).

South Africa is the only emerging market economy in the region. Since 1994, when the South African economy was re-integrated with the world economy, the country's authorities have taken two broad steps to liberalise the capital account. First, they liberalised capital flows for non-residents in March 1995, and from July 1995 started a liberalisation process concerning capital flows by residents (Gottschalk, 2002). The liberalisation of capital flows by non-residents was implemented very rapidly in March 1995, when foreign exchange restrictions on non-residents were removed and the exchange rate was unified (Wesso, 2001); liberalisation covered all forms of flow, including short-term capital. The liberalisation of capital flows by residents, in contrast, has been gradual and sequenced. Starting in mid-1995, institutional investors were initially permitted to invest abroad through an asset-swap mechanism. The objective of this mechanism was to ensure balance of payments neutrality (National Treasury, 2001). This mechanism was removed in 2001, however, and replaced with certain limits. Nowadays, institutional investors are allowed to make foreign transfers of up to 10% of their net inflow of funds during the previous year. In addition, they are subject to overall limits of 15% of the total assets for pension funds, fund managers and insurers, and 20% for unit trusts (IMF, 2001; National Treasury, 2001). Corporations and individuals are also permitted to hold financial assets abroad, although the limits they face are more restrictive, especially for individuals.

The attention the South African authorities devoted to capital outflows by residents, and their lesser concern regarding capital inflows, probably reflected the fact that, in spite of being an emerging economy, they perceived the major threat to be capital outflows by residents, given the initial lack of confidence in the country's prospects by the monied minority. South Africa in fact witnessed less of a capital inflow surge during the decade than many other emerging economies, though the cycles of inflows and their reversal were much shorter and, therefore, in many ways very damaging to the country's macroeconomy.

Côte d'Ivoire is the only Francophone country in our sample, but certainly very representative of the countries that are members of the West African Economic and Monetary Union (WAEMU[11]). Capital inflows to Côte d'Ivoire are quite unrestricted, and this applies equally to all countries of the Union (IMF, 2002). A few restrictions still remain, mainly on capital outflows by residents.

[11] The WAEMU comprise the following countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

Bibliography

Ariyoshi, A. et al. (2000) 'Capital Controls: Country Experiences with Their Use and Liberalisation', IMF Occasional Paper No. 190, May 17.

Armendariz, E., Gottschalk, R., Griffith-Jones, S. and Kimmis, J. (2002) 'Making the Case for UK Pension Fund Investment in Development Country Assets', mimeo, IDS, July.

Begg, David, Barry Eichengreen, László Halpern, Jürgen von Hagen, and Charles Wyplosz (2003), *Sustainable Regimes of Capital Movements in Accession Countries*, CEPR Policy Paper no. 10.

Cooper, Richard N. (1999), "Should Capital Controls be Banished?" *Brookings Papers on Economic Activity*, 1.

Edwards, S. (1999) 'How effective are capital controls?' NBER working paper 7413, November.

FitzGerald, V. and Krolzig, D. (2003) 'Modelling the Demand for Emerging Markets Assets, mimeo, Oxford, January.

Gallego, F., Hernandez, L. and Schimidt-Hebbel, K (1999) ' Capital Controls in Chile: Effective? Efficient?' Working Paper of Central Bank of Chile no. 59, December.

Garcia, M. and Valpassos, M. (1998) 'Capital Flows, Capital Controls and Currency Crisis: The Case of Brazil in the Nineties', Texto Para Discussao, Departamento de Economia, PUC-RIO, November.

Gottschalk, R. (2002) 'Capital Account Liberalisation: The International Experience and Lessons for South Africa', report prepared for the South African National Treasury, December.

Gottschalk, R. (2000) 'Sequencing Trade and Capital Account Liberalisation: The Experience of Brazil in the 1990s', Occasional Paper, UNCTAD/UNDP, UNCTAD/EDM/Misc. 132, September.

Gottschalk, R. and Griffith-Jones, S. (2003) 'The Financial Crises of the Late 1990s: Summary and Policy Lessons', in Griffith-Jones, S., Gottschalk, R. and Cailloux, J. International Capital Flows in Calm and Turbulent Times: The Quest for a New Financial Architecture', University of Michigan Press, Ann Arbor.

De Gregorio, J., Edwards, S. and Valdes, R. O. (2000) 'Controls on capital flows: do they work? Journal of Development Econmics, vol. 63, Issue 1, October, pp. 59-83.

Griffith-Jones, S. (2002) 'Capital flows to developing countries: does the emperor have clothes?' IDS, mimeo.

Griffith-Jones, S. et al. (1998) 'EU/Chile Capital Flows', study prepared for DG-1 of the European Commission.

Griffith-Jones, S. (1996) 'The Mexican Peso Crisis. IDS Discussion Paper 354, July.

Griffith-Jones, S., Gottschalk, R. and Cirera, X. (2003) 'The OECD Experience with Capital Account Liberalisation', UNCTAD, forthcoming.

Griffith-Jones, S. and Gottschalk, R. (2002) 'Capital Account Liberalisation in Tanzania', report prepared for the Bank of Tanzania, October.

Griffith-Jones, Stephany, Miguel Segoviano, and Stephan Spratt (2003), "Basel II and Developing Countries: Diversification and Portfolio Effects", Institute for Development Studies, at http://www.ids.ac.uk/ids/global/finance/intfin.html.

Gurria, J. A. and Volcker, P., (2001) 'The Role of the Multilateral Development Banks in Emerging Market Economies: New Policies for a Changing Global Environment, report of the Commission of the role of the MDBs in EMEs, April.

Johnston, B., Darbar. S. and Echeverria, C., (1997) "Sequencing capital account liberalisation : lessons from the experiences in Chile, Indonesia, Korea and Thailand", *IMF Working Paper*, WP/97/157, November.

Kindleberger, Charles P. (1987), "A Historical Perspective", in D.R. Lessard and J. Williamson, eds., *Capital Flight and Third World Debt* (Washington: Institute for International Economics).

Massad, C. (1998) 'The Liberalisation of the Capital Account: Chile in the 1990s', in Fischer. S. (ed) Should The IMF Pursue Capital-Account Convertibility?, Essays in International Finance, no. 207, May.

Le Fort, G. and Lehmann, S. (2000) 'El Encaje, los Flujos de Capitales y el Gasto: Una Evaluacion empirica' Working Paper of Central Bank of Chile, no. 64, February.

Prates, D. M. (1998) 'Investimentos de Portfolio no Mercado Financeiro Domestico. In: Fundap. Abertura Externa e Sistema Financeiro. Relatorio Final, chapter 1, Sao Paulo, May.

Quinn, Dennis (1997), "The Correlates of Change in International Financial Regulation", *American Political Science Review*, 91(3), Sep., 531-51.

Reinhart, Carmen M., Kenneth S. Rogoff, and Miguel A. Savastano (2003), "Debt Intolerance", paper presented to the Brookings Panel on Economic Activity, March.

Reserve Bank of India (2000) 'Recommendations of Tarapore Committee on Capital Account Convertibility', http: www.rbi.org.in/index/dl…001&secid=21/0/0&archivemode=0

Siamwalla, A., Vajragupta, Y. and Vichyanond, P. (2003) 'Foreign Capital Flows to Thailand: Determinants and Impact', In: Griffith-Jones, S., Gottschalk, R. and

Cailloux, J., International Capital Flows In Calm and Turbulent Times: The Need for New International Architecture, University of Michigan Press, Ann Arbor.

Shin, I. and Wang, Y (1999) ‘ How to Sequence Capital Market Liberalisation: Lessons from the Korean Experience’, KIEP Working Paper 99-30, Seoul.

Wang, Y. (2000) ‘Getting the Sequencing Right: The Korean Experience in the Capital Market Liberalisation. Mimeo, Korea Institute for International Economic Policy, Seoul, Korea.

Wesso, G. R. (2001) 'The dynamics of capital flows in South Africa: an empirical investigation', Quarterly Bulletin, SA Reserve Bank, June, pp. 59-77.

Williamson, John (1999), “Implications of the East Asian Crisis for Debt Management”, in A. Vasudevan, ed., *External Debt Management: Issues, Lessons and Preventive Measures* (Mumbai: Reserve Bank of India).

____ (2000), *Exchange Rate Regimes for Emerging Markets: Reviving the Intermediate Option* (Washington: Institute for International Economics).

World Bank (2003) ‘Global Development Finance: Striving for Stability in Development Finance’, April.