



Capital inflows to Latin America

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I. Capital Inflows to Latin America

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Introduction

There has been a remarkable resurgence of international capital flows to Latin American countries. In the four years 1990-1993, these countries have received a net capital inflow of \$166 billion. This represents a major change from the previous decade, when there was a debt crisis and little capital flowed to Latin American nations. In fact, there has been a reentry of international capital flows to developing countries in other regions (such as Asia and the Middle East) as well. In the case of Latin America, both important external and internal factors have played a role in the sharp rise in capital inflows, which in turn have been accompanied by a renewal of economic growth.

Capital inflows are not an unmitigated blessing for the receiving region or country; in fact, they may pose serious dilemmas for economic policy. Large capital inflows are often associated with money and credit expansion, inflationary pressures, a real exchange rate appreciation, and a deterioration in the current account of the balance of payments. In addition, the history of Latin America provides ample evidence that massive capital inflows may also have strong impacts on the stock market, the real estate market, and the money market—impacts which may well threaten the stability of these markets and of the financial system as a whole. If the capital

inflows are of a purely short-term nature, these problems intensify, as the probability of an abrupt and sudden reversal increases. Accordingly, the design of effective economic policies for dealing with these capital inflows, and for ensuring their durability, is one of the key economic policy issues at the present time.

In this paper we discuss the principal facts, developments, and policies under the current episode of capital inflows to Latin America, as well as their implications for sustainability of the inflows. In particular, we deal with policy priorities that could ensure the persistence of these flows, as far as possible. The analysis draws heavily on previous work by Calvo, Leiderman, and Reinhart (1992, and 1993a,b,c) which used data for ten Latin American countries and eight Asian countries.² The paper is organized as follows. Section II describes the main characteristics of capital inflows to the Latin American region. Section III discusses the important role of external factors in the present inflows episode. Various observed policy responses to the capital inflows are discussed in Section IV. Last, Section V deals with factors that will determine the durability of the capital inflows phenomenon.

Capital Inflows: Main Characteristics

Some basic concepts

Capital inflows are defined as the increase in net international indebtedness of the private and the public sectors during a given period of time, 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 (which, in turn, is equal to the gap between national investment and national saving) *plus* the change in official holdings of international reserves. Thus, increases in capital *inflows* can be identified with *larger* current account deficits and/or reserve accumulation.

The central bank of the receiving economy could react to increased capital inflows in various ways, depending mainly on the prevailing exchange rate regime. Under a pure float, the increased net exports of assets in the capital account are financing an increase in net imports of goods and services. In this case there is no foreign exchange market intervention by the authorities, and the inflows of capital from abroad would *not* be associated with changes in central

banks' holdings of official reserves. At the other extreme, the domestic authorities actively intervene to maintain a fixed exchange rate. In the presence of a capital inflow, they would purchase the foreign exchange that flows in, and the increase in the capital account surplus would be associated with an increase in official reserves.

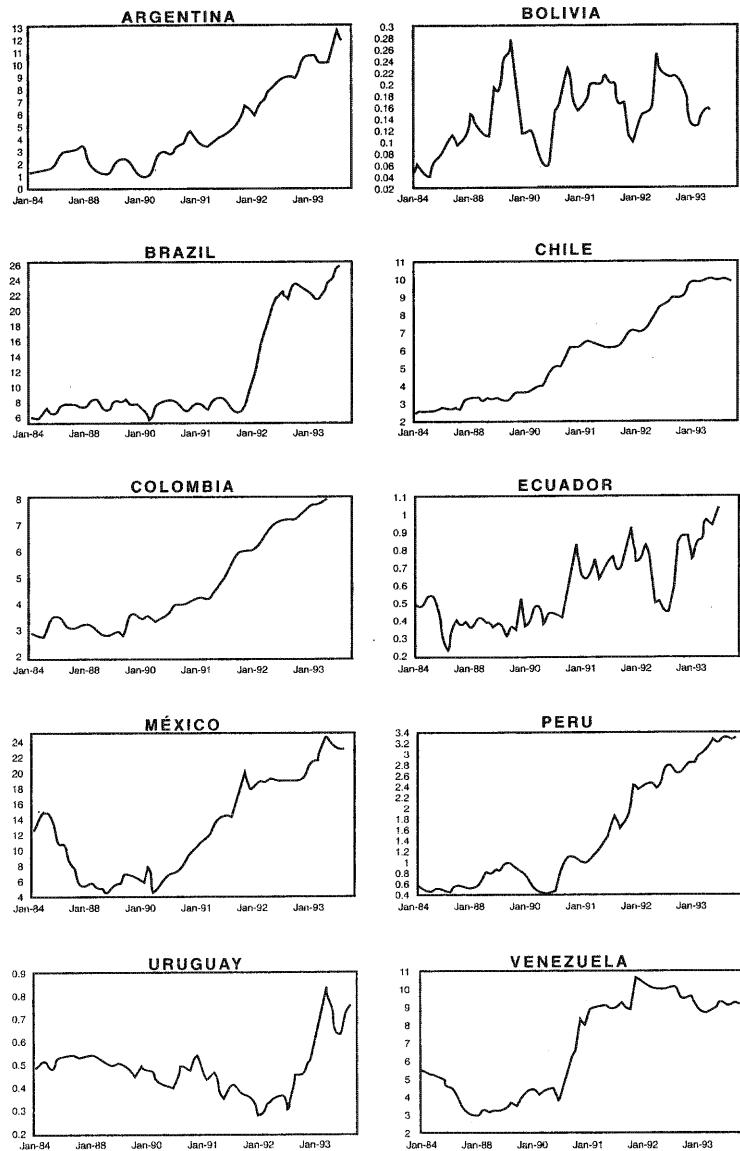
Stylized facts

Table 1 presents a breakdown of Latin America's balance of payments into its three main accounts. The capital inflows under consideration appear in the form of surpluses in the capital account, of about \$23 billion in 1990, about \$39 billion in 1991, \$59 billion in 1992, and \$44 billion in 1993. Part of the increased capital inflows represent repatriation of previous flight capital, but there are also new investors in Latin America.³ A substantial fraction of the inflows (i.e., 40 percent) has been channeled to reserves, which increased by about \$65 billion in the last four years. Interestingly, the extent of reserves' accumulation out of a given capital inflow has decreased over the years. This probably reflects the fact that at the start of the present capital inflows episode (i.e., after the debt crisis) there were relatively low levels of international reserves, and that most central banks used the initial inflows to build up their reserves. Overall, the sharp increase in official reserves indicates that the capital inflow was met with a rather heavy degree of foreign exchange market intervention by the monetary authorities in the region. Figure 1, which depicts monthly data on international reserves for the ten countries in our sample, shows that for most of the countries there is a pronounced upward trend in the stock of official reserves starting from about the first half of 1990.

The rest (i.e., 60 percent) of the capital inflows helped to finance a marked increase in the region's current account deficit—that is, an increased gap between national investment and national saving. In some countries, such as Chile and Mexico, an important part of the inflows has financed increases in private investment; yet, in others (such as Argentina) there has been a marked rise in private consumption. Thus, whether increased current account deficits have been associated with increased investment or reduced saving is mainly a country-specific matter.

Latin America has not been the only region receiving sizable capital inflows in recent years. In effect, capital began to flow to Thailand in 1988 and to a broader number of Asian countries in 1989-1990 (see Bercuson and Koenig (1993), Calvo, Leiderman, and

Figure 1. Latin America: Total Reserves Minus Gold
January 1988–November 1993
(billions of U.S. dollars)



Source: International Financial Statistics, IMF

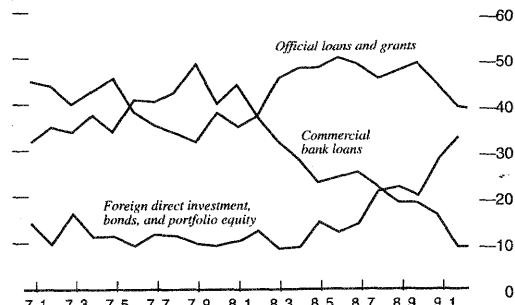
Reinhart (1993b), and Chuhan, Claessens and Mamingi (1993)). As Table 2 shows, capital inflows amounted to \$150 billion during the 1990-93 period. The inflows were met with a heavy degree of foreign exchange market intervention: 75 percent of the inflows resulted in accumulation of official international reserves.

As far as their composition is concerned, the capital inflows of the 1990s have a radically different pattern from that of earlier periods. Commercial bank loans, which dominated the earlier period, have been replaced by foreign direct investment and by bond and equity portfolio flows—a change that is also evident for developing countries as a whole (see Figure 2). According to IMF data, uninsured medium- and long-term loan commitments to the region amounted to only \$0.9 billion in 1992 and to \$0.5 billion in the first five months of 1993.

In contrast to the limited use of syndicated bank credit, Latin American countries have become the main borrower in the international bond market, raising \$12.4 billion in 1992 and \$11.2 billion during the first half of 1993. Mexico has been the leading Latin American borrower. It raised about \$6 billion in 1992 and a similar amount in the first half of 1993. In the last two years, Brazilian entities have raised considerable amounts as well (see Table 3). Terms on new issues have continued to exhibit considerable

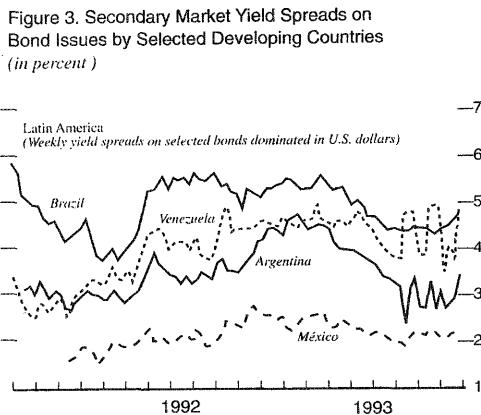
**Figure 2. Developing Countries: Capital Flows
(in percent of total)**

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(in percent of total)



Source: WEO, IMF, October 1993.

**Figure 3. Secondary Market Yield Spreads on Bond Issues
by Selected Developing Countries
(in percent)**



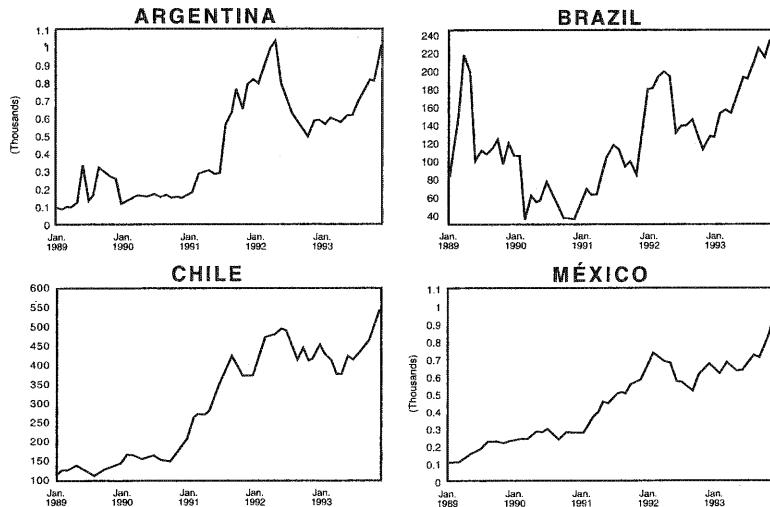
Source: *Private Market Financing To Developing Countries*, IMF, December 1993.

spreads, and these have been reflected in spreads in the secondary market for Latin American bonds, as shown in Figure 3.

Issuance of international equity by Latin American companies has shown a lower level of activity. It amounted to \$4.1 billion in 1992 and to \$2.6 billion in the first half of 1993. In particular, Mexico has issued about \$7 billion in 1990-93 in international equity, followed by Argentina, which issued about \$3 billion at the same time (see Table 3). At the same time, direct equity portfolio purchases on local stock markets, especially by institutional investors, have become the most important channel for equity inflows into various emerging-market countries. In recent years, total returns in Latin American stock markets have been considerably higher than in the U.S. and other industrialized countries (see Figure 4). International investors have viewed Latin America as fertile ground for raising their expected returns. In addition, international investors have shown increasing interest in fixed income instruments denominated in local currency. The leading example in this area are holdings of CETES (Mexican

Figure 4. Share Prices for Selected Emerging Markets in Latin America

IFC investable price indices in U.S. dollars, December 1988 = 100
January 1989–December 1993



Source: International Finance Corporation

treasury bills) outside Mexico, which have reached approximately \$20 billion at the end of 1993.

There has been a marked increase in the relative importance of foreign direct investment (FDI) inflows to Latin America. They constitute now about 25 percent of total capital inflows, compared to about 10 percent in the late 1970s. Again, this reflects an overall trend in global foreign investment going to developing countries. It is well known that foreign direct investment is guided by more medium- or long-term profitability considerations than portfolio investments, and hence it is probably subject to a smaller degree of sudden reversals than the latter. Moreover, FDI flows could have positive externalities for the receiving economy such as increased access to foreign markets, and increased scope for human capital development and for introduction of top-of-the-line technology. The United States has been the main source of FDI in Latin America, and the investment flows have been directed mainly to service sectors such as transport, telecommunications, and banking. Among various countries, FDI has been of greatest importance (relative to

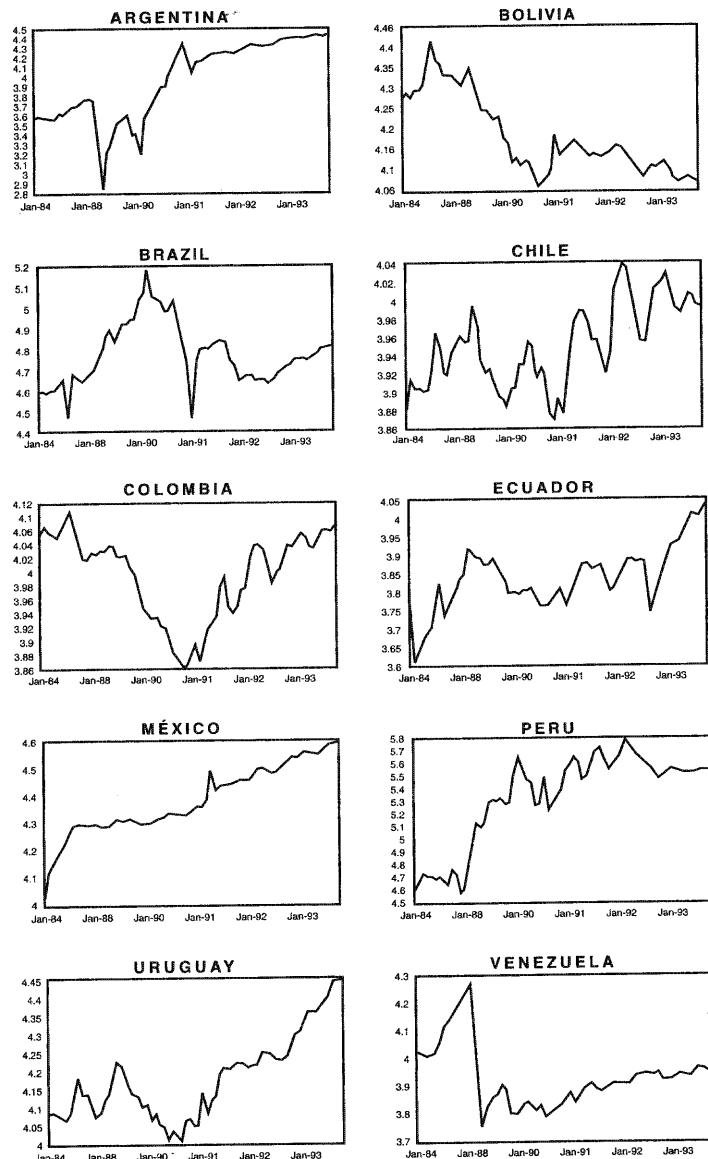
total capital inflows) in Chile, and of increasingly lower importance in Mexico, Argentina, and Brazil.

Macroeconomic effects

In discussing the macroeconomic effects of capital inflows to Latin America it is useful to compare these against the Asian experience. *First*, as Table 4 illustrates, the swing in the balance on the capital account (as a percent of GDP) is of a similar order of magnitude for the countries under study in the two regions. For the Latin American countries in our sample, the change in the capital account amounts to 4 percent of GDP; for the Asian countries the capital account surplus increases by 2.7 percent of GDP. *Second*, as discussed, capital inflows have been associated with increased current account deficits and with a marked accumulation of international reserves. *Third*, during the early phases of the surge in capital inflows there are sharp increases in stock prices. Then, share price indices decreased during 1992, and a strong recovery was observed from late 1992 onward. Share price indices for selected Latin American and Asian emerging markets were higher (in U.S. dollar terms) at the end of 1993 than at the time of renewal of capital inflows to these regions (see Figure 4). *Fourth*, capital inflows have been accompanied by an acceleration in economic growth.

As shown in Figure 5, in most Latin American countries capital inflows have been associated with considerable real exchange rate appreciation⁴, yet in Asia such an appreciation is less common. While the reasons for these differences in the response of the real exchange rate are likely to be numerous, important differences in the composition of aggregate demand may play a key role in determining whether the real exchange rate appreciates or not. As Table 4 summarizes, for the Asian countries investment as a share of GDP increases by about 3.5 percentage points during the capital inflows period, but the investment ratio remained stagnant for the Latin American region (though here there are marked differences across countries⁵). In fact, for the Latin American region the inflows during 1990-93 are primarily associated with a decline in private saving and higher consumption.⁶ If the increased investment (in Asia) is tilted more toward imported capital goods, and the increased consumption (in Latin America) has an imported domestic component, other things equal, this would work in the direction of generating stronger real exchange rate depreciation in Latin America. The behavior of public-sector consumption is another element influencing

Figure 5. Latin America: Real Exchange Rate
January 1988–October 1993



Source: Information Notice System, IMF
Note: An increase in the index denotes a real exchange rate appreciation.

the real exchange rate by affecting both the level and composition of aggregate demand. Other things being equal, the more contractionary behavior of fiscal expenditure at the time of capital inflows is, the weaker the extent of real exchange rate appreciation is likely to be. Several Latin American countries have had major fiscal adjustment programs, yet these predated the surge in capital inflows. In contrast, there were fiscal spending contractions in several Asian economies at the time of the inflows. In addition, very effective sterilization of capital inflows in Asia—which was successful in limiting the expansion in credit and money aggregates and in aggregate demand—may have contributed to the differences in real exchange rate behavior.

The Role of External Factors

In determining the main factors behind the resurgence of capital inflows to Latin America, it is important to distinguish between the external and internal factors that gave rise to this development. External factors are those which are outside the control of a given country. Thus, they are unrelated to policies followed in the country in question. Examples of such factors for “small” open economies are a decline in world interest rates and rest-of-world recession, both of which may be accompanied by reduced profit opportunities in the industrialized countries. A similar effect would arise from regulatory changes that provide incentives for further international diversification of investment portfolios at main financial centers. Some of these external factors are likely to have an important cyclical, or reversible, component. Internal factors, on the other hand, are most often related to domestic policy.

Examples of policies that would attract long-term capital inflows (possibly in the form of direct investment) are the successful implementation of inflation stabilization programs, the introduction of major institutional reforms, such as the liberalization of the domestic capital market and the opening of the trade account, and policies that result in credible increases in the rate of return on investment (such as tax credits). But domestic policies may also attract short-term capital of a highly reversible nature, especially when these policies are not fully credible. Thus, partial credibility about inflation stabilization or trade liberalization programs can result, in equilibrium, in relatively high returns on short-term investments in view of a nonnegligible probability that these programs would collapse. Foreign investors could obtain relatively high profits under these circumstances if they managed to reverse their original

inflows after they have produced high yields and before the collapse of these policy programs.

Several factors and underlying trends interacted in the late 1980s to make Latin America a potentially fertile territory for the renewal of capital inflows from abroad. First, there was a steep acceleration in the trends of institutionalization, globalization, and international diversification of investments in North America and other financial centers. This transformation is seen in the increasing amounts of funds being managed by mutual funds, pension funds, and life insurance companies. These entities began to attempt to raise expected returns and/or reduce overall risks by taking advantage of investments in emerging markets. Since the total assets of institutional investors are very large⁷, even relatively tiny portfolio shifts consisting of flows of capital to emerging markets can constitute sizable capital inflows for the receiving areas. In addition, regulatory changes in the United States have made it easier for foreign private issuers of equity to place their issues under more attractive conditions to investors.

Second, several countries in the Latin American region made significant progress toward normalizing relations with existing external creditors and reducing concerns about debt overhang. This included reaching agreements with creditors for debt restructurings, such as Brady-type operations.

Third, several countries began to adopt sound monetary and fiscal policies in the context of major disinflation plans as well as market-oriented structural reforms. Fourth, the existence of a large pool of Latin American flight capital in foreign markets (mainly in the U.S.) certainly facilitated the re-entry of capital to the region, including through the new opportunities created by the extensive privatization programs that were undertaken. All these underlying factors contributed to re-establish Latin American credibility with foreign investors and provided the necessary conditions for the potential return of external capital to the region. Beyond these trends, key external factors in the present capital inflows episode are the unusually low interest rates that prevailed in the United States for the last four years. These low rates, combined with the persistent recessions in most industrialized countries, have attracted investors to the high investment yields, and improving economic prospects, of developing economies such as in Latin America. Low world interest rates have also improved creditworthiness indicators for various individual countries, especially those with considerable debt-service obligations.

Available empirical evidence for ten Latin American countries indicates that foreign factors have played an important role in the most recent episode; Calvo, Leiderman, and Reinhart (1993a) find that foreign factors accounted for 30 to 60 percent of the variance in real exchange rates and reserves, depending on the country. Similarly, Chuhan, Claessens, and Mamingi (1993) find that external factors explain about half of the bond and equity flows from the United States to a panel of six Latin American countries. Their results also indicate that while foreign factors also played a significant role in stimulating bond and equity flows to several Asian countries (a panel of seven countries was used in the study), external developments were much less important than domestic factors in that region. The findings by Fernandez-Arias (1993)—who used a panel of thirteen middle-income developing countries receiving portfolio flows after 1988—indicate that external factors *per se* had a substantial impact on country creditworthiness indicators.

Our emphasis on the role of external factors does not imply that domestic factors, such as structural reforms and stabilization, have been of negligible importance. As discussed above, domestic policies have been part of the necessary conditions (i.e., prerequisites) for the reentry of international capital. However, and leaving aside the foregoing empirical evidence, domestic factors *alone* cannot explain why capital inflows have occurred in countries that have not undertaken reforms and have not stabilized or why they did not occur, until only recently, in countries where reforms were introduced well before 1990. A partial role played by domestic factors in attracting capital from abroad is evident in the marked differences across countries in the orders of magnitudes of the capital inflows. For example, Argentina, Chile, and Mexico (countries with important domestic reforms and disinflation) have attracted capital in orders of magnitudes well in excess of those recorded for other countries in the region. Furthermore, as discussed earlier, foreign direct investment has been most pronounced in those countries that were well advanced in their market-oriented reforms and stabilization.

Policy Response

The appropriate policy response to capital inflows clearly depends on the expected durability of the inflows, the availability and flexibility of various policy instruments, and the nature of domestic financial markets. In addition, the prevailing policy environment—e.g., whether or not an inflation stabilization plan is being implemented—and the

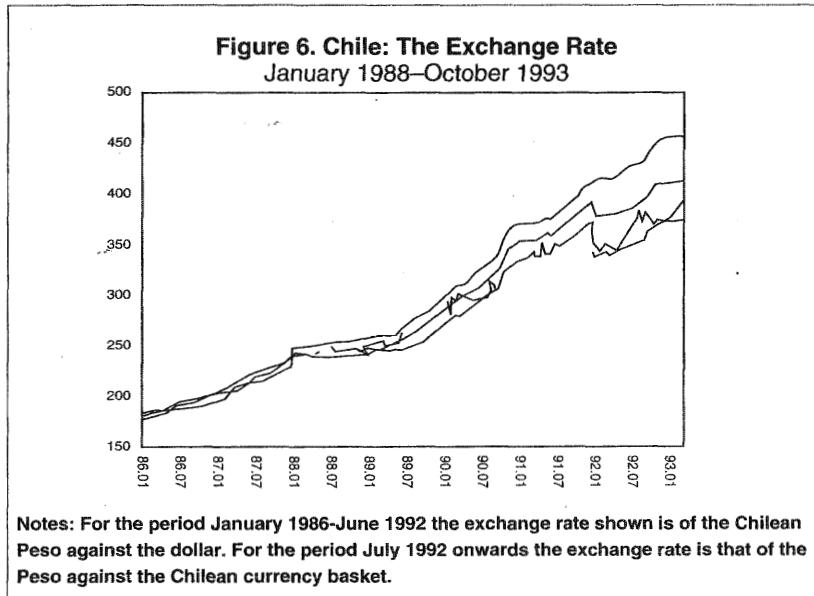
extent of policymakers' credibility are key determinants of the form and timing of the appropriate policy response.

The rationale for policy intervention emerges from the main concerns of policymakers: capital inflows can lead to inflationary pressures, real exchange rate appreciation and loss of competitiveness, and a deterioration of the current account. In addition, the inflows can have a destabilizing impact on domestic financial markets. These concerns have often led the authorities to react to the capital inflows by implementing a broad variety of policy measures. The remainder of this section examines the role of some of those policies.

Monetary and Exchange Rate Policy

Greater exchange rate flexibility. A capital-receiving country may opt to let the nominal exchange rate appreciate in response to a capital inflow. This option has three main virtues. First, it insulates the money supply, domestic credit, and more generally, the banking system from the inflows. Second, because of a pass-through from the exchange rate to prices it may help reduce inflation—precisely at a time that achieving disinflation is high on the policymaker's agenda. Third, allowing the exchange rate to fluctuate introduces some uncertainty that may well discourage some of the purely speculative (and highly reversible) inflows. The main disadvantage of a pure float is that massive capital inflows may induce a steep nominal *and* real appreciation of the domestic currency, which, in turn, may damage strategic sectors of the economy, like nontraditional exports. This is clearly the case if the real appreciation is persistent. But, even when the latter does not hold, the greater real exchange rate volatility *per se* may have negative effects on tradable-goods sectors, to the extent that financial markets do not provide enough instruments to hedge against such uncertainty.

There has been wide cross-country differences in the degree of exchange rate flexibility in the present episode. However, the common ground appears to be that all central banks intervene in the foreign exchange market to some degree and no country has operated under a free float. Chile and Mexico are among those that have allowed some degree of exchange rate flexibility in the context of their exchange rate bands. Both these countries have widened their bands, and especially in Chile the exchange rate has been allowed to extensively fluctuate within the band (Figure 6).⁸ Similarly, other countries, such as Colombia, have allowed for some appreciation of the nominal exchange rate. As indicated, one advantage of allowing



nominal exchange rate appreciation is that to the extent that market fundamentals 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.

Sterilized versus nonsterilized intervention. Having decided to intervene in the foreign exchange market, the next policy question is whether such intervention should be sterilized or not. Sterilization—i.e., the exchange of bonds for foreign exchange—can help attenuate the impact of capital inflows on money and credit. Curtailing the growth on the monetary aggregates may be desirable for a variety of reasons: As the availability of credit increases, the quality of the loans made may well decline, placing the banking system at higher risk; a too rapid expansion may lead to “overheating” of the economy and fuel inflationary pressures; if the monetary authorities have announced monetary targets, growth in excess of those targets may damage their credibility.

However, at a minimum, sterilized intervention will keep domestic interest rates above what they would have been in the absence of sterilization. At worst, this measure may well raise domestic interest rates and provide incentives for further inflows.

In addition, sterilization results in an increase in the public debt and it entails quasi-fiscal costs to the extent that the interest rate on domestic bonds is higher than that on foreign exchange reserves. Annual estimates of these costs in Latin American countries range from 0.25 to 0.50 percent of GDP. The cross-country evidence reveals that sterilized intervention (in varying orders of magnitude) has been the most common policy response to capital inflows in both Latin America and Asia.

Nonsterilized intervention may be desirable if there is a perceived increase in the demand for money (due to, for example, a successful inflation stabilization program), which 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. From an overall macroeconomic perspective, such an option becomes more attractive the smaller the capabilities (or willingness) of the banking system to increase loans to the private sector. As we approach the limiting case, in which 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, slowing down the pace of inflows and lowering the fiscal cost of the outstanding domestic credit. However, this is not the case in most of the Latin American countries.

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 curtailing access to rediscount facilities. This would be especially relevant in those countries where capital inflows have taken the form of substantial increases in local bank accounts. An increase in marginal reserve requirements (an option used by Chile and Malaysia), clearly lowers the capacity of banks to lend, thus diminishing some of the risks associated with nonsterilized intervention. Further, no quasi-fiscal costs are incurred. A drawback of this reserve-requirement policy is that over time it may promote disintermediation, as new institutions may develop so as to bypass these regulations. Eventually those institutions could grow so large that they end up being under the insurance umbrella of the central bank (by the principle that they are "too large to fail"), recreating 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 trends of financial liberalization in developing countries, which have recently resulted in sharp reductions in these requirements, and their convergence toward levels observed in industrial countries.

Banking regulation and supervision. 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; i.e., there is an implicit commitment by the authorities that banks—especially those of large size—will not be allowed to fail. It is well known that free implicit deposit insurance induces banks to increase their risk exposure. In several 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 loans has recently increased over time. In addition, banks may pay little attention to the matching of 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; e.g., consider the producer of a nontradable commodity borrowing in U.S. dollars to finance his activity. All these factors increase the vulnerability of the financial system to reversals in capital flows—reversals that have the potential to end in financial crises.

It is the role of bank regulation and supervision to effectively diminish some of these risks. As discussed earlier, attempting to insulate the banking system from short-term capital flows is a particularly important goal in cases where a substantial proportion of the inflows are in the form of short-term bank deposits. Regulation that limits the exposure of banks 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 insure such requirements are complied with could help insulate the domestic banking system from the vagaries of capital flows.

Fiscal policy

Taxing short-term inflows. Taxes on short-term borrowing abroad were imposed in some countries—Israel in 1978 and Chile in 1991

and 1992. This policy conveys the message that the authorities are concerned with the short-term (potentially speculative) inflows. Such policies can coexist with policies that encourage a different type of inflow, specifically foreign direct investment. Unlike other measures, it attacks the problem at the source. However, although this form of intervention could be effective in the short run, experience suggests that the private sector is quick in finding ways to dodge those 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 implementing a policy that adds barriers to international capital movements. If a stabilization/adjustment program was recently undertaken and the authorities enjoy less than full credibility, the imposition of any capital account barrier may be interpreted as a signal that policies are reverting, and thus potentially undermine the success of the program.

Fiscal tightening. Another policy reaction to capital inflows has been to tighten fiscal policy; the clearest example of this policy is Thailand. The idea is to impose 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.⁹ Lower government expenditure on nontraded 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 it can not be undertaken on short notice, such delays increase the risk that, *ex post*, the policy is procyclical.

Further, fiscal policy is usually set on the basis of medium- or long-term considerations rather than in response to what may turn out to be short-term fluctuations in international capital flows. Thailand provides a timely example of this policy dilemma. The combination of booming growth and the substantive fiscal restraint of the past few years have 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 the authorities had envisioned a tightening of the fiscal stance, the presence of capital inflow may call for earlier and, perhaps, more aggressive action in this respect.

Structural measures

Various countries have adopted structural measures to directly or indirectly diminish the size of or the potential adverse effects of capital inflows. In several of the Asian and Latin American countries capital account liberalization has either been undertaken already or is under consideration. The general principle has often been that by allowing domestic agents to hold foreign assets, some offsetting capital outflow is generated following the liberalization. However, the net impact of these measures on the capital account are, thus far, not conclusive. In some cases, as the recent experience of Colombia highlights, the liberalization measures increased the confidence of foreign investors and in so doing further stimulated inflows. There are also examples where the presence of capital inflows and the stronger economic activity were used to implement a more rapid pace of trade liberalization and of domestic financial reforms. While the trend is toward integrated goods and capital markets, in some countries there have been pressures for higher 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. With regard to structural policies, it appears these should be designed so as to be consistent with longer-term objectives.

The bottom line

A reasonable sequencing of policies would consist of initially limiting the intermediation of those flows—by sterilized intervention, greater exchange rate flexibility, and/or increasing marginal reserve requirements. This could be followed by a gradual monetization of these flows (i.e. nonsterilized intervention), accompanied perhaps by an appreciation of the currency. The step to nonsterilized intervention, though, could be speeded up if credit availability is limited and/or if the quasi-fiscal costs are high, and if the implied creation of credit and money does not constitute a strong force toward an acceleration of inflation.

Durability of the Capital Inflows

Will external and internal developments combine to make the flows of capital into Latin America durable? Part of the answer to this question depends on the continuation of underlying trends in the international financial system: the globalization of markets and the

diversification of investment portfolios. The growing interest of institutional investors in Latin American (and other emerging) markets is likely to continue, in what could be a large portfolio shift to be effected throughout the rest of the 1990s. The movement of international capital into Latin America has been based not only on high expected returns, but also on the idea that diversification can reduce the overall risk in portfolios. The result is that Latin American securities are increasingly sold in the United States, as well as in European and Asian markets. As time passed, the reliance of individual countries on returning flight capital has been reduced and a broader investor base has been achieved. There is a growing trend in the area toward reaching regional trade agreements. Various countries have expressed their interest in following the lead of Mexico and joining the NAFTA in the near future. This trend is likely to encourage further flows of FDI (foreign direct investment) into Latin America.

Yet, other factors work in the opposite direction. In particular, the present global environment of low interest rates and weak activity in the industrial countries is likely to change. As a global recovery progresses, international interest rates may increase and capital market conditions may tighten. Further, new competitors are likely to emerge as economic and political conditions in eastern Europe and the FSU and other parts of the world improve. Such developments raise the possibility of reversals—especially in the most “bubbly” markets and in those countries where the inflows are mostly of a short-term nature. In the face of heavy sales of domestic securities by foreign investors the liquidity of financial markets in various countries would be put to a test. However, it is encouraging for the countries in the region that their markets dealt reasonably well with the financial volatility observed in 1992. The market optimism (and possibly price overshooting) in the early part of 1992 was offset by turbulence in the remainder of the year—turbulence that was reflected in a drop in share prices of about 30 percent in U.S. dollars; see Figure 4. The fact that the market mechanism worked well against this volatility, in what otherwise could have been an abrupt disruption of the market, certainly contributed to sustain an increasing influx of new investors to the region.

Durability also depends on internal factors. Sound macroeconomic policies, a strong commitment to market-oriented reforms, and outward-oriented trade strategies are likely to enhance the credibility of a given country's policymakers from the standpoint of international investors. Economically, countries make the most efficient use of capital inflows if the return on investment of these resources is

higher than their cost. Policies that promote high domestic saving and adequate returns on domestic investment would be beneficial in this context. As noted earlier, in some countries, the financial intermediation of capital inflows is a source of concern. For the individual investor, the possibilities for hedging against these risks are certainly limited in developing countries. Under these conditions, it is necessary to ensure an adequate regulation and supervision of the banking system to avoid currency or term-structure mismatches and excessive credit creation which could damage the ability of the financial system to deal with a reversal of capital flows.

Last, it seems essential for countries to have flexible policy instruments that can respond quickly to adverse events. Holding an adequate level of reserves, and allowing for some degree of exchange rate flexibility (e.g. through an exchange rate band) can work in this direction.

**Table 1. Latin America: Balance of Payments
(1985-93)**

Year	Balance of goods, services, and private transfers**	Balance on capital account plus net errors and omissions**	Changes in reserves***
	\$ Billion (1)	\$ Billion (2)	\$ Billion
1985	-5.5	6.5	-1.0
1986	-19.9	12.9	7.0
1987	-12.9	16.2	-3.2
1988	-13.5	5.7	7.9
1989	-10.3	12.6	-2.3
1990	-7.7	23.3	-15.7
1991	-21.0	39.2	-18.2
1992	-36.3	59.4	-23.1
1993	-39.7	44.3	-4.5

* Data for Western Hemisphere from IMF's World Economic Outlook.

** A minus sign indicates a deficit in the pertinent account. Balance on goods, services, and private transfers is equal to the current account balance less official transfers. The latter are treated in this table as external financing and are included in the capital account.

*** A minus sign indicates an increase.

Table 2. Asia: Balance of Payments
(1985-92)

Year	Balance of goods, services, and private transfers**	Balance on capital account plus net errors and omissions**	Changes in reserves***
	\$ Billion (1)	\$ Billion (2)	\$ Billion
1985	-16.6	19.5	-2.9
1986	0.9	22.7	-23.5
1987	17.9	23.3	-41.3
1988	5.7	5.9	-11.6
1989	-2.6	12.3	-9.6
1990	-5.8	29.2	-23.5
1991	-4.7	46.3	-41.5
1992	-8.2	30.1	-21.9
1993	-24.0	45.0	-21.0

* Data for Asia from IMF's World Economic Outlook.

** A minus sign indicates a deficit in the pertinent account. Balance on goods, services, and private transfers is equal to the current account balance less official transfers. The latter are treated in this table as external financing and are included in the capital account.

*** A minus sign indicates an increase.

Table 3. Bond and Equity Issues
(1989- First Half 1993)

	1989	1990	1991	1992	First Half 1993
International Bond Issues					
Western Hemisphere	833	2,589	6,832	12,392	11,167
Argentina	--	21	795	1,570	941
Brazil	--	--	1,837	3,655	2,962
Chile	--	--	200	120	333
Colombia	--	--	--	--	325
Mexico	570	2,306	3,373	5,916	5,932
Panama	--	--	50	--	--
Trinidad y Tobago	--	--	--	100	--
Uruguay	--	--	--	100	140
Venezuela	263	262	578	932	535
International Equity Issues					
Western Hemisphere		98	4,120	4,063	2,611
Argentina	--	356	372	2,095	
Brazil	--	--	133	--	
Chile	98	--	129	114	
Colombia	--	--	--	27	
Mexico	--	3,764	3,058	375	
Panama	--	--	88	--	
Venezuela	--	--	283	--	

Sources: IMF staff estimates based on International Financing Review, Euroweek, Financial Times, and OECD.

Notes

- ¹ This paper was prepared for discussion at the study group on Latin American Capital Flows, The Group of Thirty. The authors would like to thank Guillermo A. Calvo for insightful discussions and previous joint work that is reflected in the present paper. Leonardo Leiderman is at The Eitan Berglas School of Economics, Tel Aviv University, and Carmen Reinhart is at the Research Department, International Monetary Fund. The views expressed are those of the authors and do not necessarily represent those of the Fund.
- ² Exceptions among our sample are Bolivia, Brazil, and Ecuador; the last of these has only experienced a very modest improvement in its capital account.
- ³ For example, both Chile and Mexico have posted increases in investment during 1990-92. More recently, there are early signs that investment is rising in countries like Argentina and Colombia.
- ⁴ Very disparate initial conditions in excess capacity between the two regions may help explain why investment surges in Asia and not in Latin America. Most Asian countries enter the capital inflow episode closer to full capacity utilization than their Latin American counterparts (an exception is Chile), where growth had been sluggish or nonexistent.
- ⁵ For example, it is estimated that the assets of pension funds and life and casualty insurance companies reached \$5.6 trillion in 1992.
- ⁶ On various aspects of exchange rate bands in Chile and Mexico, see Helpman, Leiderman, and Bufman (1993).
- ⁷ In addition, to the extent that it reduces the government's need to issue debt, a tighter fiscal stance is also likely to lower domestic interest rates.

References

- Bercuson, K. and L. Koenig, "The Recent Surge in Capital Inflows to Asia: Cause and Macroeconomic Impact," (forthcoming *IMF Occasional Paper*, 1993).
- Calvo, G., L. Leiderman, and C. Reinhart, "Capital Inflows to Latin America: The 1970's and the 1990's," IMF Working Paper WP/92/85, (1992). Forthcoming in *Development, Trade and the Environment*, E. Bacha (ed.), London: Macmillan Press.
- _____, "Capital Inflows to Latin America: The Role of External Factors," *IMF Staff Papers* 40, (1993a), 108-51.
- _____, "Capital Inflows to Latin America: With a Reference to the Asian Experience," forthcoming in *Money and Finance in the Open Economy*, S. Edwards (ed.), (1993b).
- _____, "The Capital Inflows Problem: Concepts and Issues," IMF Paper on Policy Analysis and Assessment PPAA/93/10, International Monetary Fund, (1993c).
- Chuhan, P., S. Claessens, and N. Mamingi, "Equity and Bond Flows to Latin America and Asia: The Role of External and Domestic Factors," (unpublished manuscript; World Bank, May 1993).
- Collyns, C., J. Clark, R. Feldman, A. Mansur, P. Mylonas, K. Parker, R. Renhack, P. Szymczak, and L. Pauly, *Private Market Financing for Developing Countries*, World Economic and Financial Survey Series, (Washington: International Monetary Fund, December 1992).
- Fernandez-Arias, E., "The New Wave of Private Capital Inflows: Push or Pull?," Unpublished manuscript, The World Bank, November 1993.
- Goldstein, M., and M. Mussa, "The Integration of World Capital Markets," IMF Working Paper WP/93/95, December 1993.
- International Monetary Fund, Research Department, *Determinants and Systemic Consequences of International Capital Flows*, IMF Occasional Paper, No. 77, (Washington: International Monetary Fund, March 1991).
- International Monetary Fund, Research Department, *World Economic Outlook*, (Washington: International Monetary Fund, October 1993a).

International Monetary Fund, Policy Development and Review Department, *Private Market Financing for Developing Countries*, (Washington: International Monetary Fund, December 1993b).

Mathieson, D.J., and L. Rojas-Suarez, "Liberalization of the Capital Account: Experiences and Issues," IMF Working Paper WP/92/46, (1992).

Reisen, H., "The Impossible Trinity in South-East Asia", *International Economic Insights*, (Institute for International Economics, Washington D.C.), (forthcoming, 1993).