MPRA
Munich Personal RePEc Archive

Capital Inflows to Latin America: The 1970s and 1990s

Reinhart, Carmen and Calvo, Guillermo and Leiderman, Leonardo

University of Maryland, College Park, Department of Economics

1994

Online at https://mpra.ub.uni-muenchen.de/8196/
MPRA Paper No. 8196, posted 10 Apr 2008 07:10 UTC

6 Capital Inflows to Latin America: The 1970s and 1990s

Guillermo A. Calvo
INTERNATIONAL MONETARY FUND

Leonardo Leiderman
UNIVERSITY OF TEL AVIV

Carmen M. Reinhart
INTERNATIONAL MONETARY FUND

1 INTRODUCTION

For the first time since the onset of the debt crisis in the slimmer 0f 1982, capital began to return to Latin America during 1990 and 1991: a phenomenon analyzed by Calvo, Leiderman, and Reinhart (1993). In general, Latin America's re-entry into the international capital markets, as noted by EI-Erian (1992), was perceived as a positive development.. However, policy-makers in the region have also voiced SOllle concern about the less favourable side-effects of these capital inflows. First, it was feared that the real exchange rate appreciation that oftell accompanies these inflows would adversely affect the international competitiveness of the export sector.. Second, there was concern thaI the inflows could be reversed abruptly, possibly doing considerable damage to the domestic financial system in the process. The fear of reversal was based on the experience of the debt crisis, which followed on the heels of the 'capital bonanza' of 1978-81.

This chapter compares the recent capital inflows experience with that of the late 1970s. The analysis examines the differences and similarities between the two episodes over three broad areas:

I. Domestic macroeconomic conditions in the recipient countries at the outset of both episodes.

2. The behaviour of the external factors that influence the international allocation of capital.
3. The response of key macroeconomic variables, such as the real exchange rate, reserves, and stock prices to the inflow of capital.

The chapter assesses the vulnerability of these economies to an unexpected swift reversal in capital inflows, and whether there are signs that the vulnerability has changed appreciably over time.

The paper is organized as follows. Section 2 reviews some basic empirical characteristics of capital inflows during the episodes of the late 1970s, together with the more recent experience of 1990-1. The section also examines quantitatively the extent to which these capital inflow episodes were a regional phenomenon as opposed to a country-specific event. Section 3 reviews various indicators of initial conditions in both episodes. Section 4 examines the role played by external factors, such as interest rates and capital account developments in the USA, which affect the pattern of capital flows in these economies. This section draws heavily on our previous work, Calvo, Leiderman, and Reinhart (1993). Final remarks and some policy implications are discussed briefly in Section 5.

2 EMPIRICAL REGULARITIES

First we shall discuss the anatomy of capital inflows, then turn to the responses of various macroeconomic variables to the inflows, and finally compare the degree of regional co-movements in the previous and current episodes.

2.1 Broad Evidence

While the recent capital inflows to the region were sizeable, amounting to US$24 billion in 1990 and about US$40 billion in 1991, to date these magnitudes remain well below those observed during the previous episode of 1978-81.[1] As Table 6.1 highlights, the orders of magnitude, in US$, are quite similar to those observed during 1978-9, the first two years of the earlier episode.[2] However, when measured relative to the gross domestic product (GDP) it is clear that the recent inflows do not match the experience of the late 1970s. The same applies to the transfer of resources to Latin America, defined as net capital inflow minus net payment of profits and interest, which in each year

Table 6.1 Latin America: balance of payments, 1973-91

Year	Balance on goods, services and private transfers[1] US$ billion (1)	% of GDP (2)	Balance on capital account US$ billion (3)	% of GDP (4)	Balance on capital account less errors and omissions[1] US$ billion (5)	% of GDP (6)	Overall balance[2] US$ billion (7)	% of GDP (8)
1973	-4.7	-2.4	–	–	8.5	4.4	3.8	2.0
1974	-13.5	-5.3	–	–	13.3	5.2	-0.2	-0.1
1975	-16.3	-6.1	–	–	14.7	5.5	-1.6	-0.6
1976	-11.8	-3.8	–	–	16.9	5.4	5.1	1.6
1977	-11.6	-2.7	19.8	4.6	16.4	3.8	4.8	1.1
1978	-19.4	-4.0	30.5	6.2	27.4	5.6	8.0	1.6
1979	-21.7	-3.8	35.0	6.2	32.9	5.8	11.2	2.0
1980	-30.3	-4.3	47.0	6.7	34.0	4.9	3.7	0.5
1981	-43.5	-5.5	59.4	7.4	41.9	5.3	-1.6	-0.2
1982	-42.2	-5.5	45.1	5.9	23.0	3.0	-19.2	-2.5
1983	-11.6	-1.7	22.4	3.2	13.6	1.9	2.0	0.3
1984	-3.2	-0.5	15.5	2.3	12.5	1.8	9.3	1.4
1985	-4.4	-0.6	6.7	0.9	5.5	0.8	1.1	0.2
1986	-18.9	-2.6	14.2	1.9	12.3	1.7	-6.6	-1.0
1987	-12.0	-1.6	14.5	1.9	15.3	2.0	3.3	0.4
1988	-12.4	-1.5	8.2	1.0	4.7	0.6	-7.7	-0.9
1989	-10.0	-1.1	15.7	1.7	12.1	1.3	2.1	0.2
1990	-8.8	-0.8	24.1	2.3	23.9	2.3	15.1	1.4
1991	-22.3	-2.1	38.1	3.8	39.8	3.9	17.5	1.7

Notes:
[1] 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.
[2] Column (7) equals the sum of columns (1) and (5). A positive sign in column (7) indicates accumulation of international reserves by the monetary authorities.

***Source*: *World Economic Outlook*, IMF, various issues.**

of the earlier episode was about double the value of the inflows in 1991 – US$12 billion a year in the late 1970s compared to US$6 billion in 1991 (see Griffith-Jones *et al.*, 1992).

Figure 6.1 provides country-specific evidence of some of these developments. It shows that net capital inflows were larger in the recent episode only in Bolivia and Mexico, where the capital account balance as a share of GDP in 1991 reached 3.6 and 7.6 per cent, respectively. For Argentina, the net inflows amounted to 1.7 per cent of GDP in 1991, or about half the 3.3 per cent peak of 1979. In the case of Chile, net capital inflows in 1990 were about 6 per cent of GDP, well below the level of 15 per cent in 1981, the year of the largest inflows in the earlier episode. Similarly, capital inflows to Brazil, Ecuador, Uruguay and Venezuela during the current episode were small in comparison to those of the previous episode.

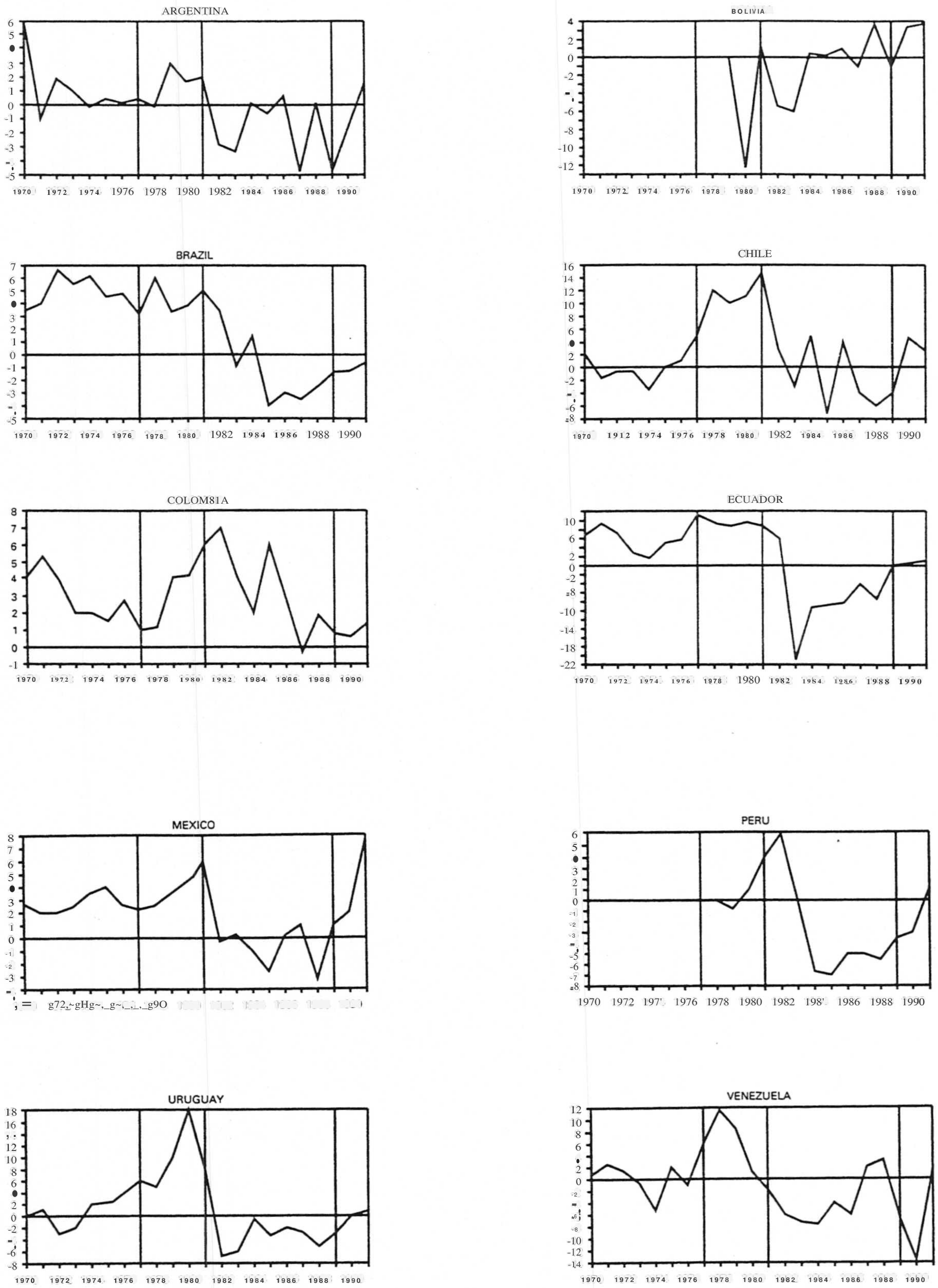


Figure 6.1 Selected Latin American countries: balance on capital account, 1970–91, percentage of nominal GDP, in US$

Notes: Positive entries denote capital inflows; capital account balance includes errors and omissions; vertical lines denote the beginning and end (when applicable) of capital inflows episodes.

Source: IMF, *World Economic Outlook*, various issues.

Table 6.2 Latin America: items in the capital account 1973-91, US$ billion

Year	Net external borrowing	Non-debt creating flows	Net asset transactions ı	Errors and omissions'	Total
\973	6.0	2.5	–	–	8.5
1974	\1.1	2.2	–	–	\3.3
1975	\1.4	3.3	–	–	14.7
1976	14.2	2.7	–	–	16.9
1977	19.4	2.8	-2.5	-3.4	16.4
1978	28.0	4.9	-2.5	-3.1	27.4
1979	30.2	7.2	-2.4	-2.1	32.9
1980	43.1	6.8	-3.0	-13.0	34.0
1981	61.0	8.2	-8.9	-17.5	42.8
1982	45.7	7.2	-7.7	-22.1	23.0
1983	\8.7	4.6	-0.9	-8.8	13.6
1984	14.1	4.5	-3.1	-3.0	12.5
1985	6.2	6.1	-5.4	-1.4	5.5
1986	11.3	4.3	-1.3	-1.9	12.3
1987	10.0	6.0	-1.2	0.5	15.3
1988	3.8	8.8	-4.3	-3.5	4.7
1989	10.9	6.9	-2.\	-3.6	\2.1
1990	28.0	8.6	-12.5	-0.2	23.9
1991	17.3	14.1	6.7	1.7	39.8

Notes:
ı These two categories are included in net external borrowing and non-debt creating flows for 1973-6.
Totals may not tally due to rounding.

SOl/rce: Data for western hemisphere, IMF, *World Economic Ol/tlook,* various issues.

An important difference between the two episodes of capital inflows is evident from columns (7) and (8) of Table 6.1. For the region as a whole, capital inflows have financed less of the current account deficits and more of the reserves accumulation in the present episode than in the earlier episode, as analyzed by Calvo, Leiderman, and Reinhart (1993).

Table 6.2 presents a breakdown of the types of capital flow to Latin America. While net external borrowing is the key item in the capital account of the region both in the late 1970s and early 1990s, as Collins *et al.* (1992) suggest, the composition of capital inflows is markedly different in the two episodes. First, they note that private-sector borrowing through bank loans and bond issues was significantly lower in the recent episode. Second, foreign direct investment was much higher in 1991, - reaching US$14 billion - than in the late 1970s, and included cash inflows of US$3.5 billion from the privatization of state-owned enterprises, particularly in Argentina, Brazil, Mexico, and Venezuela. These inflows as a result of privatization are a relatively new phenomenon; they were not present in the 1970s. Third, the 'errors and omissions' item was much smaller compared to the early 1980s. This may well indicate that current capital flight was considerably smaller than in the earlier episode as discussed by Mathieson and Rojas-Suarez (1992).[3] Put differently, net external borrowing represents a larger percentage of total capital inflows in the earlier episode than in the present one, and the opposite is true for the relative size of non-debt-creating flows.

How did the region respond to the capital inflows? Consider first the behaviour of official reserves, as depicted in Figure 6.2. It shows that in real terms the accumulation of official reserves in the current episode matched or exceeded those of the previous episode for most countries. Reserve accumulation was substantial in Argentina, Bolivia, Ecuador, Mexico, and Venezuela, about the same in Brazil, Colombia, Peru and Uruguay, and in Chile smaller in the current episode than in the earlier one.

Capital inflows are typically accompanied by real exchange rate appreciation. According to Figure 6.3, the recent real exchange rate appreciation was similar to that observed in 1978-79, although the recent level of the exchange rate remains well below the levels of the late 1970s and the early 1980s.[4] The appreciation of the real exchange rate is now somewhat greater in Argentina, Ecuador and Venezuela, but about the same in the remaining countries. When comparing the timing of reserves accumulation and real exchange rate appreciation, most of the evidence in *both* episodes suggests that the accumulation of reserves *precedes* real exchange rate appreciation.

Capital inflows are also often associated with stock market booms. Figure 6.4 indicates that the booms in the stock markets of Argentina, Brazil, Chile, and Mexico are roughly comparable.[S] While a part of these booms can be accounted for by the same fundamental factors that give rise to capital inflows, •speculative bubbles' may also have played an important role.

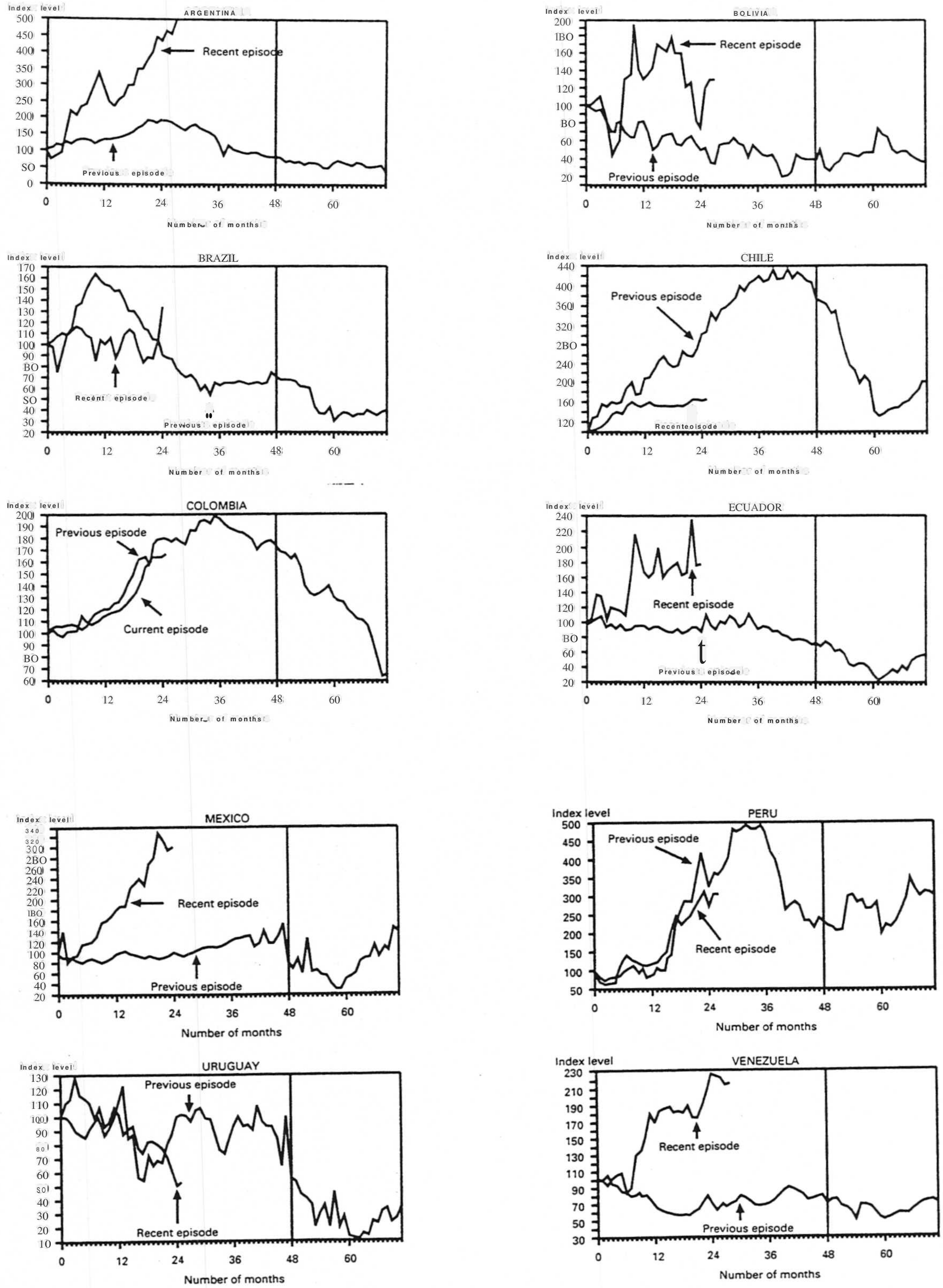


Figure 6.2 Total official reserves, US$ billion at 1985 constant prices

Notes: Total reserves minus gold (in US dollars) deflated by US Consumer Price Index.
Recent episode: January 1990 = 100.
Previous episode: January 1978 = 100.
Vertical line denotes January 1982.

Source: *International Financial Statistics.*

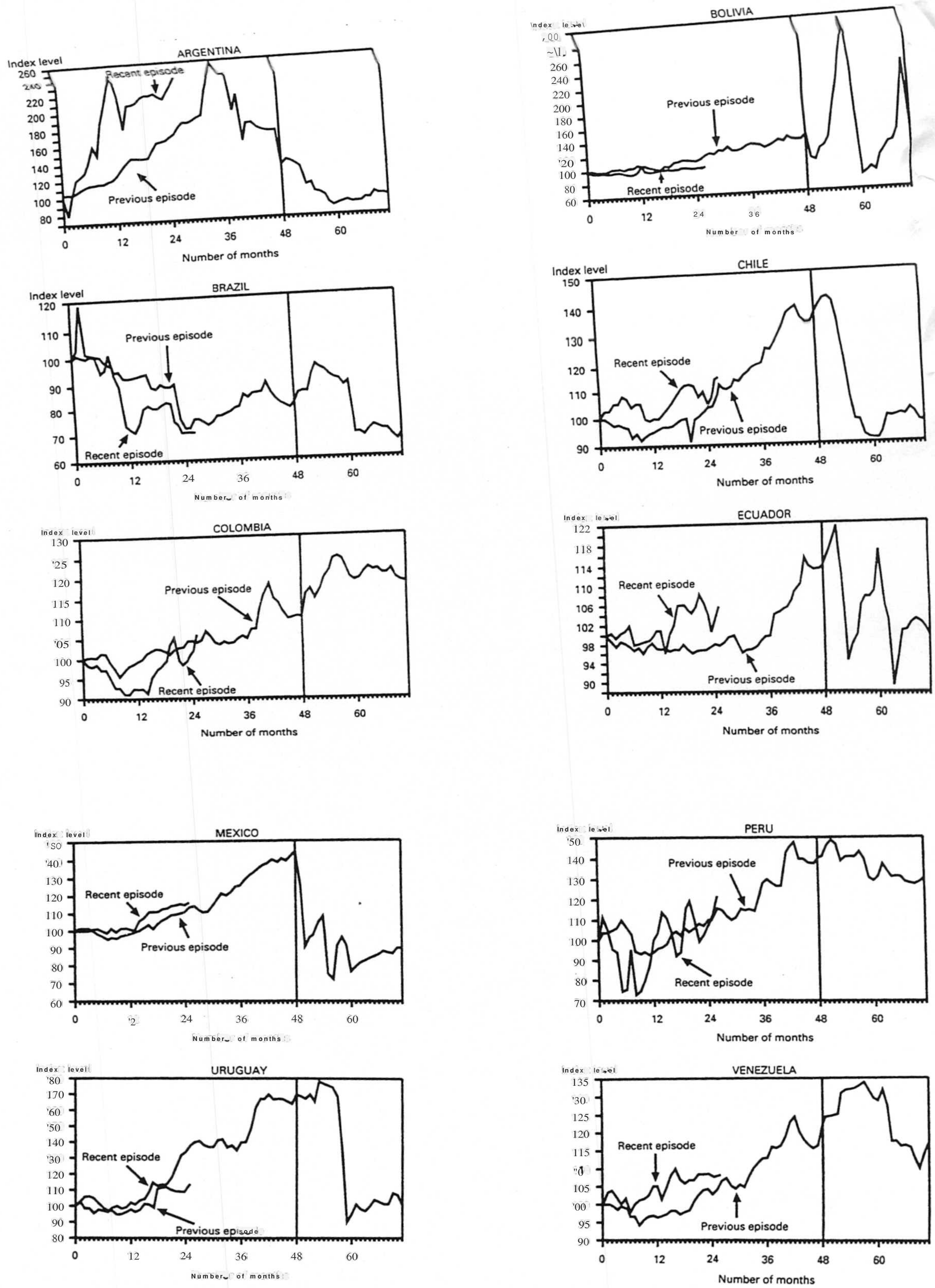
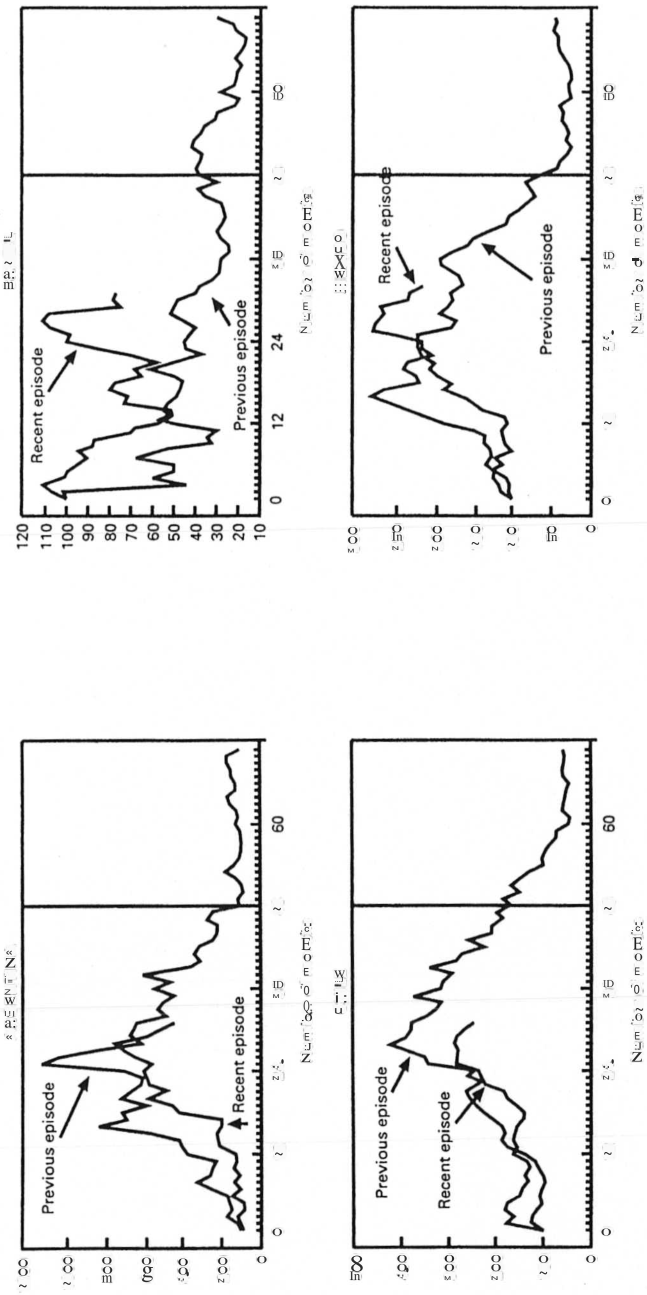


Figure 6.3 Real effective exchange rates

Notes: An increase in the index denotes a real exchange rate appreciation.
Recent episode: January 1990 = 100.
Previous episode: January 1978 = 100.
Vertical line denotes January 1982.

Source: IMF Information Notice System.



2.2 Regional Co-movements: Then and Now

Despite wide differences in policies and conditions, there is an important degree of *co-movement* across countries in the bahaviour of capital inflows, official reserves, the real exchange rate, stock market returns, and interest rate differentials illustrated in Figures 6.1 to 6.4. Indeed, in an earlier paper, Calvo, Leiderman, and Reinhart (1993) we provided statistical evidence in support of the notion that the recent episode of capital inflows embodied a key common component that was of a *regional,* rather than a country-specific nature. The presence of a strong common element across countries in the region was interpreted as being the result of a common external shock affecting Latin America.[6] In this sub-section we examine whether the previous (1978 - 81) episode, shared this regional dimension.

In order to assess quantitatively the extent of co-movement among the various economic time series considered, we used 'principal components' analysis. We began by taking an individual time series - say the official reserves for each of the ten countries and then constructed a smaller set of series of the principal components, to explain as much of the variance of the original series as is possible.[7]

In principle, it would have been desirable to use direct data on capital inflows. However, for most of the countries in our sample these data were only available on an annual basis. Consequently, we analyzed the extent of co-movement in the official reserves and the real exchange rates for which monthly data are available, as proxies for capital inflows. In addition, using monthly data, the extent of co-movement in inflation rates was examined.

The periods considered were: the previous capital inflows episode, running from January 1978 to December 1981, and, for comparison purposes, the following four years, that is, January 1982 to December 1985. Similarly, we considered the recent episode, running from January 1990 to March 1992, and for comparison purposes the period immediately preceding it, from January 1988 to December 1989. The analysis that follows uses the logs of reserves and the real exchange rate. The inflation rate is the 12-month difference in the log of the consumer price index.

The key results that emerged from examining the extent of co-movement across countries in reserves, the real exchange rate and inflation are presented in Table 6.3 and summarized in words:

Table 6.3 Establishing the co-movement in macroeconomic series, previous and recent episodes

	Previo/ls episode Jail. 1978- Dec. /98/	*Debt crisis years* Jail. /982- Dec. /985	*2nd episode* Jail. /988- Dec. /989	*Recellt episode* .Jail. /990- NOI'. 199/
REAL EXCHANGE RATE				
First principal component	0.81	0.51	0.41	0.58
Second principal component	0.96	0.71	0.78	0.79
Chi-square (45)	1274.55	470.50	302.01	286.31
Probability value	(0.0000)	(0.0000)	(0.0000)	(0.0000)
RESERVES				
First principal component	0.58	0.50	0.48	0.67
Second principal component	0.77	0.74	0.69	0.80
Chi-square (45)	645.28	431.26	204.97	297.23
Probability value	(0.0000)	(0.0000)	(0.0000)	(0.0000)
DOMESTIC INFLATION RATE (12-month percentage change)				
First principal component	0.57	0.53	0.60	0.45
Second principal component	0.81	0.78	0.88	0.64
Chi-square (45)	744.82	783.49	475.94	306.40
Probability value	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Note: The cumulative R' gives the percentage of the variance of the original series explained by the firsl principal component, the firsl two principal components, and so on.

1. The extent of co-movement in reserves and the real exchange rate across countries is markedly greater in the previous capital inflows episode from January 1978 to December 1981 than in the debt crisis years, that is, January 1982 to December 1985. Similarly, the degree of co-movement in reserves and the real exchange rate across countries is greater in the recent capital inflows episode of January 1990 to March 1992 than in the previous two years. Increased co-movements under capital inflows could possibly be explained by external shocks that are common to the region.[S]
2. The degree of co-movement in reserves across countries is greater in the recent episode. Two possible explanations are: (a) greater intervention in the recent episode, aimed at either avoiding exchange rate appreciation or at increasing reserves as a cushion against possible adverse future shocks; or (b) an attempt to bring the reserve-to-imports ratios back to their 'long-run' values - which seems plausible given that in the recent episode eight of the ten countries were below their' long-run' reserve-to-imports ratios, as discussed in greater detail below.
3. The co-variation in real exchange rates was much greater in the January 1978 to December 1981 period than in any period since. Possible explanations may be: (a) since there was less intervention at that time, the exchange rate was allowed to react to the inflow more uniformly; and (b) the exchange-rate-based stabilizations (or *tablitas*) in the Southern Cone during the earlier period were better synchronized than the stabilization programmes of the last two years considered.
4. The extent of co-movement in the domestic inflation rate, a variable less obviously linked to external factors, diminished in the recent episode of capital inflows relative to that of the previous two years, 1988 and 1989; whereas in the previous episode the extent of co-movement was about the same as that which characterized the following four years.

3 INITIAL CONDITIONS

Initial conditions may play a key role in determining the economic performance and response to capital inflows. They may also determine the vulnerability of a given economy or region to a reversal of those flows. Accordingly, we focus on comparing some of the similarities and differences in the initial conditions in the Latin American countries under study. Initial conditions are represented by various indicators for the region for 1977 - 8 and 1988 - 9, the two periods immediately preceding both episodes of capital inflows; these are discussed in the next section.

The main results from this comparison are summarized below:

1. External debt indicators suggest that most of these countries were more vulnerable to an adverse external shock, for example, in the form of an increase in world interest rates, in the 1990s after the debt crisis, than in the 1970s. While the sharp declines in US and other international interest rates have gone a long way towards reducing the debt-servicing burdens of these ten heavily-indebted countries, external debt ratios were sharply higher, as shown in Table 6.4, at the outset of the current capital inflow episode. Further, as shown in Table 6.4, the proportion of external debt carrying a variable interest rate is much higher now in most of the sample countries.
2. In eight of the ten countries considered, the ratio of official international reserves to imports was higher at the outset of the previous episode, and closer to its long-run average, as illustrated in

Table 6.4 Initial conditions: external debt and reserves indicators

Country	*Floating-rate debt as a percentage of total long-term debt*		*Ratio of total external debt to exports of goods and services*		*Official reserves as a ratio of nominal imports in US$*	
	1977	1989	1980	1989	1977	1989
Argentina	39.4	83.2	242.4	511.3	0.9	0.4
Bolivia	30.9	22.3	258.2	433.8	0.4	0.3
Brazil	54.6	71.0	304.3	295.0	0.6	0.5
Chile	17.5	69.6	192.5	174.6	0.2	0.5
Colombia	9.1	46.0	117.1	208.3	0.9	0.8
Ecuador	45.5	63.7	203.1	386.8	0.4	0.3
Mexico	53.1	79.4	259.2	250.0	0.3	0.3
Peru	30.3	32.3	207.7	415.7	0.2	0.4
Uruguay	21.4	73.1	104.1	161.3	0.7	0.5
Venezuela	60.2	87.3	131.8	205.1	0.8	0.7

Sources: IMF, *International Financial Statistics* and *World Economic Outlook;* and World Bank, *World Debt Tables,* various issues.

Table 6.4. The fact that reserves at the outset of the present episode were, more often than not, below their long-run averages may explain why reserve accumulation has been greater in the current episode.

3. Vulnerability to terms-of-trade shocks has been a common characteristic of most Latin-American economies. This vulnerability can be partially assessed by examining the structure of merchandise exports, which provides an idea as to the extent of diversification in the export base of these countries. Table 6.5 presents a breakdown of exports into broad groupings for the years 1977 and 1989. The picture that emerges is mixed. Some countries - notably Brazil, Chile, Colombia and Mexico - have made considerable progress in diversifying their export base since the late 1970s. Others have not appreciably changed the structure of exports and remain vulnerable to the vagaries of international commodity prices.
4. The public sector was larger and showed weaker budgetary discipline in the first episode. As Table 6.5 indicates, government consumption as a share of GDP is markedly lower in the recent episode for the majority of countries, with the exception of Brazil and Colombia. The stronger commitment to reduced government intervention in the recent episode is also evident in the volume of privatization in a number of the countries. For example, during 1991, Argentina,

Table 6.5 Selected indicators: merchandise exports and public consumption, per cent

	1977				1989			
	Fuels, minerals and metals[a]	*Other primary commodities*[a]	*Manufactures*	*Public consumption*[b]	*Fuels, minerals, and metals*[a]	*Other primary commodities*[a]	*Manufactures*	*Public consumption*[b]
Argentina	1	75	24	9	4	64	32	8
Bolivia	79	17	4	13	80	15	5	11
Brazil	10	64	26	9	15	33	52	14
Chile	83	10	7	15	57	33	10	10
Colombia	4	77	19	8	26	49	25	11
Ecuador	50	48	2	15	49	48	3	9
Mexico	32	39	29	11	41	14	45	8
Peru	47	45	8	15	55	26	19	7
Uruguay	1	60	39	12	0	61	39	14
Venezuela	97	1	2	15	91	1	8	10

Notes:
[a] Percentage share of merchandise exports.
[b] Nominal public consumption as a percentage of nominal GDP.

Sources: Export merchandise from World Bank, *World Development Report* (various issues). Public consumption from national income accounts in IMF, *International Financial Statistics* and *World Economic Outlook* (various issues).

Table 6.6 Selected indicators

	Domestic debt excluding central bank as percentage of GDP		
	1976-7	1981-2	1987-8
Argentina	4.6	6.0	17.1
Bolivia	0.0	0.0	0.0
Brazil	10.0	12.8	18.6
Chile	2.1	1.9	11.7
Colombia	3.7	3.5	6.4
Ecuador	0.1	–	–
Mexic	3.2	2.7	11.3
Peru	1.0	0.3	0.1
Uruguay	5.5	3.5	21.7
Venezuela	1.7	5.5	8.6

Source: Guidotti and Kumar (1991).

Brazil, Mexico and Venezuela raised about US$15 billion through the privatization of state-owned enterprises; as indicated earlier, US$3.5 billion of this was cashed as inflow from abroad. Financial markets have also been liberalized in a number of countries. The reduction in the size of government and the move towards privatization and deregulation suggest that the resurgence of capital inflows during 1990-1 may be taking place against a backdrop of stronger fiscal policy fundamentals.

5. Despite these positive developments, the debt burden in the public sector is larger now than it was in the earlier episode as shown in Table 6.6. Thus, from 1976-7 to 1987-8 the ratio of domestic public debt to GDP increased in Argentina from 4.6 per cent to 17.1 per cent; in Brazil from 10 per cent to 18.6 per cent; in Chile from 2.1 per cent to 11.7 per cent, and in Mexico from 3.2 per cent to 11.3 per cent. This is one of the legacies of a decade of fiscal deficits. Combining these developments with those in item 1. above indicates that between the 1970s and the 1990s there was a marked increase in both the external and the internal public debt of Latin America.
6. Because part of the capital inflows is monetized through non-sterilized central bank intervention, for example in Argentina, it is useful to assess the inflationary potential of these flows. If monetization were met by an increase in the quantity of real money balances demanded, then there would be no inflationary pressures arising from the inflows, so we examined the velocity of circulation of MI and found evidence of increased levels of velocity in most countries. Some of the increased monetization could have contributed to reducing velocity towards earlier levels; such a move would be consistent with the reduction in the rate of inflation observed in most countries and with the re-activation of the real sector.
7. Turning to the real sector, initial conditions during the earlier episode were more favourable than in the current one. Between 1976 and 1977, real GDP in Latin America grew at a rate of 5.4 per cent a year. In contrast, in 1988-9 real GDP growth in the region was less than 1 per cent a year. At the start of the previous episode the ratio of investment to GDP was relatively high - about 21 per cent for the region as a whole. Relatively high levels were observed for both the public and private sector investment components. These relatively high ratios were maintained, and even slightly increased, during the earlier inflows of 1978 - 81. However, all these investment ratios were markedly reduced during the debt crisis years, thereby leaving weaker initial conditions for the present episode. Are the present capital inflows being used to finance increases in investment? Our examination of the data suggests that in most cases, no major changes in investment ratios were observed during 1991. The exceptions appear to be Chile and Mexico, where some increases were observed. For the region as a whole, however, it is safe to conclude that so far the present capital inflows have not financed major increases in private or public sector investments. Thus, questions can arise as to how the Latin-American countries will generate the resources required to repay the new external debts associated with the recent capital inflows.
8. Latin-American stock markets are typically shallow, volatile, and particularly vulnerable to developments in international capital markets. While market capitalization has universally increased in the recent past for all the larger Latin-American markets,9 it is primarily driven by soaring stock prices. To gauge if these markets have deepened during the past decade, it may be necessary to look at other indicators, such as measures of volatility and the number of companies listed in the stock exchanges. In fact, the number of companies listed in the largest stock exchanges in these countries, appears to be falling. In 1980, 278 companies were listed on the Buenos Aires stock exchange and 265 companies on Chile's Santiago exchange. However, by 1989 the number of companies had fallen to 178 and 213, for Argentina and Chile respectively. The trend is similar for Venezuela and Colombia, while the number of companies in the Mexican stock exchange is about the same now

as it was in the early 1980s. Brazil provides the exception, as the number of listings there rose from 426 in 1980 to 592 in 1989.[10] Overall, stock markets appear to be at least as vulnerable now as they were at the start of the earlier capital inflows episode.

Summing up, several important indicators point to weaker initial conditions in the current capital inflows episode than in the earlier one. In particular, there is now a higher burden of domestic and external public debt; a larger portion of the external debt is now subject to variable rates; reserves are now lower relative to imports, and growth and investment as a percentage of GDP are now lower than in the earlier episode. Moreover, in most of the sample countries current capital inflows have not been used so far to finance any marked increase in investment. However, other indicators work in the opposite direction. Namely, there are leaner public sectors after the debt crisis, that is, structural deficits are lower; there is a strong commitment to lower budget deficits and inflation and to the reform and privatization of the various economies - all of which suggests future capability to deal with debt repayments.[11] These positive developments have probably dominated the overall outlook of the region, as reflected in the recent restoration of voluntary capital market financing for Latin-American countries.

4 EXTERNAL FACTORS

Our earlier work maintained that some of the renewal of capital inflows to Latin America in the 1990s was due to external factors, which could be considered an external shock common to the region. A comparison with the 1970s suggests that similar considerations applied then as well, as shown in Table 6.7. The main external factors at work in both episodes are as follows.

1. There was a decline in nominal and real interest rates in the USA. In 1975-7 nominal US interest rates were 30 per cent lower than in 1972-4, and in 1991 they were 50 per cent below 1989 levels. In both episodes, *ex post* real interest rates were relatively low; and even negative between 1974 and 1980, as shown in Table 6.8. By reducing the external debt service on floating rate debts, the recent decline in US interest rates has improved the solvency of Latin-American debtors; as reflected in a rise in the secondary market prices for their loans.

Table 6.7 External factors: selected US indicators

	Annual average 1972–81	1982–91	1978–81	1982–9	*1990–1*
Balance of USA with Latin America and other western hemisphere countries on:					
Current account (US$ m)	5642	-7955	11676	-8060	-7535
Private capital account (US$ m)	-7864	15724	-8434	15620	16140
Private capital account incl. statistical discrepancy* (US$ m)	-6201	7637	-10 766	7809	6947
3-month treasury bill rate (%)	7.8	7.6	10.7	7.1	6.5
Inflation (% change)	8.5	4.1	10.7	4.0	4.8
Ex-post real interest rate (%)	-0.7	3.5	-0.0	3.9	1.7
Real GDP growth (%)	2.8	2.4	2.4	2.9	0.1
Real capital gains/losses					
real estate (%)	-0.1	3.6	-0.8	5.1	-2.7
S&P500 index (%)	-4.6	7.5	-3.4	9.1	1.5

Notes:
* The statistical discrepancy [illegible] include capital flight.
1. Real equity and real estate prices [illegible] deflating the nominal indices by the [illegible] was used as the indicator for the real estate market.
[illegible] A [illegible] on the capital account denotes a capital outflow from the USA to Latin America.

Table 6.8 **Real export earnings – percentage change**

	Average 1978–81	1982–9	*1990–1*
Argentina	7.7	-1.0	10.6
Bolivia	12.9	2.8	4.0
Brazil	0.7	7.7	-9.0
Chile	8.7	9.5	-0.4
Colombia	-2.4	9.3	9.2
Ecuador	6.2	1.8	0.6
Mexico	32.5	0.0	8.3
Peru	11.4	-2.4	-7.9
Uruguay	5.9	5.9	1.5
Venezuela	12.8	-5.2	6.8

Source: IMF, *World Economic Outlook*.

2. The value and purchasing power of Latin-American exports markedly increased before or at the start of the capital inflow episodes. As detailed in Table 6.8, real export earnings expanded at a healthy rate in all ten countries during 1972 - 81. Thus, despite heavy borrowing to finance current account deficits, ratios of debt to exports remained stable. Between 1975 - 6 and 1977 - 8, the value of Latin-American exports rose by 40 per cent and the purchasing power of exports increased by 13 per cent. Similarly, between 1986-7 and 1988-9 the value of Latin-American exports increased by 29 per cent and the purchasing power of exports rose by 14 per cent. These developments cannot be accounted for by fluctuations in the terms of trade alone. In fact, the terms of trade were rising at the start of the earlier episode, but were decreasing at the start of the recent one; their level during the latter was about 20 per cent lower than at the start of the previous episode. Interestingly, it is precisely at times of improved export performance that Latin-American countries borrow more from abroad.
3. In both episodes of capital inflows, external conditions resulted in an increase in the availability of loanable funds in international capital markets. In this respect, the recycling of petro-dollars played an important role in the 1970s. However, as industrial countries drifted into recession, the funds were loaned elsewhere, and Latin America was one of the main recipients. In this connection, Sachs (1989) indicates that during the two years 1980 and 1981, total bank exposure to the major debtor countries nearly doubled compared with 1979. In the two years 1980 and 1981, after the rise in real interest rates, the commercial banks made about as many net loans to the major debtors as during the entire period 1973-9. Similar considerations apply to the 1990s, in that in addition to low interest rates, there were weak performances in equity and real estate markets in the USA, as was seen in Table 6.7. Real stock prices were somewhat stronger in the current episode than during most of the 1980s, while real estate was weaker. In both cases it is clear that the investment climate in the USA was relatively unattractive, and investors had incentives to seek opportunities elsewhere, for example, in Latin America. This reallocation of international capital flows is evident from Table 6.7, which shows a marked rise in capital outflows from the USA to Latin America during both episodes.

When these foreign factors are quantified in the form of principal components - as in Calvo, Leiderman, and Reinhart (1993) - it is

found that they account for a sizeable fraction - about 50 per cent - of the forecast error variance of official reserves and real exchange rates of the ten countries in our sample. Thus, while the economic and political reforms in a number of these countries have been instrumental in the re-entry of Latin America to the international credit ma~kets - and indeed there is a significant statistical residual to be accounted for - the evidence suggests that economic conditions in the USA may also have played an important role in shaping the patterns of capital inflows into Latin America in both these episodes.[12]

5 CONCLUDING REMARKS

The restoration of voluntary access to international credit markets is, without doubt, a positive development for Latin America. However, given that the previous episode of capital inflows ended in the debt crisis of the 1980s, there is well-founded concern that the present trends could be reversed. The reversible nature of the inflows would be particularly marked if a sizeable share of the capital inflows were 'hot money'. It is therefore necessary to assess the extent to which these economies are vulnerable to a sudden withdrawal of international capital.

In some areas Latin-American countries are better placed now than in the late 1970s. For example, governments have reduced their spending and structural deficits; policies are oriented towards privatization and deregulation; and inflation is being brought under control in a number of countries in the region. In addition, during the decade of the 1980s most of these countries learned to cope with adverse terms-of-trade shocks and successfully maintained growth in real export earnings through the expansion of the volume of exports. There is evidence too that some of these countries were successful in further diversifying their export base. This scenario contrasts with the late 1970s, when the buoyant export performance was largely due to favourable terms of trade. As the experience of the 1980s shows, the external shock was fully reversed in an abrupt manner. It appears that much of the aggressive lending by commercial banks during 1979-81 was based on the expectation that the favourable terms of trade environment would persist.

While these economies have become more resilient in a number of important areas over the past decade, there are other areas where their vulnerability has increased. As the key debt ratios show, external and

opment (September).
Kuczynski, P. P. (1992) 'International Capital Flows into Latin America: What is the Promise?' (Presented at the World Bank Annual Conference on Development Economics, Washington, DC (April).
Mathieson, D. J., and Rojas-Suarez, L. (1992) 'Liberalization of the Capital Account: Experiences and Issues', IMF Working Paper WP/92/46, (June).
Sachs, J. (1989) 'Conditionality, Debt Relief, and the Developing Country Debt Crisis', in Sachs, J. (ed.), *Developing Country Debt and the World Economy*, (University of Chicago Press for the NBER, pp. 275-84.
Salomon Brothers (1992) *Private Capital Flows to Latin America*, Sovereign Assessment Group (February).
Swoboda, A. K. (1983) 'Exchange Rate Regimes and European-U.S. Policy Interdependence', *IMF Staff Papers*, vol. 30, pp. 75-102.

7 International Constraints and Economic Policy-Making in African Countries

M. I. Mah'moud
AFRICAN CENTRE FOR MONETARY STUDIES (ACMS)

1 INTRODUCTION

While governments everywhere are faced with formulating economic pOlicy in order to achieve national objectives, the world economic system has evolved in ways that have made countries interdependent. International linkages through the balance of payments permit spillovers, internationally, of the effects of policy actions and non-policy disturbances, but they also impose constraints on the types and extent of use of various instruments that policy-makers must take into consideration. ParticUlarly in Africa, the implications of international constraints for the conduct of economic policy is a topical issue. This topicality is due to the fact that although economic openness generally offers an opportunity for gains from international trade and capital flows, it has remained a major source of shocks to African economies. Moreover, while the benefits and tensions associated with economic interdependence are scarcely new phenomena nor limited to Africa, the generally poor economic performance of African economies in the 1970s and 1980s has raised issues regarding the effectiveness of the conduct of economic policy in African countries in the presence of external shocks and the role of the international financial system in African policy-making.

The purpose of this chapter is to present a brief survey of the issues related to international constraints, and the conduct of economic policy with particular reference to African countries. Section 2 describes the nature of international constraints relevant to the African situation, and their roles in the analysis of the conduct of economic policy