

POLICY OPTIONS IN MANAGING CAPITAL FLOWS

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The massive inflow of capital into Asian economies since mid 1980s has generated substantial literature on appropriate policy responses in the recipient countries. This paper presents a synoptic view of the meaning, nature, composition and determinants of such flows. It is followed by a discussion on macroeconomic repercussions of such capital inflows and policy options. Although risks associated with capital inflows create policy dilemma, the overall picture for the Asian countries is much more positive than for their Latin American counterparts. Much of the capital inflow into Asia is in the nature of foreign direct investment. This calls for a high degree of credibility and until that is achieved the recipient country should be cautious about the intermediation of international capital inflows.

INTRODUCTION

In recent years, there has been a surge of international capital inflows to many Asian countries. For certain Asian countries, such as Malaysia and Thailand have amounted to as much as 15% of GDP. These developments represent a major turning point from the previous decade, when because of the debt crisis, little capital flowed to most developing countries. This change is not limited to only a few countries. The number of economies in Asia experiencing a surge in capital inflows has recently expanded; among the recipients of capital flows are India, Nepal & Sri Lanka. The surge of inflows has triggered a new literature investigating the appropriate policy response of the recipient countries. The urgency of this issue increased following the Mexican financial crisis at the end of 1994. This paper examines the policy options to the surge in capital inflows. The meaning, nature and changing composition of capital inflows is first considered. The factors underlying the surge in capital inflows and the macroeconomic

repercussions of an increase in capital inflows are then discussed and various policy options are analyzed.

CAPITAL FLOWS

Capital Inflows are defined by Calvo G.A., Leiderman L and Reinhart C.M. (1994) as "the increase in net international indebtedness of the private and the public sectors and are measured-albeit imprecisely by the surplus in the capital account of the balance of payments. Therefore, except for errors and omissions, the capital account surplus equals the excess of expenditure over income (that is, the current account deficit) plus the change in official holdings of international reserves. Thus, increases in capital inflows can be identified with widening current account deficits or an accumulation of reserves."¹

The official reserves account records purchases or sales of official reserve assets by Central Banks. Thus this account measures the extent of official foreign exchange intervention by the authorities,

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and is often referred to as the official settlements balance or the overall balance of payments.

There are two polar cases of central bank response to increased capital flows. If there is no intervention, the increased net exports of assets in the capital account are financing an increase in net imports of goods and services—capital inflows would not be associated with changes in central banks holdings of official reserves. At the other extreme, if the domestic authorities actively intervene and purchase the foreign exchange brought in by the capital inflow, the increase in the capital account is matched, one to one, by an increase in official reserves. In this case, there is no change in the gap between natural saving and investment, nor is there any change in the net foreign wealth of the economy.²

Capital inflows basically consist of foreign direct investment (FDI), portfolio equity and debt flows commercial lending and official flows. The nature and type of funds that are moving across markets, provide evidence of a significant departure from the older and well established types of cross border capital transactions. The providers of capital are mostly private investors, unlike banks and governments of developed countries, and the recipients of these flows are private corporations. Capital is now being allocated largely through the market mechanism rather than as part of aid packages or developmental assistance. Borrowing is increasingly through issue of marketable bonds, which are independently credit rated, rather than as bank loans and structured debt that are driven by broader country risk ratings. There is a qualitative shift in the nature of cross border flows with private flows becoming dominant, greatly overshadowing official flows. It is important to note that the financial flows in the 1990's have not only been extended mostly by

private lenders to private borrowers, but that the source of this financing has largely shifted from, banks to nonbanks through increased portfolio and foreign direct investment disintermediation effect i.e. securities, such as equities and bonds, have become more important than bank loans. There are two notable features in the flows to Asian countries. One is the importance of FDI and the other is the rising share of portfolio flows in the 1990's. Overall Asian developing countries attracted less portfolio flows relative to FDI than Western Hemisphere developing countries.³

Thus, as far as composition is concerned, the capital that has followed to developing countries in the 1990's is radically different from that of the earlier episodes, with commercial bank loans, which dominated the earlier periods, substantially replaced by foreign direct investment and bond equity portfolio flows. FDI is a desirable form of capital flows to the host country as it may bring in positive externalities such as technology and management expertise. From the foreign investors point of view, FDI may be motivated by strategic considerations in addition to the usual rate of return objectives. Such non-financial, strategic concerns include market share and regulations. Portfolio inflows, however, are known to be difficult to cope with if the recipient country does not have well developed macroeconomic policy instruments, or if the economy has fundamental weaknesses, such as a weak banking system (Khan and Reinhart, 1995). There is also a popular perception that portfolio flows are less stable than FDI. Turner (1991) ranks short term bank lending as the most volatile and long term bank flows as the least volatile followed by FDI. Claessens, Dooley and Warner (1995), however argue that there is no statistical support for the practice of labelling various capital flow components as "hot" or "cold".

DETRMINANTS OF CAPITAL FLOWS

To determine the main causes of the resurgence of capital inflows to many developing countries in Asia, it is important to distinguish between external and internal factors that give rise to this development.

External factors are those that are beyond the control of a given country and are thus unrelated to policies followed in the country in question. Examples of such factors for "small" open economies are i) a decline in world interest rates and ii) a rest of world recession which may be accompanied by reduced profit opportunities in the financial centres. Both of the examples suggest that these factors are likely to have an important "cyclical" reversible component.

Internal factors, on the other hand, are most often related to domestic policy e.g. countries can attract long-term inflows (possibly in the form of direct investment) by successfully implementing an inflation stabilization program, introducing major institutional reforms, such as liberalization of the domestic capital market and the opening of the trade account; and instituting policies that result in credible increases in the rate of return on investment. But domestic policies may also attract short term, reversible capital, especially when these policies are not fully credible.⁴

While foreign influences played a significant role in stimulating bond and equity flows to several Asian countries external developments were much less important than domestic ones in that region [Chuhan, Claessens & Mamingi (1993)] For Latin American countries foreign developments have played a somewhat greater role.⁵ The emphasis on external factors does not imply that domestic factors, such as structured reforms & stabilization, have played a negligible role. Domestic policies have been essential for the re-entry of

international capital. However, domestic factors alone cannot explain why capital inflows have also occurred in countries that have not undertaken reforms and have not stabilized, or why they did not occur in countries where reforms were introduced well before 1990.

PROBLEMS AND ISSUES

Large capital inflows may be a mixed blessing for the recipient countries if used productively, capital inflows allow higher investment relative to domestic savings and accelerate economic growth. To the extent that the current account deficit does not completely offset the inflow of capital, the recipient country can accumulate foreign exchange reserves, thus increasing the ability of the economy to absorb shocks emanating from variability of foreign exchange receipts and expenditure. Inflow of FDI also provides an economy with access to contemporary technology.

Nevertheless, there could be a problem of receiving "too much" capital inflows. The increase in capital inflows to developing countries is a matter of concern because of the macroeconomic and other related effects that capital inflows could have on recipient countries [V. Corbo and L. Hernandez (1993)].

Several possible consequences of capital inflows are of special concern for the recipient countries. By expanding the monetary base, non-FDI capital inflows can lead to an increase in aggregate demand, thus, generating inflationary pressures. If the nominal exchange rate is fixed, domestic inflation raises the relative price of non traded goods and the real exchange rate appreciates.⁶ Excess aggregate demand and real exchange rate appreciation would tend to widen the current account deficit of the balance of payments.

Inflation and a deteriorating current account position could send adverse signals to long-term external investors about the government's ability to maintain macroeconomic stability. Prices of financial assets and real estate can also be subject to volatility, especially if the inflows are of a short-term speculative nature. More importantly, the domestic financial system can be exposed to potential instability depending on the capacity of banks to successfully intermediate and ensure efficient allocation of credit.

For example a sudden increase in the liquidity of the banking system runs the risk that the quality of loans could deteriorate or there could be a mismatch between the structure of assets and liabilities. Both aspects could expose the banking system to potential instability. The problem could be exacerbated if there is explicit or implicit deposit insurance and if institutions for bank supervision are weak. Overall, in a world of high capital mobility, where capital flows can depart just as rapidly as they arrived, there is a genuine risk that their effects on inflation, the exchange rate and financial sector can lead to severe macro-economic stability.

The experience of Mexico in the aftermath of December 1994 is a vivid illustration of the potential problems and especially of the sharp contraction in economic activity that can follow sudden reversals of capital flows. The history of Latin America provides ample evidence that massive capital inflows may also produce stock market bubbles and lead to an excessive expansion in domestic credit, placing in jeopardy the stability of the financial system. If the capital inflows are of a short-term nature, these problems intensify, as the probability of an abrupt and sudden reversal increases. Not surprisingly therefore, effective buttering of these capital inflows as one of the key

economic policy issues.

Given that capital inflows can have both positive and negative effects - why should a government be concerned about the increase in capital inflows? There are several reasons why recipient countries are usually concerned about a large increase in capital inflows. [V. Corbo and L. Hernandez (1993)].

First, for those countries with weak supervision of the financial system, the larger amount of funds being intermediated may exacerbate moral hazard problems and result in a financial bubble that could eventually lead to a financial crisis.

Second, in countries that have recently reformed their policies increasing the integration to the world economy the real exchange rate appreciation that is required for the transfer to take place may erode the profitability of the trade oriented sectors and therefore, put the undergoing trade reforms in jeopardy.

Third, in countries with a fixed or preannounced nominal exchange rate as an anchor for domestic prices, the authorities could be concerned about the monetization effects of large capital inflows. The expansion in high-powered money caused by the large capital inflows will have inflationary effects through the price of tradable goods.

Fourth, if capital inflows are volatile and/or temporary, the reversibility of flows can have real adjustment costs because of resource reallocation costs, bankruptcies, hysteresis, or other market imperfections. If the capital inflows are considered to have a large temporary component, the country will try to avoid going through a whole adjustment process that will be reversed later on. Reversing an initial adjustment could be quite costly if there are irreversible

costs involved. For those countries with a flexible exchange rate system the capital inflows could be the source of excessive volatility in the nominal and real exchange rate. This is particularly relevant in the case of hot money.

Fifth, there always exists the concern about maintaining a current account deficit/GDP ratio that is sustainable in the long run. A too sudden build up of foreign debt could increase the country risk premium as well as restrict future access to international capital markets.

Finally, in those countries with a fixed or preannounced nominal exchange rate the authorities could be concerned about the monetization effects of large capital inflows and their lack of control on monetary policy. Thus there could be macroeconomic reasons related to the capacity to conduct monetary policy in countries with limited capacity to conduct fiscal policy. In a fixed exchange rate system with an open capital account and with domestic assets that are close substitutes for foreign assets the effectiveness of monetary policy is severely impaired [Mundell (1968)].

What can economies do to improve sustainability of the inflows and to minimize the possible negative effects? Policymakers have a number of direct and indirect instruments for managing capital flows.

INSTRUMENTS FOR MANAGING CAPITAL FLOWS

Direct Methods

If capital flows (due to their size or composition) are considered to create macroeconomic problems previously discussed, and are motivated by imperfections in the domestic financial markets, countries may try to eliminate the distortion causing the capital inflow. A type

of distortion that encourages short term capital inflows is, for example, keeping a high domestic interest rate while at the same time offering free currency risk protection through a swap facility at the Central Bank. Offering free deposit insurance at domestic commercial banks, along with a high domestic interest rate and a fixed nominal exchange rate, may also cause an increase in capital inflows.

Short-term speculative capital inflows (hot money) could also result from a restrictive monetary policy that accompany an expansionary fiscal policy. In the later case changing the policy mix toward a more restrictive fiscal policy and a less restrictive monetary policy by reducing domestic interest rates to a level closer to the sum of international interest rates and the expected rate of devaluation (i.e. getting closer to interest rate parity condition) reduces the incentives for the type of capital inflows that respond mainly to interest rate differentials and/or to the expectation of a future drop in domestic interest rates i.e. bank loans and portfolio investment.

If the ultimate cause of the increase in capital inflows cannot be dealt with, countries could try direct methods to control their size. Direct methods consist of imposing restrictions on capital inflows in order to reduce their amount. Measures include ceilings on foreign borrowings, minimum reserve requirements on foreign loans, ceilings on foreign direct investment. The authorities could also try to reduce the size of the inflows through direct investment. The authorities could also try to reduce the size of the inflows through taxation of the flows with a Tobin type interest rate equalization tax. Direct measures fall under the rubric of controlling capital flows rather than managing them. The ongoing process of liberalization is dismantling these controls

Table 1 : Policy Options In Managing Capital Flows

Long term Policies	Short term Policies for dealing with precipitous flows
<ul style="list-style-type: none"> - Macroeconomics policy balance that favours relatively tighter fiscal policy and somewhat more relaxed monetary policy. - Liberalization of external & domestic trade. - Positive investment climate, with minimal restrictions on foreign ownership of assets. - Promotion of high domestic saving - Relatively wide intervention bands on the exchange rate with periodic revisions if needed. - Support for a strong financial sector with foreign participation. - Sound prudential regulation and enforcement in financial and capital markets. - Free capital movement in both directions. - Collection and dissemination of information by rating agencies and other means. - Reduction or elimination of government financial guarantees. - Encouragement of private hedging markets, with adequate prudential regulation. 	<ul style="list-style-type: none"> - Sterilization of "excess inflows. - Higher reserve requirement for banks (on all transactions or on foreign transactions). - Limitations on open foreign exchange positions of financial institutions. - Informal pressure by authorities on the financial markets. - Foreign borrowing limits on classes of liabilities or public borrowers. - Taxes on short-term foreign borrowing - Restrictions on foreign ownership of certain short-term assets. - Restrictions on certain speculative transactions. <p>The short term policies tend to impose costs on the financial system; if maintained for too long, they may lead to distortions as bad as the ills they are supposed to cure. They are primarily designed to help governments react to sharp changes in capital flows and buy time to assess more fundamental causes and cures. The farther down the list, the less desirable the policy, the sooner it should be reversed. If such policies cannot be reversed in a reasonable time, more fundamental changes are needed in other policies.</p>

Source : Managing capital flows in East Asia; World Bank, Washington, D.C., 1996

because they tend to be inefficient, create costly distortions, and are generally contrary to the trend toward more open and integrated markets.

Indirect Methods

Governments are turning to more indirect instruments to advance their policy aims and to ensure that markets are stable and well functioning. Although perhaps less precise in immediate impact, these methods disrupt economic efficiency much less than direct controls they are replacing. Learning how to use the new policies effectively and being willing to accept the apparently lower precision that may result are important parts of the transition. The shift toward indirect policies is an essential element of developing more market oriented economies in order to realize the benefits of greater efficiency and to gain access to world capital markets. Effective use of indirect

measures also requires the development of deep, stable and well regulated domestic capital markets. Indirect measures include intervention sterilized vs. non-sterilized, fiscal adjustment, current account liberalization, more towards a floating exchange rate system, capital outflow liberalization. Indirect instrument are consistent with overall liberalization programs and are generally more effective than direct interventions.

Within such a framework authorities have at their disposal a number of tools for managing capital flows. (See Table :1 for a brief summary of policy options).

MACROECONOMIC POLICY OPTIONS : COUNTRY EXPERIENCES

The optimal policy response to capital inflows is very much a function of the

Table 2 : Country Experience Policy Options

Country	Move towards a more Floating Exch. Rate ¹	Fiscal Restraint ²	Sterilization through open market operation	Sterilization through other mechanism ³	Liberalization of the current Account ⁴	Restriction on capital Inflows ⁵	Capital outflow liberalization
Korea	X	X	X	X	X	X	X
China	X				X		X
Indonesia	X	X	X	X	X		X
Malaysia	X	X	X	X	X	X	X
Philippines	X	X	X	X	X		X
Thailand		X	X	X	X		X
India			X	X	X	X	X

1. Widening of the band, limiting the use of swap facilities, pegging to a basket of currencies.
2. Inclusive of paying public foreign debt.
3. Increase in bank reserves, increase in banks capitalization rate etc.
4. Taxes to capital inflows, minimum reserve requirements on foreign loans, ceiling on foreign borrowing etc.
5. Tariff reduction etc.

Source : Adapted from V Corbo and L. Hernandez (1994).

anticipated persistence of capital inflows and the nature of domestic credit markets. In addition, the prevailing "policy environment" (e.g. whether or not the economy is undergoing a price stabilization program) and the extent of creditability enjoyed by the authorities are also key determinants of the form and timing of the appropriate policy response.

The rationale for policy intervention emerges from the main concern of policy makers (i) since capital inflows are often associated with real exchange appreciation and with increased exchange rate volatility, it is feared these may adversely affected the export sector (ii) Capital inflows, particularly when massive, may not be properly intermediated, and, therefore, may lead to a misallocation of resources and, possibly, excessive current account deficits. (iii) Capital inflows, especially when of a "hot money" variety, could be reversed on short notice, possibly leading to a domestic financial crisis. These concerns have often led the authorities to react to the capital inflows by implementing a broad variety of policy measures. However the policies have been quite varied (See Table 2). The remainder of this section examines the relative merits of some of the policies.

A) GREATER EXCHANGE RATE FLEXIBILITY

A country that experiences a capital flow may opt to let the nominal exchange rate appreciate. This often has three major virtues. First, it insulates the money supply, domestic credit, and more generally, the banking system from the inflows; this is particularly desirable if the inflows are perceived to be reversible. Second, because of a pass-through from the exchange rate to domestic prices, it may help reduce inflation precisely at a time when achieving price stability is high on the policy makers' agenda. Third allowing the exchange rate

to fluctuate introduces uncertainty which may well discourage some of the purely speculative (and highly reversible) inflows.

The main disadvantage of pure float is that massive capital inflows may induce a steep and nominal and real appreciation of the domestic currency, which, in turn may damage strategic sectors of the economy, like nontraditional exports. Damage would be inevitable if real appreciation were to persist. But, even if appreciation did not persist, the greater real exchange rate volatility could have negative effects on tradable-goods sector to the extent that financial markets are in their infancy (i.e., do not provide enough instruments to hedge against such uncertainty).

There have been wide differences among countries in the degree of exchange rate flexibility. However, the common ground appears to be that all central banks intervene in the foreign exchange market to some degree and that no country has operated under a full float. Among the Latin American countries, Chile and Mexico have allowed some degree of exchange rate flexibility in the context of their exchange rate bands. In Chile especially the exchange rate has been allowed to fluctuate extensively within the band. Among the Asian countries, Korea's exchange rate policy was during 1991-92 characterized by significant exchange rate intervention in response to capital inflows. Other countries, such as Columbia, Malaysia, Singapore and Taiwan Province of China, have allowed some appreciation of the nominal exchange rate. One advantage of allowing nominal exchange rate appreciation is that to the extent market fundamental call for a real exchange rate appreciation, the latter can be effected all at once, through the nominal appreciation of the exchange rate rather than gradually through increases in domestic inflation.

B) STERILIZED VERSUS NON-STERILIZED INTERVENTION

Once the decision is made to intervene in the foreign exchange market, the next policy question is whether intervention should be sterilized. Sterilization - the exchange of domestic securities for foreign exchange - can help attenuate the impact of capital inflows on money and credit. Sterilized intervention is essentially an attempt to insulate the domestic economy from the macro economic effects of capital inflows. Curtailing the growth of monetary aggregates may be desirable for a variety of reasons: as the availability of credit increases, the quality of loans made may well decline, placing the banking system at higher risk; a too-rapid expansion may cause the economy to "over-heat" and fuel inflationary pressures: if the monetary authorities have announced monetary targets, growth in excess of those targets may damage their credibility. However, sterilized intervention keeps domestic interest rates higher than would have been in the absence of sterilization. At worst, this measure may well raise domestic interest rates and provide incentives for further short-term inflows - as occurred in Columbia in 1991 and Malaysia in 1991-92. In addition, sterilization results in an increase in the public debt and entails quasi-fiscal costs to the extent that the interest rate on domestic bonds is higher than that on foreign exchange reserves. Estimates of these costs in Latin American countries range from 0.25% to 50% of GDP a year. The cross-country evidence reveals that sterilized intervention (in varying orders of magnitudes) has been the most common policy response to capital inflows in both Asia and Latin America.

Non-sterilized intervention may be desirable if the demand for money is perceived to increase owing, for example, to a successful inflation stabilization program that the

authorities wish to accommodate. Under those circumstances, rapid monetary growth is not necessarily inflationary, and no quasi-fiscal burdens are generated. However, nonsterilized intervention as noted, runs the risk of increasing the vulnerability of the financial system, especially if there is a system of explicit or implicit deposit insurance and banking supervision is poor. It is important to note that in many Asian countries the domestic banks are losing their "preferred" corporate clients, who are finding it more attractive to tap the international bond and equity markets directly.

From an overall macroeconomic perspective, nonsterilized intervention, becomes more attractive the smaller the capabilities of banking system to increase loans to the private sector, particularly for consumption purposes. When the banking system is unable to intermediate more funds, additional capital inflows through the banking system is unable to intermediate more funds, additional capital inflows through the banking system will exert a strong downward pressure on interest rates. This will have the advantage of slowing the pace of inflows and of lowering the fiscal cost of the outstanding domestic credit. Argentina represents the case where a policy of non-sterilized intervention has been followed. However, most of the countries are not currently in this situation.

C) RESERVE REQUIREMENTS

A viable policy option that limits the expansion of money and credit associated with the surge in capital inflows is to increase bank reserve requirements and curtail access to rediscount facilities. This option would be especially relevant in those countries where capital inflows have taken the form of substantial increases in local bank accounts. Increasing marginal-reserve requirements - an option exercised by Chile

and Malaysia - clearly lowers bank's capacity to lend thus diminishing some of the risks associated with nonsterilized intervention without incurring quasi-fiscal costs. A drawback of this reserve requirement policy is that it is a one time measure, and it may ultimately promote disintermediation, as new institutions may develop so as to bypass the regulations. Eventually, these institutions could grow until they are considered too large to fail and end up under the insurance umbrella of the central bank, re-creating all the potential problems associated with nonsterilized intervention. Therefore, increasing marginal reserve requirements is unlikely to be effective beyond the short run. Moreover, increasing bank reserve requirements amounts to a reversal of the underlying trend of financial liberalization that has been occurring in developing countries, under which these requirements have recently been sharply reduced toward the levels observed in industrial countries.

According to Rojas-Suarez and Weisbrod (1994) the discussion whether to sterilize inflows or to raise reserve requirements should be linked to the strength of the central bank relative to that of the commercial banks as the decision implies a choice on where to concentrate resources. With a weak banking system, the central bank should opt to sterilize by issuing liabilities directly to the public rather than imposing reserve requirements; the latter weaken the banks as borrowers are diverted to lenders who may escape such reserve requirements.

D) BANKING REGULATION AND SUPERVISION

One possible concern relates to intermediation and expansion, of banking system credit that is likely to accompany the increase in money balances. With a

poorly supervised and weak banking system, the increase in commercial bank reserves could lead to excessive risk taking in lending activities, and measures may be needed to restrict bank intermediation.

A major concern about the intermediation of international capital flows through the domestic banking system is that individual banks are subject to free or subsidized deposit insurance. In other words, there is an implicit commitment by the authorities that banks especially the large ones - will not be allowed to fail. Free implicit deposit insurance induces banks to increase their risk exposure. In several Latin American countries, there has been a sharp expansion of bank loans to finance private consumption. There is evidence that in some of these countries the percentage of nonperforming banks has recently increased over time, in addition, banks pay little attention to matching the maturities of deposits against those for loans - the former being typically shorter than the latter. Similarly, there could be a mismatch between the currency denomination of bank loans and the currency denomination of profits and incomes of the borrowing sector. All these factors increase the vulnerability of the financial system to reversals in capital flows - reversals that have potential to end in financial crisis.

Strict regulatory and supervisory policies are important for minimizing, moral hazard (including corruption, fraud and excessive risk taking) in the banking system and for ensuring the health and viability of domestic banks. According to Turner (1995) in the absence of strict supervision, developing - country banks may need to be better capitalized. Well-capitalized banks will be able to withstand the emergence of bad debts and sharp fluctuations in real interest rates, and the value of domestic assets held as capital.

Effective bank regulation and supervision can diminish some of these risks. Attempting to insulate the banking system from short-term capital flows is a particularly important goal in cases where the inflows are predominantly in the form of short term bank deposits. Regulations that limit banks' exposure to the volatility in equity and real estate markets could help insulate the banking system from the potential bubbles associated with sizable capital inflows. In this vein risk-based capital requirements in conjunction with adequate banking supervision to ensure such requirements are complied with could help insulate the domestic banking system from the vagaries of capital flows.

Prudential supervision measures including limits on the foreign exchange exposure of domestic financial institutions - to steer the flow of capital toward the acquisition of relatively safe assets - may be justified. As the quality of prudential supervision improves and the capacity of the banking system to handle such flows increases, capital controls can then be progressively dismantled.

E) FISCAL POLICY

Some countries have complemented monetary and exchange rate policies with fiscal measures, such as the taxation of capital inflows and/or a reduction in public expenditure.

i) Taxing short term inflows

Taxes on short-term borrowing abroad were imposed in some countries - Israel in 1978 and Chile in 1991. This policy conveys the powerful message that the authorities are concerned with short term potentially speculative inflows. Such policies can co-exist with policies that encourage a different type of inflow, specifically foreign direct investment. Unlike other measures, such taxes attack the problem at the source.

However, although they can be effective in the short run, experience shows that the private sector is quick to find ways to circumvent the taxes through over and under invoicing of imports and exports and increased reliance on parallel financial and foreign exchange markets. Further, initial conditions are not always conducive to a policy that adds barriers to international capital movements. If a country has recently undertaken an adjustment program and the authorities enjoy less than full credibility imposing a capital account barrier may be interpreted as signaling a policy reversal and may thus undermine the success of the program.

ii) Fiscal tightening

Although policy reaction to capital inflows has been to tighten fiscal policy (example Thailand during 1988-91). The idea is to use fiscal restraint, especially in the form of spending cuts on nontradables, so as to lower aggregate demand and curb the inflationary impact of capital inflows. In addition, to the extent that it reduces the governments need to issue debt, a tighter fiscal stance is also likely to lower domestic interest rates. Lower government expenditure on non traded goods and services could have a direct impact on aggregate demand which is unlikely to be offset by an expansion of private sector demand. However, contraction of government expenditure is always a sensitive political issue and can not be undertaken on short notice. Delaying fiscal restraint, however, increases the risk that, ex-post, the policy is pro cyclical. Moreover, fiscal policy is usually set on basis of medium or long-term consideration rather than in response to what may turn out to be short term fluctuations in international capital flows. Thailand exemplifies this policy dilemma. The combination of booming growth and substantive fiscal restraint of

the past few years has generated a perceived need to improve the current infrastructure, which is no longer adequate if rapid growth is to be sustained. At the same time the pressures on the real exchange rate that accompany the surge in inflows would warrant fiscal restraint. However, in cases where authorities had envisioned tightening the fiscal stance, a surge in capital inflows may call for earlier and perhaps, more aggressive action.

Thus fiscal policy may need to be tightened especially if the absorptive capacity of the economy is limited relative to the size of the inflows. A tighter fiscal stance has been necessary in many countries to facilitate the non-inflationary absorption of large inflows. If the constraints on sterilization are too severe and the external competitive position is weak then some fiscal tightening may have to be considered. However, the time it takes to implement fiscal measures makes fiscal policy an unwieldy instrument in the short term.

F) STRUCTURAL MEASURES

Various countries have adopted structural measures to indirectly or directly diminish the size, or the potential adverse effects, of capital inflows. Several of the Asian and Latin American countries have either undertaken or are considering undertaking capital account liberalization. For instance, in 1993 Thailand removed most of the controls on capital outflows, while Chile adopted similar, but more modest measures in March 1994. These countries have followed the general principle that allowing domestic agents to hold foreign assets generates some off-setting capital outflow following the liberalization. However, the net impact of these measures on the capital account is not yet conclusive. In some cases, e.g. Columbia, the liberalization measures increased the confidence of

foreign investors and, in so doing, further stimulated inflows.

In some cases, the presence of capital inflows and the stronger economic activity were used to implement trade liberalization and domestic financial reforms more rapidly. Trade policy measures can help insulate the export sector from real exchange rate appreciation. Columbia, Indonesia and Thailand are among the countries that undertook important steps toward liberalizing trade. While the trend is towards integrating goods and capital markets, some countries have experienced pressure to increase export subsidies to mitigate the effects of a sustained real exchange rate appreciation, a policy that is known to result in substantial fiscal costs and in deeper economic distortions. Overall, with regard to structural policies, it appears that these should be designed so as to be consistent with long-term objectives, rather than as a response to short-term capital inflows.

The above discussion has highlighted that the risks associated with capital inflows create policy dilemmas. However, the overall picture is much more positive, as several Asian countries have experienced capital inflows similar to those in Latin America without associated sizable appreciations of the real exchange rate. Part of the reason for the latter seems to be the fact that a large share of capital flows into Asian countries has taken the form of direct investment. This, of course, renders moot many of the concerns. The key question, however, is how to achieve this favourable composition of capital flows. In this connection, there are no policy "tricks". In order to induce investors to bolt down their capital in a growth-strained country, policy makers must be able to muster a high degree of credibility and be prepared to support clear, simple, and market-oriented policies.

Therefore, until credibility is achieved, countries are well advised to be cautious about the intermediation of capital flows, especially if they are perceived to be primarily short term and subject to quick reversal. At the beginning, intermediation of these flows may be limited by sterilized intervention, greater exchange rate flexibility, and/or increasing marginal reserve requirements - followed by a gradual monetization of these flows (i.e. nonsterilized intervention), accompanied perhaps by an appreciation of the currency. The step to non-sterilized intervention, though, could be speeded up if credit availability is limited or if the quasi-fiscal costs are high.

Notes

1. National income accounting implies that the current account is equal to the difference between national savings and national investment. Accordingly, an increase in the current account deficit can be traced to either an increase in investment, a decline in saving, or any combination of these variables that results in an increased investments/savings gap.
2. In reality the most common response has been one where the authorities intervene and more often than not sterilize part of the capital inflows.
3. According to a study by Calvo, Leiderman and Reinhart (1994) for Asian countries 44% of the increase in capital flows came in the way of FDI, whereas for Latin American countries FDI accounted for 17% of the increase in flows. This difference may help explain why concerns over "hot money" and sudden reversal are more prevalent among Latin American policy circles than among their Asian counterparts.
4. Such policies include one of the following : i) not-fully - credible trade liberalizations program (these are likely to induce a consumption boom and thus, an increase in international indebtedness in the short run) or ii) tariff cuts under downward price rigidity, inducing (temporarily) excessive high prices on domestic goods and hence a current account deficit on the expectations that the relative price of imported goods with respect to domestic goods will increase over time.
5. Specifically their results indicate that domestic variables are three to four times more important than external variables in explaining the behaviour of capital flows.
6. In Latin America the capital inflows have been accompanied by a real exchange rate appreciation (exception Brazil); in Asia such an appreciation is not the norm. A real exchange rate appreciation is more likely when capital inflows finance consumption than when these finance investment (Calvo, Leiderman and Reinhart (1994)).

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