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**CAPITAL FLOWS IN LATIN AMERICA:
A NEW PHASE**

by
Philip Turner

BANK FOR INTERNATIONAL SETTLEMENTS
Monetary and Economic Department
Basle

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Introduction

The flow of foreign capital into Latin America was interrupted by several periods of severe turbulence during 1994.¹ In some cases, the cause was plainly domestic in origin – the Venezuelan banking crisis is one notable example. In other cases, external factors played an important role, at least in triggering the onset of difficulties. One such external factor was the rise in short-term dollar interest rates in February 1994. This brought a long period of declining rates to an end and contributed to a steep increase in long-term rates. The prices of Latin American bonds were disproportionately hard-hit, and domestic interest rates in many countries had to be increased by much more than US rates.

Mexico – with the area's largest current-account deficit, at some 8% of GDP – was hit by heavy outflows early in 1994, as uncertainties about the domestic political situation worried investors. The Mexican peso came under downward pressure. Interest rates had to be increased; various special measures were adopted to stem outflows; and significant foreign official support for the peso was arranged. Although worries about political uncertainties eased during the summer and autumn, short-term interest rates had to be kept high in real terms. Shortly after elections, however, there were renewed outflows of capital: the new Government first effectively devalued (20th December) and then floated the exchange rate (22nd December): within ten days, the peso had lost 30% of its value against the US dollar. The Mexican stock market plunged.

The reverberations of the Mexican financial crisis were felt throughout Latin America as foreign investors took a much harder look at their Latin American exposure. Equity markets fell across-the-board. Argentina

¹ The term "capital inflows" used in this paper also includes the repatriation by residents of financial assets held abroad – an important element in the case of Latin America.

increased interest rates sharply to contain the initial reaction in financial markets and to maintain its fixed exchange rate against the dollar.

The emergence of substantial outflows during 1994 brings into sharper focus some of the issues raised by the recent influx of foreign capital into the region. Two matters are of potential concern. The *short-term issue* relates to the threat to macroeconomic stability of a sudden reversal of foreign capital flows. How should monetary policy react? Allow the exchange rate to drop (running the risk of triggering an inflation spiral and undermining the credibility of policy) or increase interest rates (depressing the domestic economy, damaging the banking sector and increasing the government's debt burden)?² The *medium-term question* concerns the impact on growth and development prospects of a reduced level of foreign capital inflow, or even an outflow. Two key elements of this question relate to the productivity of real investment and to the rate of domestic saving.

This paper looks at these issues and considers some general policy issues that arise. The emphasis is on *general*, and not on the specific factors that have often played a part in individual countries. Particular prominence is given to comparisons between Asia and Latin America as these serve to highlight a number of key Latin American policy issues.

Period of heavy inflows: 1991–1993

After flowing mainly between the industrial countries in the 1980s, foreign capital returned to the developing world during the early years of the 1990s on a scale that few had foreseen. The net flow in 1993 was around \$150 billion, compared with an annual average of under \$40 billion recorded during the 1983–90 period (Table 1). About one-third of this flowed into Latin America – a striking reversal of the position of the foreign-capital-starved period that the region endured in the aftermath of the international debt crisis. On the face of it, the “classical” direction of capital flows – from capital-rich countries to capital-poor countries where the potential return is much higher – was re-established.

Measured in relation to GDP, the scale of capital flowing into Latin America was broadly comparable to that seen in the Asian developing

² See Williamson (1993) for a discussion of these risks.

Table 1
Global net capital flows
 US\$ billion, annual averages

	1975-82	1983-90	1991	1992	1993	1994
United States	-7.6	96.7	-14.8	25.7	35.3	113.9
Japan	-1.8	52.7	90.0	118.9	108.0	131.4
Western Europe	21.6	8.6	73.5	45.1	-31.1	-16.5
Developing countries	22.3	37.7	152.9	142.1	151.3	135.7
of which:						
Asian NIEs*	5.0	-3.9	5.4	3.8	-0.2	1.4
Other Asia	7.6	20.3	35.4	49.1	62.1	62.6
Mexico	6.2	0.6	22.9	26.6	30.6	10.0
Other Latin America	16.0	5.4	9.2	29.3	30.6	30.1

Note: Changes in net official monetary position are excluded. A minus sign indicates a capital outflow.

* Korea, Singapore and Taiwan. No data available for Hong Kong.

Table 2
Net capital flows to the developing world as a percentage of exports¹

	1975-82	1983-90	1991	1992	1993	1994
Total ²	5.4	5.9	16.0	13.4	13.2	10.2
Latin America	32.7	5.7	23.7	38.8	40.2	24.1
of which:						
Argentina	18.9	13.4	22.8	75.0	63.4	52.2
Brazil	54.8	7.9	4.7	22.8	21.8	18.0
Chile	47.7	21.2	11.2	26.5	21.2	31.0
Colombia	24.8	12.6	-5.7	1.8	22.6	25.4
Mexico	41.5	2.0	57.6	64.1	68.4	23.2
Venezuela	5.5	-14.6	3.0	17.5	14.3	-16.0
Asian NIEs ²	9.8	-2.7	2.3	1.5	-0.1	0.4
China	..	8.9	1.9	21.1	15.4	22.8
Other dynamic Asia	10.7	14.1	22.1	18.4	22.3	11.0

Note: Unless otherwise indicated, the country groups in the tables in this paper are defined as follows:

Latin America: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay and Venezuela.

Asian NIEs: Hong Kong, Korea, Singapore and Taiwan.

Other dynamic Asia: Indonesia, Malaysia and Thailand.

¹ Exports of goods and non-factor services. ² Excludes Hong Kong for which capital account data are not available.

countries (excluding the Asian NIEs). Capital inflows amounted to about 5% of Latin American GDP, compared with about 4% of GDP in the lower-income Asian countries. However, the Asian economies are far more export-oriented than are the Latin American economies. Measured in relation to trade, capital inflows into Latin America were much the larger: Table 2 shows net capital flows as a percentage of exports. Looking at capital flows in relation to exports is useful because it gives some – albeit imperfect – idea of the ease of the future “servicing” of foreigners’ claims on domestic assets.

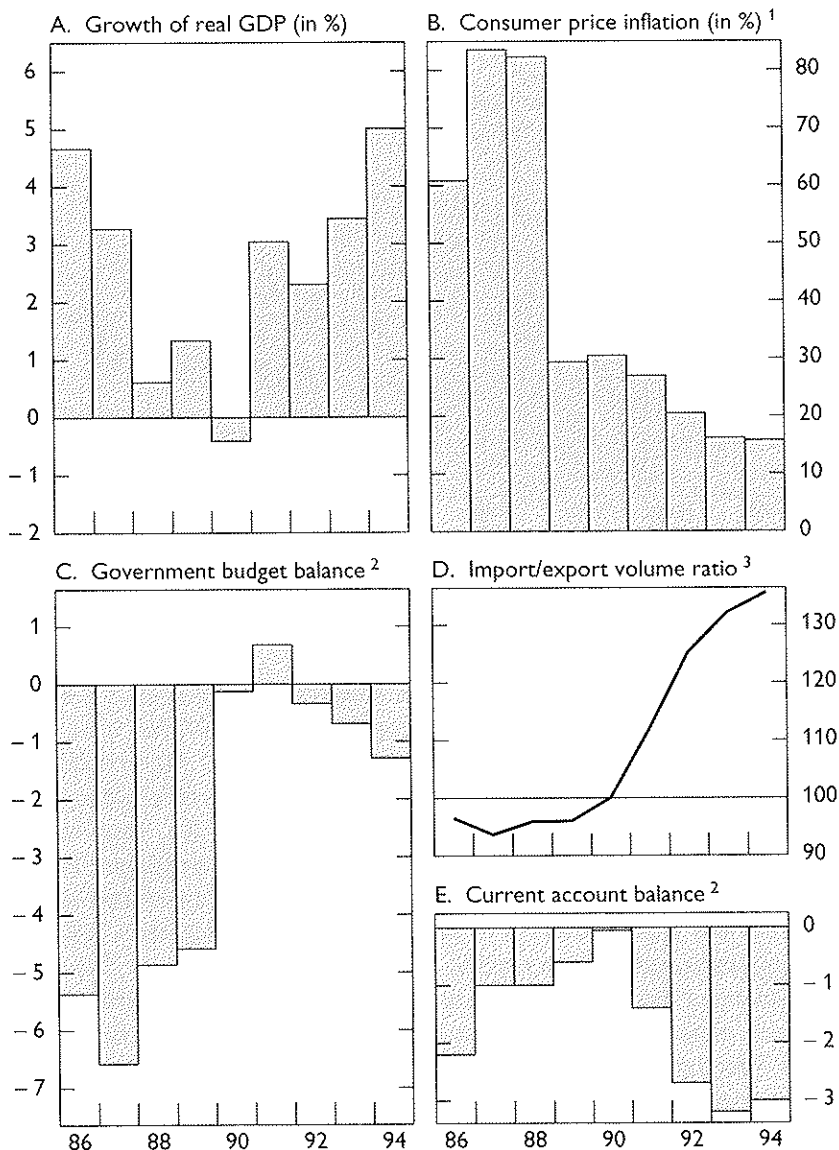
For developing countries as a whole, net capital flows during 1992 and 1993 were the equivalent of 13% of exports. The percentage in the lower-wage Asian developing countries was quite close to this, at about 20%. For Latin America, however, the average was much higher with net capital flows running at just under 40% of the annual value of exports. Not only was this much higher than in the previous decade, but it was also proportionately higher than in the 1975–82 period (i.e. before the debt crisis). Inflows into Mexico amounted to over 60% of exports in 1992 and 1993; a similar proportion was registered by Argentina. At the other end of the spectrum, inflows into Brazil and Chile have been closer to 20% of exports, well below the percentages recorded by these two countries in the pre-debt crisis period.

Exchange rate appreciation and large deficits ...

Capital inflows of this magnitude put upward pressure on most Latin American exchange rates. The notable exception (until very recently) was Brazil; in addition, the degree of appreciation has been somewhat limited in Chile. In Asia, by contrast, real exchange rates have been relatively stable (Graph 2).³ However, in Latin America, the substantial real effective appreciation of recent years was preceded by a long period of real depreciation during much of the 1980s as the implications of the debt crisis unfolded and as the terms of trade moved strongly against commodity-exporting countries.

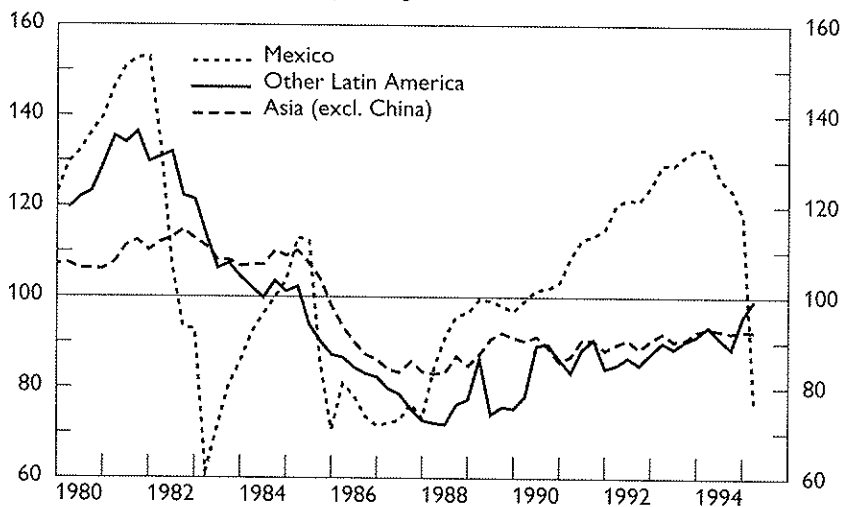
³ Calvo et al. (1993a) attribute this to the consumption-led, rather than investment-led, nature of the Latin American expansion. They argue that a consumption-led boom leads to a smaller ex ante deterioration in the trade balance than an investment-led boom because investment has a higher tradable goods component. If this ex ante deterioration is smaller than the ex ante capital inflow, then the exchange rate has to appreciate in order to, ex post, increase the trade deficit or reduce the capital inflow.

Graph 1
Macroeconomic indicators of Latin America



¹ Argentina, Brazil and Peru are excluded because their high inflation in several years dominates any average in which they are included. ² As a percentage of GDP. ³ 1990 = 100.

Graph 2
Real effective exchange rates*
 Quarterly averages, 1980 – 89 = 100



* Based on relative consumer prices.

By early 1994, the real effective exchange rate of the area as a whole had risen about 40% above the nadir reached in late 1987. But it was still below the (overvalued) levels seen in the early 1980s.⁴ Nevertheless, a real appreciation of this size must have contributed to a rather poor trade performance – although high domestic absorption (i.e. low saving, discussed in more detail below) has probably been an important factor. For the area as a whole, the volume of imports rose by a cumulative 80% over the four years from 1990 to 1994; exports rose by less than 35% (see the import/export volume ratio in panel D of Graph 1 above). The main exceptions to this poor trade performance were the two countries which had not experienced marked exchange rate appreciation – Brazil and Chile. Worthy of note is the marked contrast with Asia, where the expansion in imports has been more balanced.

⁴ Few would dispute that exchange rates in Latin America during the early 1980s were held at levels too high to sustain by (i) high commodity prices and (ii) foreign official borrowing.

Moreover, Asia's share of world markets has increased, while that of Latin America has fallen.⁵ Given the earlier marked dependence on commodity exports, many discussions of development strategy have put particular emphasis on the expansion and diversification of exports.⁶ The real exchange rate is an important element of such a strategy, and a competitive exchange rate is essential for the development of non-traditional exports. It is true that a major diversification in Latin America's exports has occurred during the last decade or so. While the value of crude material exports increased only a little from 1980 to 1992, that of manufactured goods rose by a factor of almost four: see Table 3. A sizeable expansion in the export of finished manufactured goods more than accounted for this increase; exports of semi-finished goods actually declined. Yet the pace of growth appears to have slackened appreciably in the early 1990s; by contrast, the speed of already rapid Asian export

Table 3
Exports of Latin America to industrial countries
 US\$ billion

	1970	1980	1990	1992	Memorandum item: Three dynamic Asian countries ¹	
					1990	1992
Crude materials	11.9	61.7	67.2	64.0	27.5	28.6
<i>Food</i>	6.4	21.7	28.7	30.0	8.1	10.5
<i>Fuels</i>	2.6	30.1	25.3	21.9	13.1	11.6
<i>Other</i>	2.8	9.9	13.2	12.1	6.4	6.6
Manufactured goods	2.1	15.2	51.2	56.0	26.2	41.3
<i>Semi-finished</i>	1.7	8.9	20.9	18.3	7.2	8.8
<i>Finished</i>	0.4	6.3	30.3	37.7	19.0	32.5
Total ²	14.2	77.6	120.6	122.8	54.2	70.7

¹ Indonesia, Malaysia and Thailand. ² Includes also SITC 9 (other goods). Other totals may not add because of rounding.

Source: Author's calculations based on OECD *Foreign trade by Commodities, Series C*.

⁵ For some estimates in the shift in world manufacturing output and trade during the last twenty years, see Chapter IV of BIS (1994).

⁶ More generally, outward-looking trade policies are essential – a shift in policy that is still relatively recent in Latin America: see Nogues and Gulati (1994).

Table 4
Global savings*

	1975-82	1983-90	1991-93	1975-82	1983-90	1991-93
	US\$ billion			As a percentage of GDP		
United States	777	799	836	17.7	14.8	13.8
Other industrial countries	2,112	2,620	3,005	24.9	24.6	24.2
Developing countries	543	847	1,067	25.8	27.0	26.5
of which: Asia	269	533	781	28.1	30.8	33.1
Latin America	213	247	222	22.9	23.5	19.3
Global savings	3,431	4,266	4,958	23.0	22.1	21.6

* Annual averages at 1992 prices and exchange rates.

growth picked up.⁷ It is the wide gap in export performance in these two areas that raises questions.

... lower saving and investment ...

A second important difference between Asia and Latin America concerns saving and investment balances. Asian countries have relied much more heavily on their own domestic savings to finance domestic investment than have the Latin American countries. In the 1990s, the Asian saving rate rose to 33% of GDP, up from 30% in the 1983-90 period and 28% in the 1975-82 period. The Latin American saving rate, by contrast, fell to under 20%, well below the savings rate recorded in the earlier periods shown in Table 4. This decline in the national savings rate reflected a fall in *private* savings as government dissaving has been reduced from the high levels seen in the late 1980s (the development in the budget balance for the area as a whole is shown in panel C of Graph 1).

These trends have had a not insignificant impact on developments in the aggregate level of world savings. Of global savings of almost \$5 trillion in 1991-93, the industrial countries provided just under \$4 trillion and the

⁷ The annual growth rates of the dollar value of finished manufactured exports (as shown in Table 3) were as follows:

	1980 to 1990	1990 to 1992
Latin America	17.0	11.5
Three dynamic Asian countries	23.6	30.8

developing world a little over \$1 trillion. The Asian share of this was \$780 billion, and the Latin American \$220 billion – a much greater difference between the two than in the earlier periods shown in Table 4: in the period 1975–82, for example, Latin America provided about 6% of world savings; the area now provides only 4½%.

Perhaps the oddest aspect of the capital inflow period is that the average investment/GDP ratio of Latin America as a whole did not increase. Foreign capital inflows have not therefore served to increase domestic investment; rather they have been used to make up for a decline in domestic saving. The ratio of gross fixed investment to GDP – in nominal terms – was 20% in the 1991–93 period (Table 5). This is well below the 35% and plus ratio that has characterized recent experience in other dynamic Asian countries. However, the Latin American average conceals considerable diversity within the sub-continent. Chile, in particular, has seen a sharp rise in its national investment rate. Argentina's investment ratio also rose strongly in 1992 and 1993 – albeit from very low levels.

Table 5
Gross fixed investment
As a percentage of GDP

	1975–82	1983–90	1991–93	Memorandum item: Gross rate of return*	
				1975–90	1984–93
				Latin America	23.5
<i>of which: Argentina</i>	24.6	18.0	16.6	0.4	11.1
<i>Brazil</i>	22.6	20.2	19.9	15.7	12.8
<i>Chile</i>	16.4	19.5	26.7	18.3	29.0
<i>Colombia</i>	18.8	19.6	17.9	20.6	21.3
<i>Mexico</i>	24.9	21.1	21.9	15.0	9.6
<i>Venezuela</i>	31.8	18.3	20.4	8.0	15.9
Asian NIEs	30.8	27.9	31.9	28.4	27.5
China	30.9	37.3	35.5	23.8	26.8
Other dynamic Asia	25.4	30.6	37.3	24.3	21.6

Notes: (i) Groups of countries are weighted by the dollar value of 1990 GDP.

(ii) Area definitions are given in Table 2.

* Defined as reciprocal of ICOR (incremental capital-output ratio: the ratio of gross investment to GDP divided by the average rate of real growth for the period).

One partial explanation of the failure of the investment ratio to rise is that the price of capital goods declined relative to the GDP deflator. Given the high import content of capital goods, this probably reflected the strong real appreciation in the exchange rate. Hence, measured at constant prices, the investment/GDP ratio rose quite strongly in contrast to that measured at current prices.⁸ This means that investment in real terms *has* increased sharply in recent years in Latin America.

However, even allowing for relative price effects, investment/GDP ratios are still far lower than the high investment rates seen in Asia. Moreover the productivity of investment appears to have been lower. The only measure of this that can be readily extracted from national accounts statistics is the incremental capital-output ratio (the ICOR).⁹ The reciprocal of this may be interpreted as an average gross rate of return for investment – although it is a very crude measure, and depends on a number of assumptions. At best, it can be indicative of broad orders of magnitude when computed for a long run of years. Calculations based on a few years would be misleading.

The calculated average gross rates of return are shown in the last two columns of Table 5. Over the period 1975–90, the Latin American return of about 13% was little over half that registered in the dynamic Asian countries. The aggregate picture for the more recent 1984–93 period is broadly similar. It is perhaps natural that the potential rate of return to investment in capital-poor, low-wage areas should be higher than in capital-rich countries – indeed this difference underlies the notion of the classical direction of capital flows. So it is not surprising that returns should be so much higher in developing Asia than in the developed countries. Yet the Latin American rate of return has been little different from that seen in the industrial world as a whole – it has actually been some-

⁸ The cases of Argentina and Mexico provide striking examples. Fixed investment as a % of GDP has developed as follows:

	Current prices		Constant prices	
	1990	1993	1990	1993
Argentina	14.0	18.4	14.2	21.0
Mexico	21.9	22.5	18.7	21.0

⁹ If investment I increases real income by Y , then the ICOR can be written as (ignoring depreciation etc.):

$$\frac{\Delta K}{\Delta Y} = \frac{I/Y}{\Delta Y/Y}$$

where I/Y is the investment/GDP ratio and $\Delta Y/Y$ is the rate of GDP growth.

Table 6
Direct investment (DI) versus portfolio investment (P)
into the developing world

Annual averages, US\$ billion

		1975-82	1983-90	1991	1992	1993	1994
Total	DI	10.3	19.5	36.2	50.0	69.7	94.1
	P	2.4	6.3	31.9	53.8	98.8	44.8
Asia*	DI	2.1	8.3	19.1	31.1	44.0	57.5
	P	0.6	1.9	4.4	8.3	23.5	20.1
Latin America	DI	4.4	5.9	11.2	12.6	16.1	25.9
	P	1.7	3.0	26.2	40.6	67.8	13.0

Note: Area definitions are given in Table 2.

* Excludes Hong Kong.

what below. This suggests poor investment choices or a climate not conducive to economic activity.

... but high returns on financial assets

Nevertheless, returns to Latin American *financial* assets have been exceptionally high during the recent past, after many years of very poor – often negative – returns. And it was into financial assets that foreign investors put their money – hence the dominance of portfolio investment (Table 6). With the demise of commercial bank lending as an important source of foreign capital, inflows have been in effect “securitized”. This trend can only partly be attributed to the debt crises of the 1980s; it was also a reflection of the increased importance globally of financial markets and of non-bank institutional investors.¹⁰ One consequence of this securitization is that both the sources and the users of external finance have become much more diversified than in the years before the debt crisis when major banks lent predominantly to governments.¹¹ This development has served to spread risks and to reduce the likelihood of systemic problems. In this sense, the intermediation of capital flows has significantly improved in recent years.

¹⁰ On this see Culpeper (1994).

¹¹ Gooptu (1993) reviews the different sources. At a recent World Bank conference an official of the Federal Reserve Bank of New York estimated that individuals hold about 80% of emerging market funds (quoted in Claessens and Gooptu (1993), page 4).

The heavy emphasis on portfolio investment provides another striking contrast with Asia, where foreign direct investment dominated. Even the *nature* of foreign direct investment differed. While in Latin America it has mainly taken the form of debt/equity swaps and privatisations, which do not necessarily generate additional capital formation, in Asia it has mostly taken the form of acquisitions or the setting-up of new enterprises.¹² Moreover, direct investment has been much more export oriented in Asia than in Latin America. The relationship between recent FDI inflows and the expansion in exports recorded in the 1990s by the larger economies in Asia and Latin America is shown in Graph 3. Two differences between the regions stand out. The first is that the relationship between direct investment and the growth of exports is closer across the Asian countries than across the Latin American countries. The second is that foreign direct investment in Asia is more export-intensive (i.e. the regression line shown is flatter) than that in Latin America.

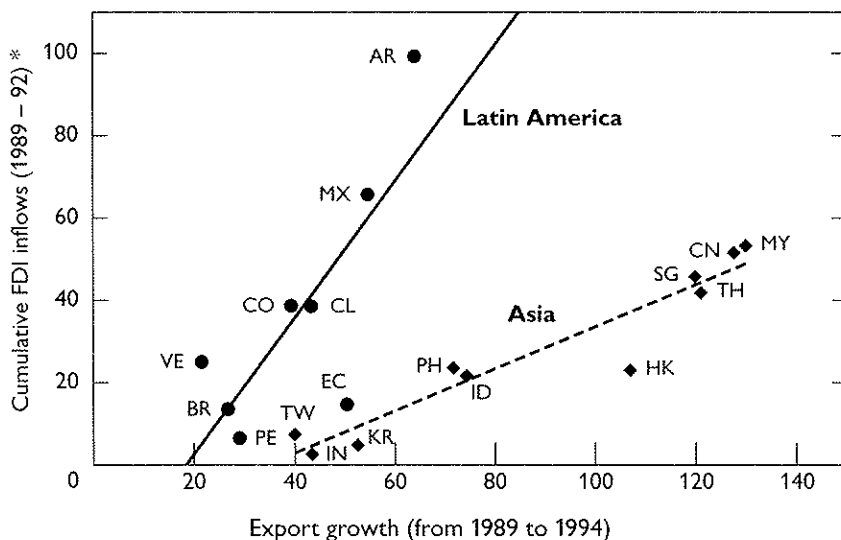
Portfolio flows are more sensitive to shifts in international financial conditions than direct investment. In this context, it is of interest to note that some research suggests that, while domestic factors have tended to dominate the flows of capital to Asia, foreign factors – such as the level of interest rates and the state of the cycle in the industrial world – have dominated flows to Latin America.¹³ The implication is that stronger activity and higher interest rates in the main industrial countries – two changes that materialized in 1994 – would have been expected to have a disproportionately large and adverse effect on capital flows to Latin America, even in the absence of the Mexican crisis.

This pattern of investment has left Latin America more vulnerable than Asia to swings in foreign investor sentiment. Direct investment decisions are likely to be more long-term in nature than portfolio investment: it takes time to generate returns and the decision to withdraw usually incurs significant costs. Moreover, direct investment allows the recipient country to share the risks of investment with the investor: the “servicing”

¹² A closer examination of the nature of portfolio flows suggests other aspects of potential vulnerability. One significant change is that the average maturity of international bonds issued by Latin American entities has declined appreciably over the years, and is now relatively low. For a discussion of this, see Griffith-Jones (1994).

¹³ Notably Calvo et al. (1993a) and Chuhan et al. (1993). Fernandez-Arias (1994) puts more emphasis on the international “push” factor behind the flow of capital, arguing that the improved creditworthiness of a number of countries – usually cited as a “pull factor” – itself partly reflected significant declines in international interest rates.

Graph 3
Foreign direct investment and exports



Latin America: AR = Argentina; BR = Brazil; CL = Chile; CO = Colombia; EC = Ecuador; MX = Mexico; PE = Peru; VE = Venezuela.

Asia: CN = China; HK = Hong Kong; IN = India; ID = Indonesia; KR = Korea; MY = Malaysia; PH = Philippines; SG = Singapore; TW = Taiwan; TH = Thailand.

* As a percentage of 1989 exports.

of direct investment liabilities depends on the generation of profits, and does not create a fixed burden in the same way as bank or bond debt.¹⁴ As Calvo et al. (1993a) have pointed out, these differences may help explain why concerns over “hot money” and a sudden reversal were always more prevalent among Latin American policy circles than among their Asian counterparts.

However, such concerns about vulnerability, doubtless valid for debt-creating portfolio flows, need to be somewhat nuanced for equity flows. First, the “servicing” of equity investment does not represent a fixed burden but depends on the generation of profits. Secondly, one of the functions of equity markets is to “absorb” shifts in investor expectations

¹⁴ An additional consideration is that debt/equity swaps involved an effective subsidy for foreign investors acquiring domestic assets. Ffrench-Davis (1990) has put the implicit subsidy at 46% of the value of investments.

through changes in the market price of securities. Selling pressure from foreign holders of shares, for example, would tend first to depress the local stock market: it would have no necessary effect on the foreign exchange market. The exchange rate is depressed only to the extent that residents purchase what non-residents want to sell. Thus if it is mainly foreigners who become pessimistic, and they sell to residents, then there is direct and simultaneous downward pressure on the exchange rate. But if residents also wish to sell at initial prices then a shift in foreign sentiment would simply depress equity values to the point that existing resident and non-resident owners were prepared to continue holding their shares. Hence the equity market would assume the role of shock absorber – and *perhaps do so without provoking an exchange rate crisis*.

The high returns to financial assets reflected two main factors: the high level of domestic interest rates and the boom in equity markets. High returns on domestic financial assets added to the upward pressure on the real exchange rate; and the appreciation in turn enhanced the attractiveness of investing in domestic assets.

... due to high interest rates ...

A central feature of macroeconomic stabilisation in most Latin American countries was the maintenance of high short-term interest rates. In a number of countries, this coincided with the opening of the short-term money market to foreign investors and thus led to heavy capital inflows. Foreign investment in the Mexican money market, for example, was liberalized only at the end of 1990: a high proportion of the outstanding stock of Mexican short-term Treasury bills came to be held by non-residents. However, not all Latin American countries have well-developed money markets: the following paragraphs focus on interest rates on certificates of deposit or three-month bank deposits.

During the early 1990s, such interest rates were usually positive. According to the calculation shown in Table 7, the average real interest rate in the area generally exceeded 3%.¹⁵ For most Latin American countries this marked a decisive break from the earlier period when real rates were negative – sometimes substantially so. The exceptions are Chile (which has had positive real rates for a decade) and Brazil.

¹⁵ Real rates in Brazil have been even higher – over 20% (Table 7). However, high Brazilian rates of inflation inevitably create significant measurement problems for the calculation of real rates of interest. Brazil is excluded from the averages shown in Tables 7 and 8.

Table 7
Real short-term interest rates*

	1984-87	1988-90	1991-93	1994
Latin America	-10.2	-20.2	1.0	3.1
<i>of which: Argentina</i>	-12.9	-52.1	-5.5	4.0
Brazil	18.1	- 0.1	21.3	23.9
Chile	2.7	5.5	4.2	5.6
Colombia	9.5	4.4	3.9	5.6
Mexico	- 9.5	8.9	3.7	7.1
Venezuela	- 7.3	-18.8	2.6	-19.0
Asian NIEs	4.6	2.6	1.7	1.8
China	- 2.5	- 0.6	-5.1	-11.2
Other dynamic Asia	7.9	6.5	7.2	2.0

Notes: (i) Area definitions are given in Table 2.

(ii) Brazil is excluded from the Latin American average.

* Short-term interest rates are generally either those paid on 3- to 6-month bank deposits or those on short-term government paper. Deflated by the consumer price index.

In addition, the depreciation of most exchange rates against the dollar did not fully reflect the inflation differential vis-à-vis the United States (and the industrial world generally). This further increased the relative attractiveness of holding bank deposits and other short-term financial assets in Latin America in recent years. Sometimes such comparative exchange rate strength reflected the deliberate policy of managing a downward float of the nominal exchange rate so as to compensate only partially for inflation and thus contribute to disinflation. Sometimes exchange rate strength itself reflected the pressure of spontaneous capital inflows.

The consequence of this was that domestic interest rates were, when converted into US dollars, generally extremely high. One way of illustrating this is to combine the interest rates underlying in Table 7 with the movements in the dollar exchange rate to produce an exchange-rate-adjusted interest rate. The results are shown in Table 8. Naturally, these calculations must be regarded as indicative of broad orders of magnitude only: there are typically many different short-term interest rates, and hyperinflation introduces a certain amount of arbitrariness into the calculation. Also, these are ex post returns, and no one can know future exchange rates. Nevertheless, the main conclusion that there was a

Table 8
Returns on short-term domestic instruments in US dollar terms
 Annual rates of return

	1984-87	1988-90	1991-93	1994
Latin America	-12.0	- 4.9	10.3	-12.6
of which: Argentina	- 9.1	-36.0	3.0	8.0
Brazil	22.9	14.1	21.7	75.7
Chile	- 2.4	13.1	10.2	22.4
Colombia	1.2	4.1	10.7	24.2
Mexico	-11.7	31.8	15.0	-33.1
Venezuela	-18.7	-19.8	8.9	-13.4
Asian NIEs	12.0	11.3	5.9	9.4
China	-17.7	8.9	-5.9	14.3
Other dynamic Asia	5.3	9.6	11.7	9.0

Notes: (i) Calculated from monthly average interest rates and changes in the exchange rate during the month.

(ii) Area definitions are given in Table 2.

(iii) Brazil is excluded from the Latin American average.

sea-change in the relative attractiveness of investing in short-term paper in Latin America is inescapable.

During the 1984-87 period, when most Latin American currencies came under heavy downward pressure as the debt crisis unfolded, the average rate of return on short-term domestic instruments was a negative 12 to 13% per year. As short-term interest rates on US investments were a little over 7% on average during this period, the interest rate differential in favour of dollar assets of almost 20% annually. Obviously, it would not have been very sensible for Latin American residents to have repatriated their overseas assets during that period. With the reversal of this pattern in the 1990s, Latin American returns averaged 10% in dollar terms over the period 1991-93, while US rates fell to about 5% on average – a 15% advantage in favour of Latin America. In a number of cases, the advantage was far larger.¹⁶ Such returns were even larger than the (high) returns seen in the rapidly growing economies in Asia.

¹⁶ Part of the higher returns on Latin American assets reflected the greater risk involved. Historically, the variance of returns has been very high. For example, dollar returns on Brazilian assets went from -19.6% in 1990 to +42.3% in 1992. Such great volatility must imply that investors demand large risk premia.

The Brazilian currency reform of July 1994 provides the most recent episode of high domestic interest rates associated with heavy upward pressure on the exchange rate. With inflation running at around 45% per month, the cruzeiro real was introduced and was initially fixed at a nominal one-to-one parity with the dollar. Domestic interest rates were kept high in real terms, and monthly inflation fell to 7 to 8% in July and further to 2 to 3% in August and September. Because the Real was widely expected not to fall against the dollar at least over the short term, the incentive to move from dollar-denominated to real-denominated assets to take advantage of the high interest rates was very strong. This caused a massive remonetisation of the economy (the monetary base more than doubled in the two months following the introduction of the new currency) and heavy capital inflows (despite tight restrictions on foreign investment in Brazilian assets). At the same time, the equity market boomed. By end-September, the Real had appreciated in nominal terms by 15% against the dollar, and remained strong for the remainder of 1994.

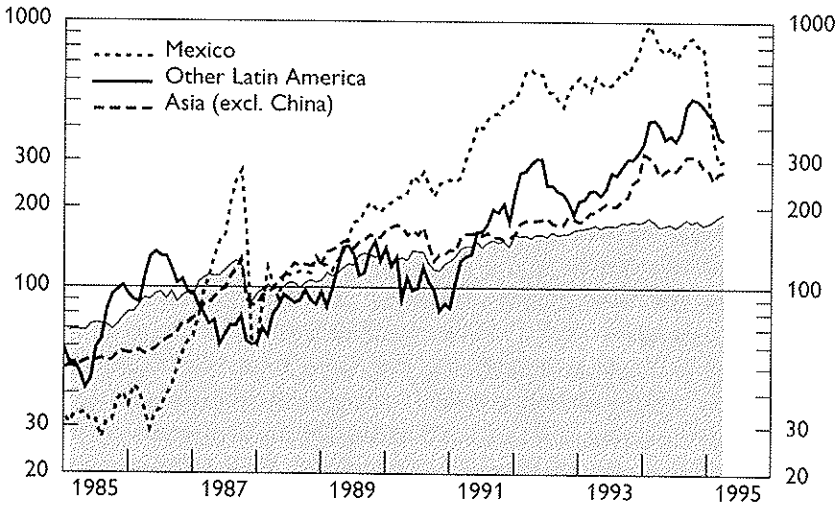
Colombia has also faced heavy capital inflows. With inflation running at over 20% annually, monetary policy has had to be tightened and domestic interest rates kept high. A sharp increase in coffee prices and higher oil exports have added to the upward pressure on the real exchange rate. With the nominal exchange rate vis-à-vis the dollar relatively stable, the real rate has appreciated significantly during the last two years.

... and booming equity markets

Booming domestic equity markets was the second major factor. Foreign inflows fuelled a massive boom in most Latin American equity markets; and there was probably a certain bandwagon effect whereby the strong performance of such equities itself attracted wider foreign interest. Between late-1990 and early 1992, the IFC's composite dollar index for Latin America increased by a factor of 2½–3, before falling back during 1992 and early 1993 (see Graph 4). A further steep rise towards the end of 1993 was followed by a sharp correction in the first half of 1994, reflecting unsettled conditions in international financial markets generally and some Latin America-specific nervousness about elections and other political factors. In the wake of the Mexican crisis most Latin American markets fell sharply.

Of the several factors that have stimulated foreign investor interest in these markets, some are rather durable, others not. The factor that

Graph 4
Equity markets *
 1985 – 89 = 100



* End-month data, in US dollar terms (semi-logarithmic scale). The shaded area represents the US equity market (S & P 500).

Sources: International Finance Corporation and national data.

perhaps stands the best chance of proving durable is the growing perception that better economic policies are creating a climate more favourable for business. The longer such policies can be maintained, the more confident will prospective investors be – given the history of policy reversals in this region, this process will inevitably take time.

A number of other factors are of a more temporary nature, and their effect will decline over time. One was that foreign investors sought to diversify their portfolios by adding high-return, but high-risk, stocks in the developing world. As most industrial country investment portfolios contained very little developing country equity at the beginning of the decade – certainly a much lower proportion than the developing world's share of world output – there was considerable room for diversification. Moreover, such diversification has been encouraged by the tendency of fluctuations in developing countries' financial markets to be relatively independent of fluctuations in industrial countries. In addition, innovation in financial markets has enabled a broader range of investors to take

advantage of the opportunities in the emerging markets – in particular the development of professionally-managed country funds portfolios has made it easier to invest in many diverse markets without having to have detailed knowledge of the performance of individual companies. One recent estimate suggests that investors who placed one-fifth of their portfolio in an emerging market index fund would have reduced portfolio risk by about 1½%, while increasing returns by 2%.¹⁷ A second factor was that the development of American Depository Receipts made it easier for Latin American and other entities to raise funds in the US market. A third factor was the sale to foreigners of shares in newly privatised companies.¹⁸ As these three factors run their course, some slackening in the pace of flows can be expected.

One aspect of equity markets in the emerging economies that has attracted attention is the inefficiency of the pricing mechanism. Statistical findings that stock prices in such markets can be predicted by past price behaviour to a much greater extent than prices in industrial country markets can be taken as evidence of pricing inefficiency.¹⁹ This means they can be more liable to bandwagon effects. A second aspect is that (aside from privatization issues) there have been relatively few new issues of equity capital in Latin America to take advantage of booming equity markets.²⁰ Hence the equity market boom has not helped finance increased investment.

The dilemma for policy: discouraging inflows ...

The heavy influx of foreign capital created a difficult dilemma between the domestic and external objectives of monetary policy. The extent of this dilemma can be conveniently gauged by comparing the level of interest rates seen by internal “eyes” and that seen through external “eyes”. In most countries, interest rates deflated by domestic inflation – that is, interest rates through internal “eyes” – were moderately positive in real terms. As already noted, this represented a marked shift from the negative real rates that characterized much of the 1980s in many countries –

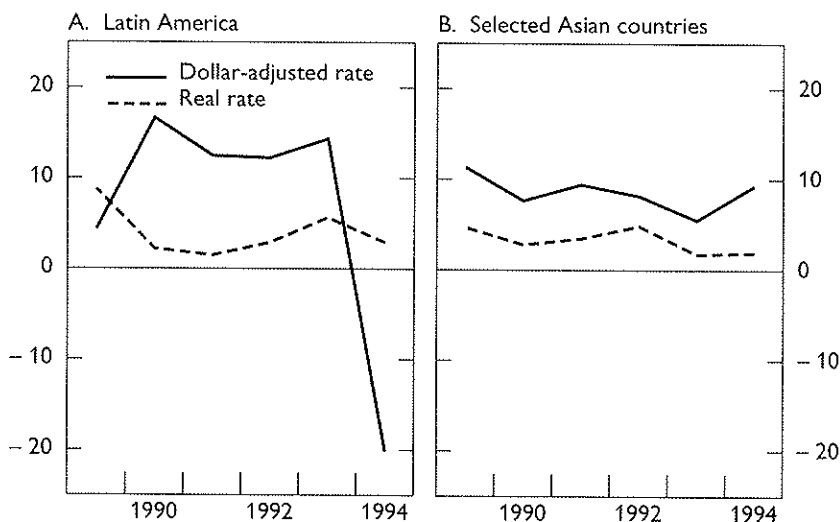
¹⁷ Divecha et al. (1992). Cited by IMF (1994).

¹⁸ See Sader (1993) for details of the role of privatisations in the development of capital flows.

¹⁹ This issue is discussed in Claessens and Gooptu (Eds, 1993). Claessens, Dasgupta and Glen found that the first-order autocorrelations of returns for many emerging markets were about 0.2 compared with less than 0.1 in industrial countries.

²⁰ For a discussion of the possible reasons see Group of Thirty (1994).

Graph 5
The internal/external interest rate "wedge" by area



Notes: (i) The real rate is the annual average of the monthly interest rate deflated by the monthly rise in the consumer price index (see Table 7). The dollar-adjusted rate is similarly calculated, but using the change in the exchange rate against the US dollar during the month (see Table 8).

(ii) Brazil is excluded from the average for Latin America.

and has played a significant role in reducing inflation. Yet interest rates adjusted for exchange rate movements against the dollar – external “eyes” – were very high, and this attracted often-unwanted capital inflows and led to currency appreciation that was in some cases not warranted.

Attempting to counter this inflow of capital by lowering interest rates could conflict with the domestic objective of monetary policy by pushing rates too low – even negative – in real terms. As restrictions on capital account transactions have been eased, a number of emerging economies have faced this dilemma. But the gap between the two measures of interest rates has been much larger in Latin American than in Asian countries: (see Graph 5). A second difference has been the much greater volatility of dollar-adjusted returns on Latin American assets over the last decade or so. Volatility has created substantial opportunities for speculative profits by moving into – and out of – local-currency assets.

Although this dilemma cannot be avoided, several ways have been tried to alleviate it. There is, first, the standard macroeconomic solution of tightening fiscal policy: cutting the budget deficit (or even running a budget surplus) can serve to reduce the supply of government paper and so bear down on domestic interest rates. Secondly, measures can be taken to limit capital inflows directly or to foster capital outflows. The third possibility is to increase uncertainty about the future exchange rate so that short-term inflows are discouraged. The following paragraphs briefly review these three solutions.

... by fiscal tightening ...

As for the first solution, there has indeed been a decisive and general shift towards better budgetary balance in most of Latin America. The shift towards surplus in the area as a whole since the late 1980s has amounted to about 5 to 6% of GDP during the last five years or so (panel C in Graph 1).²¹ In many cases, the better fiscal position has reflected the implementation of important reforms – a more efficient tax system and cuts in unproductive spending (military expenditure, subsidies etc.) – and could therefore endure. However, almost all of this fiscal adjustment took place *before* the influx of foreign capital; since 1992 there has indeed been some slippage as budget deficits have widened again.

The slippage in the past two to three years – at a time when growth was picking up – does suggest a modest degree of fiscal easing that was perhaps unwarranted. Nevertheless, deficits have remained relatively small. It is an open question whether further fiscal adjustment, to the extent not needed on domestic grounds, should have been implemented on purely external grounds. In any case it was in practice difficult for governments to win public support for any significant further measures of budgetary restriction to cope with the foreign inflows.²² In addition, the reduction in budget deficits has not generally been enough to counter-balance falling *private* savings. The net result has been that total national saving has tended to decline.

²¹ Note, however, that the measurement of budget deficits for many Latin American countries is complicated by (i) a large public enterprise sector whose losses may not be fully reflected in the government deficit figures and (ii) the impact of inflation on nominal government debt. To deal with (ii) in high inflation countries, only the real component of government interest payments on nominal debt is counted under government expenditure (the nominal part being assumed to have an exact offset in the reduction in the real value of government debt).

²² See Schadler et al. (1993).

... by capital controls ...

The central drawback of the second remedy – direct controls on capital inflows – is that foreign investment in the domestic economy is a key vehicle for making the economy more productive and responsive to the world market. This applies particularly to foreign direct investment and long-term equity purchases. But it applies less strongly to those flows of capital that are motivated by the prospects of short-term gains. Hence there may in principle be a case for controls on short-term capital inflows. One example of this approach has been Chile, which has imposed legal reserve ratios that bear particularly heavily on the main forms of short-term capital inflow. Colombia has also recently resorted to controls on short-term capital movements. Brazil has retained extensive controls, and indeed has recently tightened existing measures: the direct purchase by non-residents of domestic fixed-income securities, for example, was restricted last year. In addition, interest equalization taxes were imposed on external bond issuance by domestic enterprises.

The practical difficulty with controls is that they can be circumvented in a number of ways (e.g. through manipulating trade invoicing, channelling flows through residents). Over time private financial operators find successive loopholes, and the danger is that this can force the authorities to progressively tighten the regulations – often to the point where some desirable economic activity is hampered. Perhaps a fair summary of international experience is that controls can be effective for a limited period of time. In some instances, they may be enough to “buy time” – for example so that the markets can grasp the medium-term dangers of, e.g., large current account deficits. But controls are not a permanent solution.²³

The complementary approach of liberalizing capital outflows may be preferable on general grounds. Building up foreign assets allows domestic investors to diversify risks – instead of leaving them all-dependent on domestic assets and domestic economic performance. This can be a particularly important consideration for major commodity-producing countries. Chile, Colombia and Mexico have all relaxed restrictions on capital outflows when confronted with capital inflows.²⁴ Chile has moved

²³ A recent study by Johnston and Ryan (1994) found that controls have typically been less effective in developing than in industrial countries.

²⁴ See Ffrench-Davis et al. (1994). For a summary of particular measures taken, see Schadler et al. (1993), page 20.

perhaps furthest in this direction by allowing corporations to undertake direct investment abroad and, more recently, allowing institutional investors to acquire foreign financial assets.²⁵

... and increasing exchange rate uncertainty

The third strategy of increasing the short-term variability of the exchange rate relies on the fact that such “noise” can have a particularly large effect on short-term flows, when the investment horizon is such that even rather modest movement in the spot rate has a major effect on annualized expected returns.

There are several ways of achieving this. One is to resort to wider exchange rate bands. Mexico is one prominent example of this approach. From November 1991 to December 1994, the Mexican authorities allowed the floor to crawl downwards but maintained the ceiling on the nominal exchange rate. Given relatively high inflation, this ceiling meant implicitly accepting real appreciation when inflows were at their heaviest: the band was in effect widened to absorb capital inflows. The real exchange rate was allowed to appreciate under the pressure of the influx of foreign capital but room was left for a proportion of this appreciation to reverse once inflows fell back. As inflows did reverse in early 1994, the exchange rate could fall significantly *but without breaching the official band*. Holding the official band intact was felt to be important for assuring investors and others that the peso would be kept relatively “hard”. This had been felt to be a key element in preserving the credibility of government policies.²⁶

Another way is to implement discrete revaluations of the exchange rate, and leave open the possibility of their later reversal. Chile has pursued such tactics with some success. However, the effectiveness of such measures depends on an element of surprise – if repeated more than once or twice, markets will learn to anticipate revaluations and the policy would no longer work as desired.

Sterilization

Few, if any, of the countries involved were prepared to take a *laissez-faire* stance and simply allow the exchange rate to float upwards. Intervention

²⁵ Up to 10% of the investment portfolio can be held in foreign assets (limit increased gradually).

²⁶ Calvo (1994a) sets out this case in his comment on Dornbusch and Werner (1994).

was substantial, and a large part of the capital inflow was taken into the reserves. Official foreign exchange reserves in the area rose by over \$70 billion over the three years 1990–93. Such a build-up of reserves was a wise precaution against a possible reversal of foreign inflows.

The domestic consequences depend on whether intervention is sterilized or not. At one extreme, Argentina has pursued a strict policy of non-sterilization; under its currency board system, the monetary base can expand only to the extent of foreign currency inflows. Most other countries have attempted to limit the impact of inflows on domestic credit by sterilization – either by increasing reserve requirements or by open market operations.

Increasing reserve requirements on commercial banks is a standard mechanism, particularly in countries without deep and open financial markets. A number of Latin American countries have resorted to increased reserve requirements in recent years including Chile and Colombia.²⁷ The most recent example was Brazil's action in sharply raising reserve requirements on the introduction of a new currency in July 1994.²⁸

The great advantage of relying on increased reserve requirements is their cheapness to the authorities. Indeed, to the extent that compulsory deposits are remunerated at below-market rates (or not remunerated at all), their imposition acts as a tax on commercial banks; it is the fragility of the domestic banking system that is often the main impediment in practice to a tightening of reserve requirements. Where the banks have a sufficient "cushion" to absorb this tax, such a measure can be quite effective as a temporary expedient. Where banks' balance sheets are rather fragile, resort to increased *marginal* reserve requirements (i.e. applying to new loans or deposits) can have the desired incentive effects without hurting the banks' balance-sheet position on *existing* business. Yet even in favourable circumstances, the main general disadvantage of reserve requirements remains – that their effectiveness tends to decline over time because they encourage the use of alternative mechanisms which circumvent banks.

²⁷ After raising reserve requirements on bank deposits, the central bank raised marginal reserve requirements to 100% in January 1991. See Corbo and Hernandez (1993).

²⁸ Compulsory reserve requirements for the time deposits with commercial banks were increased from 20 to 30%.

In recent years greater reliance has been put on open market operations, usually involving the sale of government bonds. The greatest single difficulty with this approach is the heavy quasi-fiscal cost incurred by the central bank (or by the government). On the assets side of the central bank's balance sheets are (mainly) short-term dollar investments; on the liabilities side, domestic currency instruments. When the high nominal interest rates yielded by the latter are not offset by a depreciation against the dollar equal to (or greater than) the interest rates differential, then the central bank or government suffers a loss. The size of this loss depends on the gap between dollar interest rates and exchange-rate-adjusted interest rates (as developed in Graph 5).

A second major problem is that sterilization policies tend to keep domestic interest rates high, and thus perpetuate the pressure on the exchange rate. The precise impact of sterilization policies on interest rates depends on the nature of a given country's financial structure – the range of financial assets available and the degree of substitutability between them. In many countries, for example, bond markets are not well developed and the central bank has only short-term debt instruments at its disposal in conducting open market operations. In this case, sterilization tends to drive up *short-term* interest rates and thus risks biasing the structure of inflows towards the short end. Even where bond markets exist, complications may arise from imperfect substitutability with the assets demanded by foreigners. For example, recent inflows have reflected increased foreign demand for equities, not government bonds: if the central bank attempts to sterilize by selling bonds (and if bonds and equity are only imperfect substitutes) then the yield on bonds may rise above its initial levels.²⁹

By interesting contrast with Latin American experiences, the Asian countries – which have built up reserves on an even larger scale – have apparently had little difficulty in sterilizing inflows. There are a couple of possible explanations. One is that the quasi-fiscal cost was lower as Asian interest rates were closer to US levels. The second is that some countries in Asia were able to absorb liquidity by shifting deposits of compulsory saving schemes, public enterprises and so on, from commercial banks to the central bank.³⁰

²⁹ Frankel (1993) provides a good summary of these issues.

³⁰ See Reisen (1993), pp. 48–49, for details.

1994: a turning-point

Although the surge of foreign investment in Latin America during the 1990s engendered a widespread feeling of unease, the specific nature of the worry was often not clear. At the risk of some oversimplification, there seem to have been two types of worries, one short term and the other medium term. The short-term worry was that some shock could provoke a sharp outflow of foreign capital. This would put upward pressure on domestic interest rates and downward pressure on the exchange rate, putting macroeconomic equilibrium at risk. Because the foreign stake in a number of financial markets in the region – notably the equity markets – has grown enormously in recent years, many local markets are particularly vulnerable to shifts in foreign investor sentiment.³¹ A related aspect of this is that a sudden deterioration in real or financial market conditions would carry with it systemic risks for banking systems; the risks would be all the higher where banks were already fragile. This was a major element of the crises in the 1980s.³²

The second worry centred on the medium-term consequences of recent macroeconomic developments that have been associated with the capital inflows. Two (related) aspects of this have already been alluded to: the low domestic saving rate and the large, persistent current account deficit.

1994 proved to be a turning-point.³³ Interest rates rose sharply in the industrial world, particularly medium- and long-term rates. This reversed a long period of declining interest rates and could, of itself, be expected to weaken capital flows to the developing world. In addition, a series of events served to unsettle investor confidence in a number of countries. As the year ended, the Mexican crisis broke. The prospect of elections and other political uncertainty were among the more important disturbances.

³¹ For example, foreign investors account for one-fifth of the capitalization of Mexico's equity market.

³² The key elements of the earlier Chilean financial crisis are summarized in Le Fort (1994). Although many of the problems were domestic in origin (e.g. poor capitalization of banks, use of banks to bail out non-bank enterprises owned by majority shareholders of banks), external problems provided the spark which ignited the crisis.

³³ For several countries, however, there was little evidence of declining capital inflows in 1994, notably Brazil, Chile and Colombia.

Short-term impact

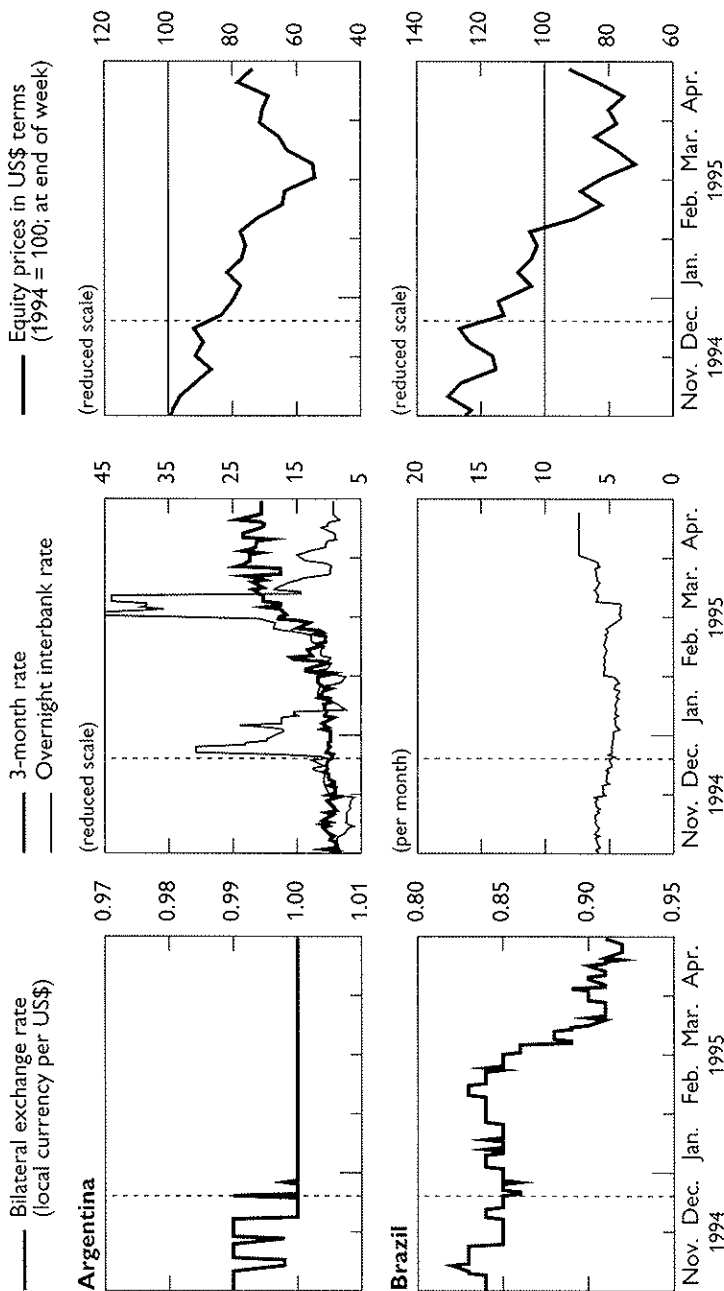
The experience of 1994 and early 1995 was that countries could cope with the short-term consequences of the sometimes sharp reversals in capital flows only when the medium-term fundamentals were "healthy". In *Venezuela*, for example, markets were disrupted by a major domestic banking crisis and doubts about the stance of macroeconomic policy. Inflation rose rapidly and the exchange rate plummeted before capital and other payments controls were imposed.

Mexico's current account deficit – rising to \$28 billion in 1994, the equivalent of 8% of GDP – ultimately proved unsustainable. Faced with heavy capital outflows in early 1994, the Mexican authorities resorted to all types of measure mentioned above in the attempt to preserve the peso's band of fluctuation against the US dollar. The foreign exchange reserves fell sharply. Special arrangements were made for foreign official financial support for the peso. And there was large-scale issuance of government debt indexed to the dollar exchange rate and held largely by non-residents. In addition, a modest depreciation of the exchange rate was accepted, with the peso falling by about 8% against the dollar from January to July 1994. As this drop took the peso to the lower limit of its (rather wide) band against the dollar, domestic interest rates were sharply increased: the rate on 28-day Treasury bills rose from around 9 to 10% at the beginning of the year to over 17% by late spring. As political uncertainties subsequently eased, the exchange rate strengthened and interest rates fell back somewhat. Yet, with inflation at less than 7%, short-term interest rates remained high in real terms. Renewed capital outflows towards the end of the year led to heavy losses of reserves and the policy of maintaining an exchange rate band against the dollar had to be abandoned.

Once allowed to float, the exchange rate fell steeply. This created major difficulties for the indebted sector of the economy. Those who had borrowed heavily in dollars – notably the government and the larger enterprises – suffered huge exchange rate losses.³⁴ Those who had borrowed in domestic currency were hit by a sharp rise in already high peso interest rates. As heavier debt burdens translate into difficulties in

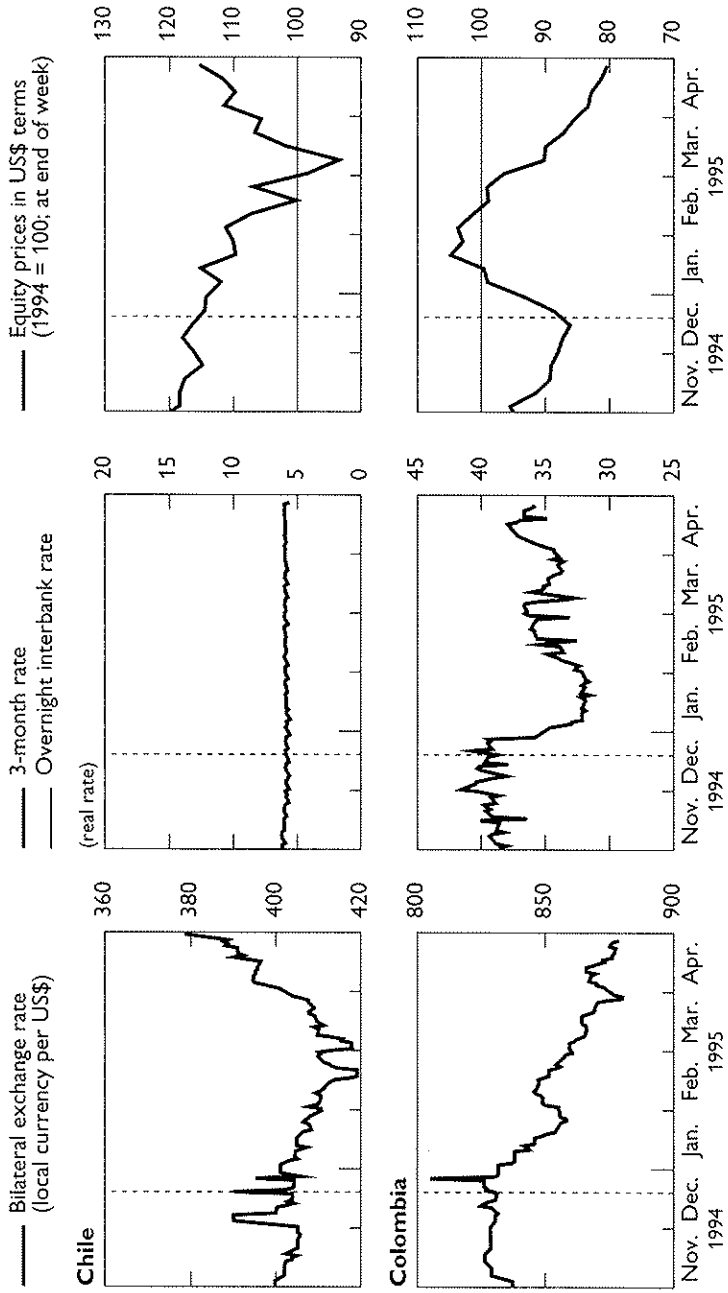
³⁴ The volume of short-term government securities indexed to the dollar exchange rate (the so-called *Tesobonos*) held outside the central bank amounted to about \$21 billion at end-1994; non-resident holdings were put at over \$16 billion.

Graph 6
Exchange rates, interest rates and equity markets



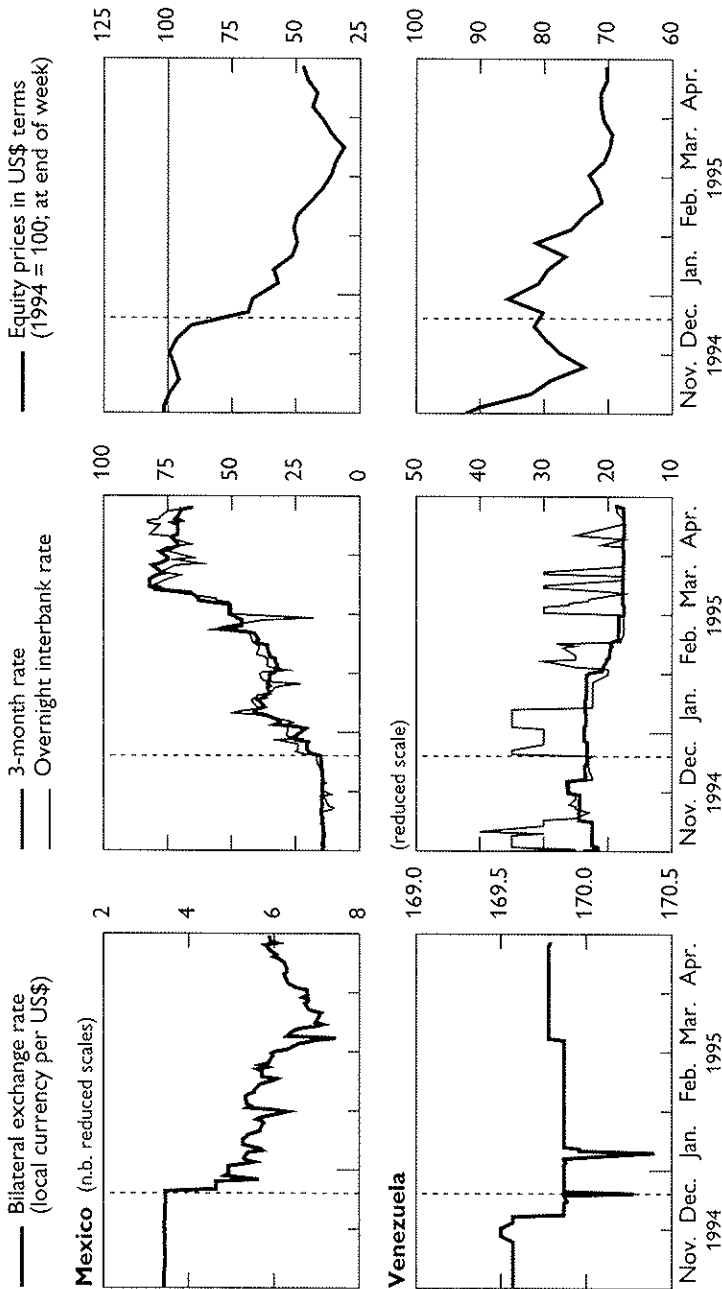
Note: The day of the peso devaluation (20th December) is shown by a dotted vertical line. For bilateral exchange rates, inverted scale.

Graph 6 (cont.)
Exchange rates, interest rates and equity markets



Note: The day of the peso devaluation (20th December) is shown by a dotted vertical line. For bilateral exchange rates, inverted scale.

Graph 6 (cont.)
Exchange rates, interest rates and equity markets



servicing current bank debt, the quality of banks' loan portfolios deteriorates. Moreover, part of banks' capital assets is held in long-term Government securities or in the Mexican stock market – which both fell sharply in the wake of the drop in the exchange rate.

Argentina, with a fixed exchange rate against the dollar underpinned by a currency board arrangement, has had to rely on adjustments to interest rates. Although short-term interest rates rose to over 10% by the middle of the year, they subsequently fell back somewhat. But the Mexican crisis took a heavy toll towards the end of the year: in the immediate aftermath of the crisis, the central bank supported its commitment to maintaining a fixed exchange rate against the dollar by a large increase in interbank interest rates. There was a substantial fall in the country's international reserves in the first quarter of 1995; bank deposits declined and parts of the banking system experienced difficulties. A further dollarisation of the economy was accommodated by changes in banks' reserve requirements and government-backed arrangements to assist troubled banks through foreign currency borrowing. The authorities also tightened fiscal policy, in the context of an IMF programme. Although the country has faced a sizable real appreciation in its exchange rate, the current account deficit has remained proportionately smaller than that of Mexico.

Medium-term prospects

The Mexican crisis that broke during the final days of 1994 illustrates just how disruptive a reversal of capital inflows could be. How durable the damage caused by such short-term adverses proves to be depends in part on the underlying strength or weakness of the domestic macroeconomy. Two aspects of this deserve particular attention – the low rate of domestic saving and the poor return to investment.

Domestic saving

As noted earlier, domestic saving has remained low in general – at least according to the available statistics on national accounts.³⁵ On the face of it, many Latin American economies are at a stage in development when high rates of saving and investment are particularly needed. Population growth is rapid. Moreover, the large technological gap with the

³⁵ Note that the measurement of aggregate saving – often derived as a residual between other magnitudes – is subject to a large margin of error.

industrial world implies that high rates of growth of GDP are entirely feasible. Yet actual rates of growth this decade have been rather low – around 3 to 4 per cent – well below those achieved in the dynamic Asian economies. In per capita terms, growth has been lower still. Achieving faster growth would require significant increases in the rate of investment.

While foreign funds could in theory finance higher investment, dependence on foreign funds has its own disadvantages. The first is that it increases vulnerability to foreign “shocks” or to changes in foreign investor sentiment. The impact of increases in US interest rates earlier this year and the financial market nervousness near elections or other quasi-political disturbances have provided ample evidence of such effects. The second is that the returns to investment will accrue to non-residents, eventually requiring surpluses on the other components of the current account.

The low and declining saving rate is something of a puzzle. It is true that there is no theoretical presumption that higher real interest rates necessarily increase saving (because the income and substitution effects work in opposite directions). But a shift in real interest rates as large as that experienced in Latin America over the last decade should also have served to reduce spending on some inflation hedges (jewellery, consumer durables, inventories etc.) that were recorded as consumption or as current business expenses in the national accounts. Investment in financial assets should have increased. Such a shift may itself appear as increased saving as defined in the national income accounts.³⁶

Although this puzzle is not entirely new – McKinnon noted it in his classic 1973 study on financial repression³⁷ – it appears to have attracted relatively little systematic study in recent years. Two types of explanation have been advanced: domestic and international.

One *domestic* hypothesis, put forward in a recent UNCTAD report,³⁸ is that consumers in Latin America have a stronger preference for conspicuous consumption (often of goods with a high import content)

³⁶ However, it is also possible that investing in physical capital assets as inflation hedges can “artificially” inflate both saving and investment in the national accounts.

³⁷ McKinnon argued that higher real interest rates in developing countries had their main effect through increased investment efficiency, rather than through increased saving. His explanation for the apparent failure of saving to rise in response to higher real interest rates relied on the real balance effect. Inflation forces households to keep adding to their nominal money balances to keep real money balances constant: as households abstain from consumption to do this, this inflation “tax” counts as private saving. See his discussion of more recent studies in McKinnon (1991).

³⁸ See UNCTAD (1994), page 75.

than consumers in, say, East Asia. A second theory, put forward by Schadler et al. (1993), is more consistent with neoclassical consumption theory and turns on wealth and expected-future-income effects: that high equity prices (a real estate boom also?) combined with greater optimism about growth prospects gave households the confidence to spend more. A third explanation focuses on credit markets. Price stability makes possible the development of a consumer credit market that was previously inhibited by very high inflation.³⁹ When inflation is chronic, consumer credit is often extended at a floating rate that varies with inflation; but this can be a very volatile particularly in relation to the (unknown and possibly irregularly indexed) income of the consumer. This uncertainty itself (even with indexation) tends to make consumer credit less viable. As consumer credit becomes more feasible under lower inflation, saving rates decline.

Other explanations rely on *international* factors. There are a couple of ways in which the decline in aggregate national saving can be attributed to the process of trade liberalization. The relaxation of restrictions on imports may have contributed to a temporary dip in household savings as pent-up demand for imported consumer durables was satisfied. It is also possible that lower import tariffs – and exchange rate appreciation – may have squeezed corporate profits, which often provide a sizeable proportion of aggregate saving. A second hypothesis is that the decline in international commodity prices during the 1980s contributed to lower national savings. The marginal propensity to save out of increased prices for commodity exports may be relatively high.⁴⁰

Whatever the underlying motivation, it seems clear that lower national savings have been facilitated by a very large expansion in domestic bank credit to the private sector – often rising in real terms at 20 to 30% a year (Table 9). Steps taken towards the liberalisation of the domestic banking system (e.g. the abolition of credit ceilings) and the reduction in lending to the public sector permitted a very large increase in the volume of bank credit. Such a rapid expansion in bank credit inevitably raises prudential as well as macroeconomic issues: new borrowers will

³⁹ Calvo (1994) considers the case of instalment credit for consumers (the most widespread form when financial markets are not well developed?): as inflation declines, “credit instalments in real terms become flatter and the consumer is, thus, able to spread out the expense (in real terms) over a longer period of time ... under low inflation, more consumers will have access to credit”.

⁴⁰ On the impact of terms-of-trade changes over the last decade see Devlin et al. (1994).

Table 9
Rate of growth of bank credit to the private sector¹

	1991	1992	1993	1994 ²
Argentina	14.7	30.2	15.0	17.6 (Nov.)
Chile	5.4	20.2	16.6	15.8 (Oct.)
Colombia	-12.7	12.5	27.7	17.8 (Sept.)
Mexico	29.1	40.4	13.9	21.3 (Dec.)
Venezuela	14.6	2.3	-23.4	-45.5 (Dec.)

¹ In real terms (i.e. deflated by the consumer price index). End-December to end-December.

² Year-on-year to latest month (shown in parentheses).

not have established credit histories; others may be operating in a new environment – greater international competition, freer domestic markets, lower inflation – that may limit the usefulness of past credit histories as a guide to future solvency.

It is perhaps significant that Chile has had the slower expansion of domestic credit: the saving ratio in Chile has also remained high. One lesson from Chilean experience may be the importance of institutional mechanisms for saving to provide for old-age pensions. Chile is one of the few industrializing countries to have a well-established comprehensive and private pension system. Established in 1981, accumulated funds have been invested in the open financial markets (i.e. not held as book reserve credits with the government as is often the case in the developing world), and have earned a substantial real return since inception.⁴¹ The total value of accumulated funds in the system had grown to some 35% of GDP by 1993, and is projected to reach 80% of GDP by the end of the century. This has doubtless contributed to the country's high aggregate saving ratio. It has also served to promote the development of a rather deep capital market.⁴² Argentina, Mexico and Peru have recently taken steps to introduce similar schemes. This could eventually make a significant contribution to raising aggregate saving in the region.

Efficiency of investment

The second medium-term aspect concerns the real rate of return.

⁴¹ Davis (1995) quotes an average real return of 13% per year over the 1990s. This paragraph draws heavily on Davis's survey of pension funds internationally.

⁴² On this, see Le Fort (1994).

Comprehensive policies of macroeconomic stabilization and the implementation of radical microeconomic reform should also have increased the potential return to private investment in the area. But this can take time to materialise, and the shift of policy in a more liberal direction is still rather recent. Among the first to reform was Chile (where the policy shift can be dated from the 1970s). Mexico followed in 1987 and Argentina in 1991.

The ICORs shown in Table 5 suggest that the productivity of capital has markedly increased only in Chile, the earliest reformer.⁴³ This is in some ways a rather comforting finding in that it suggests that economic reforms *do* raise the efficiency with which resources are used. In time the other countries should also reap the benefit of their more-recently-begun reforms. There are also other indications suggesting that investment has become more productive than it was in the past – notably the decline in the share of public investment, and the rise in private investment. It is also possible that the new environment of positive real interest rates has ensured that only genuinely productive private investment (not just inflation-hedge investment) is undertaken. Nevertheless decisive evidence that investment has become more productive has yet to emerge.

Conclusions and policy issues

1994 marked an important new phase in the latest episode of heavy capital inflows to Latin America. A number of countries had to cope with capital *outflows* during 1994 and the year culminated in a major financial crisis in Mexico. There was a steep drop in the exchange rate, leading to difficulties in financing heavy dollar-denominated debt and a sharp hike in domestic interest rates which, if sustained, would weigh heavily on the banking system.

Most would agree that Latin America's increased integration into the international financial markets has brought significant benefits – notably in strengthening competition, in attracting foreign capital, and in disciplining economic policy. Nevertheless, it has also brought with it greater risk.

Even well-established industrial countries have in recent years found themselves buffeted with extraordinary force by shifts in sentiment in the

⁴³ The Colombian ICOR is also higher than average.

international financial markets. The recent exchange rate crises in Europe exemplify this well. More generally, there is little evidence that a decade or more of much increased capital flows among industrial countries has enhanced the stability of financial markets. Indeed, prices in some major markets have become *more* volatile – possibly because greater capital mobility has contributed to herd behaviour in the markets. Some observers have noted that financial markets are somewhat fickle, with sentiment swinging from excess optimism to excess pessimism with alarming speed. In any event, disturbances in one market tend to be quickly transmitted to other markets, often irrespective of the underlying fundamentals.

These potentially disruptive elements may well be even more evident in the emerging markets. Foreign investors tend to be more important players; many recipient countries do not have the long record of macro-economic stability that would enable them to withstand external financial shocks; and general perceptions about an area as a whole (e.g. Latin America) often fill the void left by investor ignorance about the specific prospects of individual countries. The extent to which the shock-waves from the Mexican financial crisis affected markets in other Latin American countries provides ample testimony of these effects.

The vulnerability of Latin America and indeed other emerging economies to sharp mood changes in the international financial markets raise three broad policy issues. Exchange rate policy is the first; the setting of domestic policies the second; and official financial arrangements that may serve to absorb some of the impact of sudden shocks, allowing time for fundamental adjustment, is the third.

Realistic exchange rates

Consider first exchange rate policy. A common policy response in Latin America to the danger of financial instability has been to put emphasis on the maintenance of a particular exchange rate or band. Over the five-year period up to late 1994, this approach had notable successes – especially in bringing down the rate of inflation and in encouraging a return of foreign capital. And the authorities in a number of countries were able to sustain their exchange rate commitment in the face of sharp-but-temporary reversals of capital flows. Several factors explain this success. A high level of foreign exchange reserves – on occasion supported by the offer of external official financial support – was one important element. Perhaps

more important was the willingness to use interest rates to support the exchange rate even in the face of weak domestic demand. A third factor was the maintenance of comparatively small fiscal deficits.

In some cases, however, the exchange rate was held by resort to techniques which prove to be very costly should devaluation occur. Undertaking official (and officially-encouraged or -guaranteed private) borrowing in foreign-currency rather than domestic-currency terms is one such technique. The legacy of such borrowing was an important element of the financial crises that afflicted much of Latin America in the 1980s after real exchange rates had fallen sharply. A second danger is that a necessary adjustment to the real exchange rate can be put off too long. Waiting until the international financial markets themselves force adjustment runs the risk that the exchange rate will in the end fall too far and too fast with serious consequences for domestic financial stability.

Prudent domestic policies and high savings

The second issue is the adequacy of domestic economic policies. To build up a certain "prudential buffer" to help navigate through squalls in the financial markets, policies may need to be more prudent than they would have to be before capital flows were so important. One such buffer is a strong fiscal position. Sharp increases in domestic interest rates often needed to maintain stability in the face of capital outflows will worsen the fiscal balance: budgetary plans need to be set with this contingency in mind. This may necessitate running significant budget surpluses when conditions are favourable. Dooley et al.'s (1994) recent judgement that "fiscal reform in general has not built the kind of cushion into the finances of most debtor countries that could easily offset [increased] debt service payments that would result [should capital inflows reverse] ..." deserves serious attention. A second buffer is well-capitalised banks, able to withstand sharp fluctuations in real interest rates and the emergence of bad debts. This is all the more important where the value of domestic financial assets held by the banks as capital (equity, government bonds, etc.) is itself at risk when financial difficulties emerge. Banks may need to be better capitalised in the emerging markets than they need be in the major industrial countries.

A related issue is the need to monitor the expansion of bank credit. Maintaining high domestic interest rates may not be sufficient to restrain

credit expansion – particularly in the early stages of financial liberalisation when banks are learning to live in a new, less regulated environment. Indeed, the 1990s have seen a large – in some cases massive – expansion in bank credit to the private sector in Latin America. This has allowed a marked decline in private sector saving to occur. Indeed, a persistent low rate of domestic saving has left much of Latin America vulnerable to economic shocks, external or domestic. A period of sustained, and often radical economic reform combined with a quantum improvement in the macroeconomic stability of the region has yet – with one or two exceptions – to produce any significant increase in the region’s low saving rate. Although government dissaving has been curtailed, *private* saving has fallen sharply. This is in striking contrast to developments in the rapidly growing Asian countries, where saving rates are very much higher.

The inadequacy of domestic saving has both internal and external dimensions. The internal dimension is that a significantly higher rate of investment is needed if the area’s potential for growth is to be fully realized. Again the comparison with Asia suggests that much needs to be done to increase the average rate of investment and to improve its efficiency. The external dimension of low saving is that current account deficits remain large, and show little sign of declining. Moreover, given the earlier heavy dependence on raw material exports and the low foreign trade/GDP ratios inherited from the earlier protectionist policies, the development of the tradables sector is particularly important for Latin America.

The chances that the real exchange rate could fall without putting at risk the achievement of relatively low and stable inflation would be much enhanced if it took place in a context of lower domestic absorption and higher saving. Some degree of exchange rate stability remains important for the credibility of government policies because the re-orientation of policies is as yet too recent to command credibility of itself. But it would be illusory to imagine that such stability can be brought about by some internationally-blessed legerdemain without the appropriate domestic fiscal and monetary policies.

International co-operation

The third issue – that of possible official or other financial arrangements to help insulate developing economies from the volatility of private capital

flows – is in many ways the most difficult. It is clear that the quantum leap in the scale of capital flows to the emerging markets has had a double-edged effect. The one side is the increased, if temporary, “permissiveness” towards external imbalances. With heavy capital inflows, large current-account deficits can be financed for many years without recourse to official (or even foreign bank) assistance that would carry with it “conditionality”. The other side is the abruptness with which a severe external constraint can suddenly be imposed. If private capital flows reverse, the ultimate need for external assistance can be much larger than before.

Various suggestions have been put forward recently to help remedy this. One suggestion is a special IMF facility to help countries cope with sudden short-term capital outflows (notably de la Dehesa (1994), Guitián (1994)). Another proposal is that international banks stand ready to provide emergency liquidity to local banks with which they have close links (Calvo (1994b)).

Two considerations are important in weighing such suggestions. The first is that the sheer volume of funds that can be shifted in liberalized financial markets is such as to swamp the feasible scale of official assistance. Hence such assistance is only effective when backed up with measures that assure financial markets that corrective measures are being implemented. The second is that any scheme needs to incorporate a mechanism that guards against excessive “permissiveness” in the early stages when external imbalances are building up. Both considerations suggest that policy advice from the official lending institutions continues to be useful even in the new world of much increased private capital flows. Such advice can be particularly important in the early stages when official financial support is not required. Early policy correction undertaken when financial markets are calm and confident is likely to be more effective and efficient than policy decided in the throes of a major financial crisis.

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