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4 Structural Adjustment Policies in Highly Indebted Countries

Sebastian Edwards

4.1 Introduction

Mexico's announcement, in August of 1982, that it could no longer meet its international financial obligations took most of the world by surprise, sending shivers down the spines of bankers, politicians, and international bureaucrats. That fateful Friday the 13th of August 1982 marked the beginning of the worst international financial crisis since the Great Depression. What initially was thought to be an isolated case of temporary illiquidity soon spread to most of the developing world, placing the stability of the international financial system in serious jeopardy.

Five years after the eruption of the debt crisis most of the developing world is still struggling to get back on its feet. Although the collapse of the world financial system predicted by some overly pessimistic observers has not materialized, the debt crisis is far from over. In fact, when traditional creditworthiness indicators, such as debt-exports or debt-service ratios are analyzed, the highly indebted countries are now in an even weaker position than in 1982 (see table 4.1). It has now become apparent that a long-term resolution of the debt problems will be a painful and protracted process that will still require major additional adjustment efforts by the indebted countries, as well as extensive

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Table 4.1 **Creditworthiness Indicators for Developing Countries: 1974–88**

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
A. Ratio of External Debt to Exports of Goods and Services (%)										
All developing countries	90.8	81.6	94.6	120.1	133.3	133.7	147.8	167.5	168.6	160.7
15 highly indebted[a]	182.3	167.1	201.3	269.8	289.6	272.1	284.2	337.9	349.6	324.7
Western Hemisphere	197.7	183.5	210.3	273.8	290.3	277.1	295.5	354.7	367.6	342.2
B. Debt Service Ratios to Exports of Goods and Services (%)										
All LDCs	14.1	12.9	16.2	19.5	18.9	20.1	20.5	22.4	20.7	20.0
15 highly indebted[a]	34.7	29.6	39.0	49.4	42.5	41.1	38.7	43.9	40.7	39.5
Western Hemisphere	39.6	33.4	41.9	51.0	43.9	41.7	38.7	45.6	44.9	40.9

Source: IMF's *World Economic Outlook,* April, 1987.

[a]Argentina, Bolivia, Brazil, Chile, Colombia, Ivory Coast, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.

negotiations between debtor governments, creditor governments, the multilateral institutions, and the banks.

The adjustment approaches followed until now by most of the highly indebted countries can best be described as *emergency stabilization programs* geared towards generating very large trade balance surpluses in very short periods of time. Given the new circumstances and the sudden halt in external financing after 1982, these countries had little choice but to use every possible tool at their disposal to achieve the needed turnaround in their current accounts. As a consequence the adjustment process has been quite costly, generating drastic declines in real income and important increases in unemployment. In fact, as is reflected in table 4.2, in a number of Latin American countries in 1986 real per capita GDP was below its 1970 level!

A long-run solution to the debt crisis problem would entail (a) the regaining of creditworthiness by these countries, and thus the resumption of voluntary lending by the international financial community; and (b) the resumption of sustained growth.[1] Much of the recent policy literature on the debt crisis has focused on these issues, with some of the discussion dealing with the type of long-run structural reforms the debt-troubled countries should implement in order to attain the dual objective of improved creditworthiness and growth. Most of this literature has recommended very conventional measures, what economists had been advocating for a long time prior to the debt crisis, including trade liberalization, financial reform, major devaluations, and a reduced role for the government.[2] For example, this policy package is the core of the conditionality contemplated by the Baker plan. Surprisingly, there have been very few attempts to evaluate whether the design of these traditional policies, and in particular their speed and sequencing, should be altered in the presence of a major debt problem and, in some cases, still significant macroeconomic disequilibria.

Table 4.2 **Index of Real Gross Domestic Product Per Capita In Selected Latin American Countries (1970 = 100)**

	1970	1975	1980	1981	1982	1983	1984	1985	1986
Argentina	100	105.9	107.5	99.2	92.6	93.9	94.3	88.7	92.2
Bolivia	100	117.3	120.6	118.3	107.6	95.7	89.7	85.8	80.4
Brazil	100	145.1	179.5	172.8	170.4	161.5	165.0	174.7	184.7
Colombia	100	118.2	137.9	138.0	136.4	134.7	136.1	136.6	140.7
Chile	100	81.8	109.1	113.4	95.8	93.6	98.1	98.8	101.9
Mexico	100	116.8	139.8	146.8	142.3	131.3	132.4	132.6	124.3
Peru	100	108.9	104.7	105.9	103.6	89.9	91.8	90.9	96.2
Venezuela	100	106.5	105.7	102.3	100.0	91.8	88.3	83.7	82.9

Source: CEPAL, *Anuario Estadístico de América Latina y el Caribe, 1985* and CEPAL, *Balance Preliminar de la Economía Latinoamericana, 1986.*

The purpose of this chapter is to analyze a number of issues related to structural adjustment in the highly indebted developing countries. The chapter starts with a brief discussion of the main features of the adjustment process followed during 1982–87. I note that in spite of the major involvement of the IMF in this first phase of the adjustment, the actual policy packages implemented by most of the debt troubled countries differed markedly from what we can describe as an orthodox IMF-type stabilization program. I argue that the "unorthodox" elements of the stabilization programs, such as the imposition of exchange controls and trade restrictions, responded to the emergency nature of these programs. I then discuss at a more analytical level some longer-term aspects of structural adjustment reforms, focusing on the relation between outward orientation, export promotion, and trade liberalization. Emphasis is placed on the sequencing and speed of the structural reforms related to the external sector. Lessons drawn from the recent Southern Cone experiments with trade liberalization are incorporated into the analysis of the possible effects of tariff reforms on employment, income, and growth. I also discuss the role of devaluations in structural adjustment processes in the same section. Since the chapter focuses on the role of the adjustment programs implemented by the countries themselves, relatively little emphasis is given to the role of banks and the international financial community.

4.2 The Nature of the Adjustment, 1982–87

In this section I analyze the main features of the adjustment process followed by the highly indebted countries during 1982–87.[3] Given the great diversity of experience of the various countries, it is not possible to make sweeping generalizations; in fact, doing so would grossly oversimplify the discussion. When possible I point out the more important differences across countries.

4.2.1 Origins of the Crisis

During the second half of the 1970s and the early 1980s most of the developing nations embarked on a foreign borrowing binge. Between 1975 and 1982 the developing world's long-term foreign debt more than tripled, growing from $162.5 billion to $551.2 billion; in 1982 the *total* foreign debt of the developing world, including short-term debt and use of IMF credit, stood at $738.7 billion. Naturally, this huge increase in indebtedness was made possible by the liberal way in which, after the first oil shock in 1973, the international financial community and in particular the banks, provided funds to these countries. There is no doubt that the pace at which the developing countries were accumulating debt in the late 1970s and early 1980s—at a rate exceeding 20 percent per year—was not sustainable in the medium to longer run;

some type of adjustment was bound to take place. The world, however, was astonished by the severity of the crisis; instead of there being an orderly and slow reduction in the flow of borrowing, there was a major crisis that brought capital flows to a virtual halt.

The causes behind the spectacular growth in borrowing during the 1974–82 period varied from country to country. In Brazil, for example, it responded to a deliberate development strategy adopted after the 1973 oil shock. This policy was based on import substitution supplemented with a heavy reliance on foreign borrowing to finance major investment projects. In Turkey, the accumulation of foreign indebtedness responded mainly to the rapid growth of the public sector, which used most of the funds for investment purposes. The situation was greatly aggravated by the existence of the so-called "convertible Turkish lira deposits," which provided a defacto, evergrowing subsidy to foreign borrowing. Contrary to most other countries, Turkey entered into a crisis in 1977, even before the second oil shock. In Mexico, the populist policies of the Echeverria and Lopez Portillo administrations, with spectacular growth in the public sector and in the fiscal deficit, lay behind the crisis. The discovery of additional oil reserves generated a wave of optimism that greatly influenced the magnitude of the expenditure binge. It has been argued that approximately one half of the Mexican debt accumulated during the Lopez Portillo administration went to finance capital flight (Buffie and Sangines 1987). In Chile, on the other hand, fiscal policies played no role in the unleashing of the crisis; most of the huge increase in Chile's foreign debt was contracted by the private sector with no government guarantees. The opening up of the Chilean economy, as part of the overall project of economic liberalization of the Pinochet government, allowed the private sector to finance huge increases in consumption—especially of durables—with borrowing from abroad.[4] In spite of their different experiences during the 1970s, by late 1982 all these countries faced a severe cut in foreign financing; they had come to share the harsh reality of the debt crisis. In the years to follow their experiences would again differ, as they tended to follow somewhat different adjustment programs.

The behavior of the world economy during the early 1980s, and in particular the increase of interest rates, the decline in commodity prices, and the sluggish growth of the industrial countries, played an important role in determining the magnitude and timing of the crisis.[5] A recent study by CEPAL has estimated that for the Latin American nations, the deterioration of unit prices of non-oil exports and the hike in world interest rates "explain" almost 50 percent of the increase in the region's current account deficit during 1981 and 1982.[6]

The magnitude of external shocks can be better understood by analyzing the evolution of the *real* interest rate "relevant" for these countries, computed as nominal LIBOR (London Interbank offer rate for

dollar deposits) deflated by the rate of inflation of their exports. This concept of real interest rate combines in one indicator the effects of both the higher international nominal interest rates and the lower commodity export prices. For the case of Latin America, this measure of the real interest rate jumped from an average of −3.4 percent during 1970–80 to 19.9 percent in 1981, 27.5 percent in 1982, and 17.4 percent in 1983. During the early 1980s even those countries with a large percentage of their debt contracted at fixed concessionary terms experienced dramatic increases in their interest bill. For example, as a result of the higher world interest rates, the Ivory Coast's interest payments increased from 3.1 percent of GDP in 1980 to more than 8 percent of GDP in 1983.

The adoption of inadequate exchange rate policies constitutes one of the most important domestic causes of the crisis; most of the countries that eventually experienced payments difficulties allowed their real exchange rates to become highly overvalued during the late 1970s and early 1980s.[7] The case of the countries of the Southern Cone of South America is a primary example of inadequate exchange rate policies. In Chile, for example, after a period with a passive crawling peg, and as a way to bring down a stubborn inflationary process, the currency was fixed to the U.S. dollar in June of 1979, at the same time as wages were indexed to past inflation and capital controls were relaxed. As a result, the real exchange rate appreciated by more than 30 percent between 1979 and mid-1982, provoking a major deprotection of the domestic tradables sector and a gigantic current account deficit that exceeded 14 percent of GDP in 1981.[8] Argentina and Uruguay adopted a declining preannounced rate of devaluation, also as a way to reduce inflation. However, contrary to the case of Chile, in Argentina and Uruguay the predetermined rate of devaluation was clearly inconsistent with the magnitude of their fiscal deficit. This resulted not only in a substantial real appreciation, but also in a steady loss of credibility in the sustainability of the stabilization and liberalization programs, and in major capital flight.[9]

In Mexico, as a result of a highly expansive fiscal policy, which was coupled with a quasi-fixed nominal exchange rate, the effective real exchange rate experienced a real appreciation that exceeded 40 percent between 1976 and February of 1982. In 1976–77 in an effort to put an end to an acute situation of real exchange rate overvaluation, the Mexican peso was devalued by almost 80 percent relative to the U.S. dollar. By 1981, however, the real value of the peso was already below its 1976 level; in less than 5 years more than 100 percent of the real effect of the devaluation had fully eroded. This case is particularly interesting since it clearly illustrates the difficulties that developing nations have many times faced when trying to engineer a real devaluation (see Edwards 1987).

The mismanagement of exchange rate policy was by no means a monopoly of the Latin American countries. For example, the Ivory Coast, the Philippines, and Nigeria, among the highly indebted countries, also experienced important degrees of real exchange rate overvaluation during the period preceding the crisis. In both the Ivory Coast and the Philippines real appreciation exceeded 15 percent between 1978 and 1982, while in Nigeria it boardered 10 percent during the same period.

The exchange rate policy was not inadequate in every developing country, however. In Colombia, Indonesia, and Korea, for example, the adoption of an active exchange rate management, including periodic devaluations, was an important component in overall strategies aimed at reducing the effects of world economic fluctuations. In that regard, Indonesia's exchange rate and macro policies were quite successful as a means to combat the Dutch disease effects associated with the oil booms. Also, Colombia's pragmatic approach towards exchange rate management allowed the country to avoid the deprotection effects of the coffee boom of 1975–79 and to maintain a reasonable macroeconomic equilibrium.[10]

Perhaps one of the most devastating effects of the generalized tendency towards overvaluation is that it fueled massive capital flight out of the developing world. In country after country, as it became increasingly apparent that the overvaluation was unsustainable in the longer run, the public began to speculate heavily against the central bank by acquiring foreign exchange and moving it abroad. Moreover, in some countries, such as Chile and Argentina, the overvaluation cast doubts on the continuity of an overall development strategy based on liberalization and open markets. In Chile the public began to expect a hike in import tariffs and tried to anticipate it by acquiring imported durables in record quantities (Edwards and Cox-Edwards 1987). Although because of its semi-illegal nature it is not easy to find official data on capital flight, most available estimates concur in suggesting that in most of the Latin American countries there was a significant increase in capital flight during the years surrounding the debt crisis. In a recent empirical study Cuddington (1986) found that there is a significant relation between overvaluation and capital flight. Table 4.3 contains estimates on capital flight for six developing countries. There is an interesting contrast between the Latin American and the Asian nations. In particular notice that in Korea, a country that by and large avoided the temptation of real exchange rate overvaluation, between 1979 and 1984 capital flight was, on average, *negative*.

4.2.2 The Adjustment

In August of 1982, immediately following Mexico's formal announcement that it was facing serious financial difficulties, the international

Table 4.3 **Estimates of Capital Flight in Selected Developing Countries[a] (billions of U.S.$)**

	1979	1980	1981	1982	1983	1984
Argentina	2.2	3.5	4.5	7.6	1.3	−3.4
Brazil	1.3	2.0	−1.4	1.8	0.5	4.0
Korea	−0.5	−0.7	−0.8	0.5	−0.7	−0.6
Mexico	−1.1	2.2	2.6	4.7	9.3	2.6
Philippines	0.0	−0.1	1.3	0.0	−1.5	−1.8
Venezuela	3.0	4.8	5.4	3.2	3.1	4.0

Source: Cumby and Levich (1987).

[a]These estimates use William Cline's definition of capital flight as computed by Cumby and Levich.

financial community greatly reduced the amount of funds intermediated to the developing world. Even countries such as Colombia—which had not faced payments problems, had no serious macroeconomic disequilibria, and had not accumulated debt at a very fast pace—were affected by this reduction in foreign lending. In fact, it is fair to say that the availability of foreign funds was reduced in a brutal way. For the developing world as a whole external financing was reduced by almost 40 percent between 1981 and 1983. Moreover, the major debtors were forced to fully close a current account deficit, which in 1982 exceeded $50 billion, in less than 3 years. By 1985 the aggregate current account had reached virtual equilibrium (−$0.1 billion). In order to achieve this significant adjustment, these countries had to engineer a major turnaround in their trade balance, which went from an aggregate deficit of almost $7 billion in 1981 to a surplus of more than $40 billion in 1984. Table 4.4 contains data on exports, imports, the trade balance, and the current account, that very vividly capture the magnitude of the adjustment.

As can be seen from table 4.4 after reaching a record level in 1984 (almost $44 billion) the aggregate trade surplus of the major debtors has experienced a steady decline and it is expected that in 1988 it will be just over $22 billion. This rapid deterioration in the aggregate trade balance is to a large part a reflection of the Brazilian and Mexican situations.

Latin America was severely affected by the sudden unavailability of loans. Table 4.5 contains data on the net transfer of resources to the region from 1973 to 1986. As can be seen, starting in 1982 the net transfer of resources became significantly negative; between 1982 and 1986 the annual net transfer averaged −$26.4 billion, compared to a positive yearly average net transfer of more than $12 billion between 1976 and 1971. In real terms the net turnaround of resource transfers

Table 4.4 **Current Account and Trade Balance for 15 Highly Indebted Countries: 1979–88 (billions of U.S.$)**

Year	Export (FOB)	Imports (FOB)	Trade Balance	Current Account
1979	94.2	96.1	−1.9	−24.6
1980	127.1	122.7	4.4	−29.5
1981	126.1	133.6	−7.5	−50.3
1982	111.5	108.3	3.2	−50.6
1983	111.1	82.8	28.3	−15.2
1984	123.4	80.2	43.2	−0.6
1985	119.2	78.4	40.8	−0.1
1986	98.6	75.7	22.9	−11.8
1987	101.5	83.3	18.8	−14.0
1988	112.2	90.3	22.3	−10.5

Source: IMF's *World Economic Outlook* (April 1987).

Table 4.5 **Capital Inflows and Net Transfer of Resources in Latin America: 1976–86 (billions of U.S.$)**

Year	Net Capital Inflows	Net Interest Payments	Net Transfer of Resources	
1976	17.9	6.8	11.1	
1977	17.2	8.2	9.0	
1978	26.2	10.2	16.0	$\bar{X} = 12.3$
1979	29.1	13.6	15.5	
1980	29.4	17.9	11.5	
1981	37.5	27.1	10.4	
1982	20.0	38.7	−18.7	
1983	3.2	34.3	−31.2	
1984	9.2	36.2	−27.0	$\bar{X} = -26.4$
1985	2.4	35.3	−32.9	
1986	8.6	30.7	−22.1	

Source: CEPAL (1986b, table 14).

exceeded $70 billion in the short period of three years between 1980 and 1983!

These very rapid adjustments in the current account and trade balance were achieved in all cases by reductions in imports and in investment. As can be seen from table 4.4 in the highly indebted countries the *nominal* dollar value of exports was lower in 1986 than in 1980, with the magnitude of this decline exceeding 15 percent. This drop was basically the result of a decline of almost 25 percent in the export prices of these countries between 1980 and 1986. In Latin America the deterioration of the terms of trade was so severe (see table 4.6), that in spite of an increase in the *quantity* of exports of 30 percent between 1980 and 1986, 100 percent of the net adjustment of the trade balance improvement has also been achieved by means of a reduction of imports.

Table 4.6 **Terms of Trade in Latin America Between 1981 and 1986 (Index, 1980 = 100)**

	Index				Rate of Change (%)					Cumulative Rate of Change (%
	1983	1984	1985	1986	1982	1983	1984	1985	1986	1981–86
Latin America	87	92	88	80	−9.0	1.1	6.5	−5.0	−8.7	−20.0
Oil Exporters	95	97	93	63	−10.3	5.0	2.0	−3.4	−32.2	−36.9
Bolivia	97	112	110	86	4.0	2.7	16.4	−2.2	−21.5	−13.8
Ecuador	82	96	85	58	−1.3	−17.7	17.0	−10.8	−31.9	−41.9
Mexico	93	86	84	62	−13.9	6.7	−7.2	−2.3	−26.4	−38.1
Peru	96	94	89	77	−9.5	19.7	−2.8	−5.1	−12.8	−22.6
Venezuela	104	116	114	62	−7.9	8.9	12.1	−1.9	−45.5	−38.0
Oil Importers	82	89	83	94	−8.3	−0.1	9.4	−6.6	12.8	−6.0
Argentina	82	99	87	75	−11.7	−4.6	21.0	−12.1	−13.3	−24.9
Brazil	78	86	83	102	−6.0	−2.5	10.1	−3.4	22.6	1.6
Colombia	94	101	97	114	2.2	8.3	6.9	−3.9	17.6	13.9
Costa Rica	86	90	88	107	−2.0	2.8	5.2	−2.8	21.2	6.5
Chile	84	78	72	79	−13.2	9.6	−6.3	−8.0	9.3	−21.3
El Salvador	83	73	69	87	2.2	−11.8	−12.0	−5.0	26.6	−12.9
Guatemala	85	88	83	95	−5.5	3.4	3.4	−6.0	14.3	−5.5
Haiti	66	83	85	104	3.8	−10.7	26.1	2.7	22.5	4.4
Honduras	93	96	76	95	3.6	0.9	3.2	−20.9	24.8	−5.4
Nicaragua	83	105	97	119	−5.3	−3.3	26.9	−7.8	23.1	19.4
Panama	91	95	97	105	−10.3	9.7	4.6	2.2	8.2	5.0
Paraguay	90	134	110	102	−12.6	−3.9	49.8	−17.9	−7.2	2.3
Dominican Republic	77	85	72	83	−31.3	−5.5	9.7	−14.8	15.2	−16.9
Uruguay	99	99	93	96	6.9	6.9	0.4	−5.6	2.6	−4.0

Source: CEPAL (1986b).

For the major debtors as a group, investment declined from an average of 26 percent of GDP in 1973–77 to an average of 17.2 percent in 1983–86. Table 4.7 contains data on investment ratios for a selected group of countries. As can be seen, with the exception of Chile, which started from an exceedingly weak position, in all of these countries the gross investment ratio declined significantly after the crisis, with the cases of Nigeria, the Philippines, and Venezuela being particularly dramatic. In most cases public investment and investment in the construction sector were the components more severely curtailed. In the case of public investment this was a result of restrictive aggregate demand policies implemented immediately after the crisis. Naturally, this decline in investment has serious consequences for the prospects of renewed growth. Not only has the adjustment been costly in terms of current output and employment, but also in terms of future income.

Most countries faced the need to reverse the direction of the net transfers by resorting to a combination of expenditure-reducing and expenditure-switching policies, including devaluation, the imposition of capital controls, and import quotas. The adjustment required both a significant increase in real interest rates as well as major relative price changes or real devaluations. In most cases the selection of policy packages was based on the perceived "effectiveness" of these policies in the short run, rather than on efficiency, income distribution, or welfare considerations. As a result of the efforts made to implement rapidly effective policies, a number of trade-offs between different objectives—including improvement in the current account and inflation—emerged during the process.

In most countries the expenditure-reducing policies have been centered on efforts to cut public expenditure. In a number of cases the

Table 4.7 **Gross Investment as Percentage of GDP in Selected Debtor Countries**

	Average 1975–80	1984
Argentina	25.2	17.8
Bolivia	29.5	28.5
Brazil	25.9	17.0[a]
Chile	13.2	13.7
Ivory Coast	26.5	22.1[a]
Mexico	24.4	20.3[a]
Nigeria	25.3	14.4
Peru	16.6	16.0
Philippines	30.1	17.1
Venezuela	34.3	16.0

Source: International Monetary Fund.

[a]1983.

reduction of real public expenditure has been in fact very significant, with most of the cuts concentrating on public investment and government employees wages. According to CEPAL, in Argentina, Ecuador, Mexico, Uruguay, and Venezuela government expenditure was cut by more than 20 percent in real terms following the crisis.[11] Similarly, in Morocco real expenditure of the central government declined by 18 percent between 1982 and 1984, while in the Philippines this reduction exceeded 25 percent between 1982 and 1985.[12]

In spite of the effort to reduce overall public expenditures, government interest payments on the domestic and foreign debt increased quite significantly during the first five years of the adjustment process. This was a result of both the real devaluations engineered as part of the stabilization programs and of the deliberate policy of raising domestic interest rates in an effort to further curb aggregate expenditure. The negative effects of the devaluations on the interest bills of different governments are a good illustration of the trade-offs involved in the adjustment process. In the majority of the major debtors most of the foreign debt is owed by the government, either because the public sector originally contracted it, or because it took it over when the local private banking system collapsed, as in Chile.[13] What real devaluations do is raise the (real) domestic currency cost to the government of raising the required funds to pay the interest bill. This effect has been significant in countries like Argentina, Mexico, and Peru, where interest payments on public-sector foreign debt are a high proportion (i.e., approximately 20 percent) of total government expenditure.[14] In a number of countries, most notably in Argentina and Chile, the exchange rate policies followed during this period also became an important source of government expenditures. For example, in Argentina, the need to cover the exchange rate guarantee after the abandonment of the "tablita" generated staggering fiscal outlays. Similarly the adoption of a preferential (lower) exchange rate for foreign currency debtors in Chile resulted in an implicit subsidy that absorbed large amounts of foreign resources.[15]

In spite of the relatively successful efforts to reduce public expenditures, fiscal deficits increased in relation to the precrisis period in the major debtors as a group (see table 4.8). This was mainly due to the fact that in many of these countries total tax revenues were negatively affected by the recessions that followed the crisis. The steep increase in interest rates that took place in most countries also impacted negatively the fiscal accounts, by means of its effect on the public-sector domestic debt. Moreover, in most cases the sources of fiscal deficit financing were affected by the crisis. Up to 1982 in most instances the public-sector deficits were financed by foreign borrowing. The drying up of this source of funds forced the local governments to turn to the inflationary tax and to issuing additional domestic public debt.

Table 4.8 **Monetary Policy, Fiscal Policy, and Inflation in Highly Indebted Countries**

Year	Annual Percentage Change of Broad Money	Central Government Fiscal Deficits as Percentage of GDP	Average Percentage Change of CPI[a]
1979	51.8	0.8	40.8
1980	55.2	0.8	47.4
1981	64.0	3.7	53.2
1982	69.3	5.4	57.7
1983	86.7	5.2	90.8
1984	117.7	3.1	116.4
1985	125.4	2.7	126.9
1986	73.9	4.5	76.2
1987	n.a.	3.6	86.3
1988	n.a.	n.a.	87.2

Source: International Monetary Fund.

[a]Average annual inflation for 1969–78 was 28.5 percent.

The need to use inflationary financing placed pressure on the monetary and domestic credit policies which became significantly more expansive than the IMF, the World Bank, and the private bank officials felt they should have been. Table 4.8 contains summary data on monetary policy, the fiscal deficit, and the average rate of inflation in these countries. These data quite clearly illustrate some of the most interesting features of the emergency phase of the adjustment process. As is pointed out in more detail below, contrary to the historical experience with IMF sponsored programs, these have been stabilization programs with acceleration in monetary expansion, persistent high fiscal deficits that largely exceed the levels that prevailed before the crisis, and very high inflation.

The restraint of wage increases was, in most countries, another major component of the expenditure-reducing package. Table 4.9 contains data on the evolution of real wages in selected Latin American countries. As can be seen, with the exception of Argentina, Brazil, and Colombia, the decline in real wages has been significant.

In most countries the adjustment also relied on higher real interest rates, which helped keep expenditure, and in particular investment, in check. It should be noted, however, that in some cases the rise in real interest rates began some time before the "official" unleashing of the debt crisis in August of 1982. For example, in the countries of the Southern Cone, real interest rates began to climb quickly in mid–1981 as these economies were becoming clearly overheated; higher interest rates were in fact an early sign that in these countries the need for adjustment was quickly approaching. In Argentina the annual real lending rate had already reached 19.3 percent in 1981, a figure that was

Table 4.9 **Evolution of Real Wages in Selected Latin American Countries (percentage variation)**

	1981	1982	1983	1984	1985	Present Crisis[a]
Argentina	−10.6	−10.4	25.5	26.4	−15.2	7.8
Brazil	8.5	12.1	−7.3	−6.7	7.1	12.6
Colombia	1.4	3.4	5.2	7.4	−2.9	13.4
Costa Rica	−11.7	−19.8	10.9	7.8	8.9	−7.8
Chile	9.1	−0.4	−10.6	0.3	−4.5	−14.8
Ecuador	−13.8	−11.9	−16.2	−1.3	−3.2	−39.2
Mexico	3.6	0.8	−22.7	−6.2	1.2	−26.1
Peru	−1.7	2.3	16.8	−15.2	−15.3	−38.9
Uruguay	7.5	−0.3	−20.7	−9.2	14.1	−18.1

Source: CEPAL (1986b).

[a]As the crisis did not begin simultaneously in all the countries included, cumulative variations have been calculated over different periods in order to reflect the impact of adjustment on real wages more accurately. Figures in this column thus show the variation registered between 1980 and 1985 for Colombia, Chile, Mexico, Peru, and Uruguay.

significantly higher than the average of 1.5 percent that prevailed during 1978–80. In 1982 and 1983, as the effects of the debt crisis per se were being felt, the real lending interest rates remained high (around 12 percent per annum) but not as high as the level attained in 1981. Chile presents a similar case, as in 1981 the annual real interest rate reached 58.1 percent, a figure much higher than the average of the previous two years (8.5 percent). During 1982 and 1983 the *real* lending rate declined to the still remarkable level of 16 percent per annum (Ramos 1986).

Although in the Southern Cone real interest rates began climbing almost a whole year before August 1982, the debt crisis further shocked the already weakened financial sector. In particular, in Chile the halt of capital inflows was partially responsible for the timing and magnitude of the financial debacle of late 1982 and 1983. By the end of 1982 the foreign debt of the Chilean banking system exceeded 6.6 billion in U.S. dollars, a remarkable figure when compared to the mere $0.6 billion (U.S.) of debt in 1978! These funds had been obtained without any government guarantee and had mainly been used to finance the operations of the large private conglomerates—the so-called *grupos*. By mid-1982 a large proportion of these loans were in fact bad loans, as owing to a number of factors including the real overvaluation of the peso, the *grupos* were facing very difficult financial times. During 1982 the amount of foreign funds available to the Chilean banks was reduced by more than 75 percent, generating a fatal blow to the troubled financial sector. As a result of these difficulties, in January 1983 the government stepped in, liquidating two banks and nationalizing others. Responding

to pressures by the international banks the Chilean government decided to take over these banks' foreign debt, guaranteeing its payment. Paradoxically, at the end of 1983 the Chilean financial sector was in some ways at the same juncture as it had been ten years before, in the midst of the Allende socialist government. It had been nationalized and was tightly controlled by the state (see Díaz-Alejandro 1985 Edwards and Cox-Edwards 1987).

After August of 1982 most countries also relied on expenditure-switching policies. These consisted in most cases of a combination of nominal devaluations and, at least initially, of a major escalation in the degree of trade restrictions.

The extent of the devaluations varied from country to country and were particularly severe in Latin America. In an effort to assure that the effects of the nominal devaluations on the real exchange rate did not erode through inflation, most countries adopted some kind of active exchange rate management where the exchange rate continued to be adjusted after the initial parity change. In fact, as of July 1986, out of the 15 major debtors 12 had some sort of crawling peg regime consisting of periodical adjustments of the nominal rate somewhat related to the differential between internal and external inflation.

Another important feature of the exchange rate policy followed by many countries was the adoption of multiple exchange rates. This basically served three purposes. First, by implementing differential exchange rates for capital and current account transactions—as in Venezuela—the authorities hoped to separate real transactions from the supposed volatility of capital movements. More important, however, by imposing a free-floating exchange rate on unregistered capital flows the Venezuelan authorities tried to discourage capital flight without greatly affecting the current account. Second, multiple rates were also applied as a way to supplement the protective system. Indeed, when different exchange rates are applied to different commercial transactions, the resulting outcome is perfectly equivalent to a differentiated tariff schedule. This practice was again used by Venezuela, as well as by Mexico. And third, in some countries, such as Mexico, Chile, and Venezuela, a lower "preferential" exchange rate has applied to the private sector repayment of foreign debt. The rationale for this preferential rate was that in this way it would be possible to avoid the general bankruptcy of the private sector, which had borrowed heavily from foreign banks at the previously fixed nominal exchange rate.

Most countries were able to generate important real devaluations, which in some cases more than corrected the overvaluation that preceded the crisis. In Turkey, for example, between 1982 and 1986 there was a 24 percent real effective devaluation, while in the Philippines the real devaluation amounted to more than 8 percent. It was, however,

Table 4.10 **Real Effective Exchange Rate Indixes, 1980 = 100 (Trade Weight at 1980)**

	Argentina	Bolivia	Brazil	Chile	Mexico	Peru	Venezuela
1980	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1981	99.11	79.75	84.06	85.52	87.97	85.77	89.00
1982	177.98	58.21	77.60	92.00	112.34	81.15	80.66
1983	188.62	71.15	91.10	115.91	132.97	85.59	75.51
1984	139.35	28.42	102.65	118.12	114.66	87.91	105.67
1985	173.78	9.5	103.85	145.52	106.22	101.91	104.81
1986	203.71	103.93	111.68	162.39	135.61	84.98	100.81

Note: An increase of this index indicates real devaluation, while a decline is a real appreciation. These real effective exchange rate indexes have been computed as the trade-weighted geometric average of the bilateral exchange rates adjusted by the ratio of domestic consumer price index to the corresponding trade partner wholesale price index.

in the Latin American countries that the more important turnarounds of real exchange rate behavior were achieved. As can be seen in table 4.10, in all of these countries the real effective exchange rate index shows that there have been significant real depreciations between 1982 and 1986.

As a result of these large nominal devaluations most countries experienced important increases in their price levels. As noted above, in an effort to avoid the erosive effects of these price increases the Central Bank authorities decided to resort to further devaluations as a means of maintaining a high real exchange rate. Naturally this practice added fuel to the already accelerated rates of inflation (see table 4.11).

Table 4.11 **Rate of Devaluation and Rate of Inflation in Selected Debtor Countries**

	Average Annual Devaluation (%)	Average Annual Inflation (%)
Argentina	301.2	366.5
Brazil	195.1	175.5
Chile	39.5	24.2
Ivory Coast	1.3	19.9
Mexico	81.5	76.9
Nigeria	18.9	21.9[a]
Peru	111.4	113.5
Philippines	24.3	19.6
Venezuela	17.1	10.3

Source: IMF, *International Financial Statistics.*

[a]1982–85.

Immediately following the crisis in many (but not all) of the major debtors the devaluation policies were supplemented by the imposition of trade restrictions. Table 4.12, for example, presents data on some of the policies implemented by four countries.

An important question is whether the use of quantitative restrictions (QRs) instead of tariffs or more substantial devaluations during the initial phases of the adjustment has introduced unduly high costs in terms of growth and efficiency. A well-known proposition in the theory of commercial policy is that, in terms of welfare and income distribution, tariffs are generally superior instruments than quotas as a means to restrict trade.[16] That type of analysis, however, is static and assumes perfect information on behalf of the authorities; according to this simple setting the relevant elasticities are known and thus it is possible to compute the exact height of the desired tariff. In reality, however, things are quite different, since the magnitudes of elasticities are only known in a very imprecise way. This means that in order to achieve a certain volume of imports with the use of tariffs, it is necessary to go through a trial and error process. This type of procedure may be very ineffective in cases such as the debt crisis where the foreign exchange value of imports has to be reduced very quickly, and where there are high penalties associated with surpassing that (much reduced) level of imports. For a small country that faces given foreign currency prices of imports, the use of quotas is an effective way of being sure that the value of imports (in foreign exchange) will not exceed a certain level.

Table 4.12 **Examples of Additional Trade Restrictions during the 1982–86 Period**

Argentina	1984:	Decree 4070. All imports require a permit. All imports competing with local production are subject to authorization (with consultations to domestic producers' associations).
	1985:	Tariff surcharge of 10 percent over imports and 9 percent for exports.
Chile	1982:	Import surcharges ranging from 4 to 28 percent imposed on more than 30 items. Also, two-tier exchange rate established.
	1983:	Import tariffs raised from 10 percent to uniform 20 percent.
	1984:	Import tariffs temporarily hiked to 35 percent.
	1985:	The uniform import duty system is stabilized at 20 percent (from the earlier uniform level of 10 percent).
Mexico	1982:	QRs were imposed on all imports (during the 1970–80 decade QRs only affected 60 percent of imports).
Venezuela	1983:	Foreign exchange controls and a two-tier official exchange-rate system. QRs on 70 percent of final consumption goods.

Source: The World Bank.

QRs = quantitative restrictions.

As long as countries need to establish credibility regarding their willingness to adjust, it is particularly important not to surpass the preestablished level of imports.

Although there is some justification for the (very) short-term use of QRs in the very first phase of the adjustment, there are no good reasons for maintaining their use for long periods of time. From an efficiency perspective QRs have well-known undesirable effects. For example, Buffie and Sangines (1987) have argued that the generalized use of QRs in Mexico in 1982–84 resulted in an unnecessary reduction of imports of intermediate inputs, which greatly hurt the Mexican economy.

Some countries have recently relaxed trade restrictions, while others have announced some easing up for the near future. In Chile, for example, tariffs were reduced to a 20 percent uniform level. Mexico has taken some steps towards reducing the coverage of licenses, while in Bolivia, as part of the stabilization program aimed at stopping hyperinflation, quotas have been abolished and tariffs reduced. As is discussed in more detail below, in many countries trade liberalization packages are being discussed as a part of conditionality agreements with the multilateral institutions.

In spite of the significant efforts to adjust made by most of these countries—and of the costs incurred in the process—the magnitude of their trade surpluses has systematically fallen short of their interest payments. In Latin America, for example, in 1986 the interest bill amounted to 5.3 percent of GDP while the trade surplus reached 2.3 percent of GDP. In most countries up to now this financing gap has been closed, usually after long and protracted negotiations, by packages of funds provided by the banks and the multilateral institutions. It is important to notice, however, that the banks have been able to significantly reduce their exposure to the major debtors in spite of the fact that they have made some contributions to financing these funds shortfalls (see IMF 1987).

Up to now banks have relied on the policing activities of the multilateral institutions, and in particular of the IMF, for determining whether a particular country is making a "sufficient" effort to adjust. A question that is still unresolved is whether the banks will make a serious commitment to providing additional financing to the indebted countries in the next few years.

A number of studies have suggested that for the great majority of the highly indebted countries it would not be possible to generate in the short run trade surpluses of a magnitude sufficient to cover interest payments without further decreasing the level of real consumption. Selowsky and van der Tak (1986), for example, have estimated that a "typical" major debtor would need additional financing for approximately five years in order to experience some recovery in real con-

sumption (2 percent per year) and in real income (4 percent per year). Under these assumptions, since the rate of growth of income exceeds that of consumption, domestic savings rise continuously. According to this simulation exercise after five years "the typical" major debtor would start to amortize its debt. After six more years the debt would have been reduced to "normal" levels, and the country would again be "creditworthy." Cline (1987) has recently argued, along similar lines, that banks could and should indeed increase the amount of funds being intermediated to those countries that show progress in their adjustment efforts.

4.2.3 Crisis Adjustment and Traditional Stabilization Programs

The above discussion shows that, in spite of the active involvement of the International Monetary Fund, the programs followed by most of the major debtors between 1982 and 1986 differed in a number of key respects from the typical IMF sponsored program of the pre-1982 era. These differences mainly involve the selection of policy packages, as well as the availability of additional financing. Also, the behavior of the exogenous variables, including the international environment, has tended to differ from the historical experiences.

According to Khan and Knight (1985) we can distinguish a macroeconomic and a structural adjustment component in the typical IMF program. The macro or demand management package is mainly based on restrictive monetary, fiscal, and domestic credit policies, aimed at eliminating the disequilibrium between aggregate demand and aggregate supply, improving the current account, and reducing inflation. Special emphasis is usually placed on the control of fiscal deficits. The structural adjustment or resource reallocation package, on the other hand, usually includes three main policy blocks: (1) trade liberalization, (2) financial reform, and (3) major devaluation including exchange rate unification in the case of multiple rates. [17]

The objectives of the structural adjustment component of conventional programs are to increase efficiency, raise investment, and enhance growth opportunities. Historically, for most countries the implementation of IMF sponsored programs has not taken place at the same time that a gigantic foreign debt is being serviced. Quite the contrary, it has usually been assumed that while implementing the structural reforms, these countries can command significant additional net funds from abroad (see Khan and Knight 1985). Although this may have been the case in the past, it is very far from today's reality, when the highly indebted countries have to generate a significant net transfer of resources to the rest of the world.

In terms of outcome, an historically "successful" IMF program can be described by a reduced fiscal deficit, lower inflation, more liberalized trade, and an improvement in the current account and balance of payments. In many ways the current (1982–86) adjustment looks very different from this IMF blueprint. Generally speaking, and as is captured by tables 4.8 and 4.11, this has been an inflationary adjustment process with high and persistent fiscal deficits. Additionally there has been an escalation in the degree of distortions of the external sectors, with a profusion of QRs and multiple exchange rates.

The behavior of investment has also been very different during the current crisis adjustment period when compared to the historical episodes. In a detailed study of 39 historical episodes of structural adjustment programs between 1962 and 1982, Edwards (forthcoming) found that for the group as a whole the investment ratio did not experience a significant decline in any of the four years following the implementation of the programs. Moreover, according to this study, on average in these historical episodes it is not possible to detect, as in the current case, significant declines in real output.

To a large extent the "unorthodoxy" of these new stabilization and adjustment programs can be attributed to three main factors: (1) the magnitude of the adjustment required, (2) the urgency with which it had to be implemented, and (3) the global nature of the crisis. In a way, when faced with the trade-offs between current account corrections, efficiency of the adjustment, and inflation, these countries opted—or were forced to opt—for the current account improvements placing, at least during the initial phases of the process, little priority on inflation, efficiency, or costs. Implicitly the IMF endorsed or encouraged these adjustment programs, in spite of the fact that they departed from its traditional view. Now, however, as things are somewhat under control, more emphasis is indeed being placed on efficiency, growth, and other social costs. These issues are discussed in more detail in section 4.3.

4.3 Trade Liberalization and Adjustment with Growth

The emergency packages implemented until now have succeeded in averting what some considered to be an almost sure collapse of the world financial system. This has been achieved, however, at a significant cost for the major debtors in terms of decline in employment, income, and standard of living. The key question now is how to move from the current situation towards what we can call phase 2 of the adjustment process, a phase characterized by adjustment *with* growth. At a more concrete level, the Baker and the Bradley plans, among other initiatives, clearly reflect the preoccupation of politicians with this issue.

A number of authors—and indeed the supporters of the Baker plan, as well as the IMF—believe that a rapid trade liberalization, coupled with devaluation, privatization, and financial reform, is the most reasonable strategy to achieve these objectives.[18] For example, Balassa et al. (1986, 88) have recommended that, among other things, the developing nations should eliminate all QRs and reduce, in a period of five years, imports tariffs to a uniform 15 to 20 percent; these tariff reforms should be coupled with significant devaluations in order not to "deprotect" the tradable goods sectors.[19] To a large extent these recommendations are very similar to what many economists have been advocating for many years for the developing countries. However, these new proposals are more drastic, in the sense of arguing for a bolder movement towards free trade. The current proposals on significant trade liberalizations have not involved a detailed discussion of the important issues related to strategy, including the appropriate speed and sequencing of reform. Also, there has been little consideration on the possible short-run trade-offs between these liberalization reforms aimed at improving efficiency and other objectives of the overall programs.

Most of the traditional literature on trade liberalization has assumed that these reforms take place in the absence of a foreign debt overhang problem. Moreover, many writers have assumed that during the trade reform process countries will be able to attract substantial voluntary lending. McKinnon (1973, 1982), for example, has forcefully warned us of the dangers related to excessive capital *inflows* during a trade liberalization episode. However, it is clear that at the present time, in the vast majority of LDCs there is very little danger of trade liberalization attracting excessive (or indeed any) voluntary capital inflows. Today, the problem is quite the opposite: Countries have to generate a positive resource transfer *to* the rest of the world.

The purpose of this section is to analyze some specific issues related to trade reforms. I first discuss the relation between outward orientation, trade liberalization, and export promotion. I then analyze issues related to the order and speed of reforms, focusing on the relation between stabilization policies and trade reforms and on the unemployment effects of liberalization. Finally I deal with the role of devaluation and of credibility during a structural adjustment process.

4.3.1 Outward Orientation, Export Promotion, and Trade Liberalization

There is by now an impressive amount of empirical evidence suggesting that countries that have adopted outward-oriented development policies, which emphasize export promotion, have outperformed those countries that have followed inward-oriented strategies based on import substitution. Even CEPAL—not exactly known for its endorsement of

outward policies—has recently recognized that the excesses of import substitution have been very costly for Latin America; some of its senior staff members have recommended that in the future export promotion should play a more central role in that region's development policies.[20]

There seems to be relatively less agreement, however, on whether "trade liberalization" packages have played an important role in the performance of the outward-oriented economies. For example, in a recent paper Sachs (1987) questioned the idea that trade liberalizations are indeed a required component of successful outward-oriented strategies. Making reference to the experiences of the East-Asian countries—Japan, Korea, Singapore, Taiwan, and Hong Kong—Sachs argues that the success of these countries was to a large extent due to an active role of government in promoting exports in an environment where imports had not yet been fully liberalized, and where macroeconomic (and especially fiscal) equilibrium was fostered. Whether one agrees with Sachs depends on how outward orientation, export promotion, and trade liberalization are defined. Recently some confusion has emerged regarding these concepts, and it is not exactly clear what people mean by them.

In the more traditional policy literature of the 1960s and 1970s trade liberalization was defined in a very general way: What economists usually meant was *some* relaxation of trade and exchange controls. In fact, in the by now classic NBER study on trade regimes directed by Bhagwati and Krueger, a liberalization episode was defined as a more extensive use of the price mechanism that would reduce the anti-export bias of the trade regime.[21] In her 1986 review article on the problems of liberalization, Krueger went as far as saying that even a (real) devaluation in the presence of QRs constituted a liberalization episode. These are indeed very mild definitions of liberalization. In fact today very few people will raise an eyebrow about them. Only recently has "trade liberalization" acquired a more drastic connotation, meaning (for many people) an elimination of QRs coupled with a severe reduction of import tariffs to a uniform level of around 10 percent. Moreover, recently trade liberalization has, in many ways, become synonymous with free-market policies involving minimum or *no government intervention* at any level.[22]

The difference between the old and new definitions of trade liberalization is, to a large extent, one of degree or intensity. While a devaluation in the presence of QRs, or the replacement of QRs by (quasi) equivalent tariffs is a mild form of liberalization, the reduction of tariffs (with no QRs) to a uniform 10 percent or, for that matter, the complete elimination of tariffs is a very drastic liberalization. In order to clearly understand the different issues involved in policy discussions it is, crucial to specify the *intensity* of liberalization we are referring to.

Unfortunately this is not always done; the policy literature on the subject is plagued with imprecisions and ambiguities.

There is little doubt that a successful export promotion policy requires *some* kind of trade liberalization. In fact, the historical evidence clearly shows that those countries that have successfully embarked on that kind of strategy have had a more "liberal" trade regime than those countries following indiscriminatory import substitution. The successful outward-oriented countries have generally had lower coverage of prior license systems, lower average tariffs, less dispersion in their tariffs, and less episodes of real exchange rate overvaluation.[23]

In a recent major multi-country study by the World Bank it was found that there was a clear relation between movements toward more liberal trade systems and a higher performance (Papageorgiou, Michaely, and Choksi 1986). In that regard, the case of Korea—one of, if not *the* most successful of the export-oriented countries—is very educating. In 1985, for example, 90 percent of Korean imports were subject to automatic approval (i.e., were not subject to any form of QRs) and the average tariff rate was only 26 percent. Moreover, the tariff structure was characterized by higher tariffs concentrated on final goods, with capital equipment and intermediate inputs having relatively low degrees of protection.[24] This extent of import protection was significantly below that of most of the developing nations and also below the degree of Korean protection in 1965, before the outward-oriented policy was embraced. The Korean experience of export promotion coupled with trade liberalization can be contrasted with the Chilean case. Between 1975 and 1979 a drastic trade liberalization that eliminated all QRs, and reduced tariffs to a uniform 10 percent in four years was implemented in Chile; in addition, as part of a massive move towards free market orientation, this period's policies almost completely eliminated the government's role in defining external sector strategies. By allowing the real exchange rate to slip by approximately 30 percent between 1979 and 1982, the Chilean experience of that period became one of ultra trade liberalization *without* export promotion (see Edwards and Cox-Edwards, 1987).

Within the Latin American context Colombia after 1967 provides another educating example of successful export promotion with some trade liberalization. Until that year the Colombian external sector was highly distorted and had been subject to deep and recurrent crises; coffee exports provided most foreign exchange, and the Colombian economy was subject to the vagaries of the world coffee market. In 1967 three major measures were taken. First, any attempt to fix the exchange rate was abandoned, and a crawling peg system aimed at avoiding real exchange rate overvaluation was adopted. Second, an aggressive export promotion program was enacted. Here a subsidies

scheme—the so-called CATs—and the government export promotion office (Proexpo) played an important role. And third, imports were greatly liberalized; in 1983 the average tariff in Colombia was only 29 percent, while the proportion of imports subject to QRs had greatly declined since 1967. As a consequence of these policies the Colombian noncoffee exports sector has performed in an efficient way, helping Colombia sustain a vigorous growth rate during the last 20 years.[25] In fact, today Colombia stands alone among the Latin American nations as a country that escaped the traumatic debt experience of the crisis while being able to maintain a reasonable rate of growth.

Although the evidence supporting the merits of outward orientation is abundant, there is no well-developed theoretical model—or empirical evidence for that matter—linking very low (or zero) import tariffs to higher *growth*.[26] Nor is there evidence suggesting that a completely "hands-off" policy on behalf of the government is the most desirable alternative. In fact, the success of the East Asian countries with export-led growth suggests that some selectively determined degree of intervention specially aimed at supporting exports, played a key role.[27] In this section no attempt will be made to solve the difficult and very important question of the optimal degree of government intervention, or of the optimal level and structure of import tariffs. This is indeed one of the most difficult question of economic policy, whose answer (even at the purely abstract and theoretical level) will depend on the existence of other distortions, the completeness of markets, and the availability of other policy tools, among other things. Instead we will proceed under the assumption that in most of the highly indebted countries the current structure of import protection is higher than the (unknown) optimal level and that, in the long run, these countries will gain from engaging in *some* trade liberalization that is aimed at reducing import tariffs and making them uniform. Under these (very plausible) assumptions, in the rest of this section we will discuss specific issues dealing with the appropriate speed and sequencing of the trade liberalization component of an outward-oriented strategy.

4.3.2 Trade Liberalization with a Government Budget Constraint

An important policy question is whether the trade liberalization component of an outward-oriented strategy should be attempted at the same time as a country is embarked on a severe stabilization and anti-inflationary program. Not surprisingly, the answer depends on the intensity of the trade reform and of the ongoing inflation.

Historically, there has been a close link between *mild* trade liberalizations and stabilization programs.[28] Consider the following typical scenario leading to a stabilization program coupled with a mild to me-

dium trade liberalization effort:[29] At some point in time the authorities of a particular country decide to pursue a fiscal policy that is inconsistent with the chosen nominal exchange rate regime, usually a pegged rate. Given the underdeveloped nature of the domestic capital market, the fiscal expansion is basically financed with domestic credit creation. As a result, there will be a loss of international reserves; domestic inflation will exceed world inflation, and the real exchange rate will become increasingly overvalued. In an effort to stop the drainage of reserves the authorities will usually respond by imposing exchange controls and by increasing the degree of restrictiveness of the existing trade impediments: tariffs will be hiked and QRs will be imposed. Naturally, as long as the ultimate causes of the macroeconomic disequilibrium—that is, the inconsistent credit and fiscal policies—are not tackled, all the authorities will gain by imposing new trade restrictions is a delay in the need for corrective macroeconomic measures. The real exchange rate will become more overvalued, international reserves will continue to decline, and a black market for foreign exchange will emerge. At some point this disequilibrium situation will become unsustainable, and a stabilization program, usually under the aegis of the IMF, will be enacted. This program will usually consist of a significant nominal devaluation geared at correcting the overvaluation developed in the previous period, of a contractionary macroeconomic policy, and of a liberalization of trade restrictions aimed at dismantling those controls imposed during the expansionary phase of the process. These types of trade liberalizations have historically been mild and have seldom consisted of complete elimination of QRs and major tariff reductions of the kind now recommended for the indebted countries.[30]

Table 4.13 contains a summary on the evolution of trade exchange and capital controls in the period immediately following the adoption of 14 major Latin American stabilization episodes. In determining the timing of these programs, the implementation of the major nominal devaluation was taken as defining the beginning of the program. As may be seen, in many countries there were mild, and sometimes short-lived liberalizations; out of these 14 episodes we do not find a single major liberalization attempt.

Perhaps Chile during 1975–81 constitutes the most notable case of a major liberalization undertaken in conjunction with a major stabilization effort. The trade liberalization that eventually eliminated all QRs and reduced tariffs to a uniform 10 percent level was pursued at the same time as inflation was being reduced from 400 percent to 10 percent.[31] The Chilean episode illustrates very vividly one of the most serious trade-offs that emerges when a major liberalization is undertaken at the same time as a major anti-inflation program. As in most successful stabilization programs, in the last phase of the Chilean

Table 4.13 **Summary of Evolution of Exchange Controls and Trade Restrictions after Enactment of Stabilization Programs in Selected Latin American Countries**

Country	Year	Payments Restrictions on Current Transactions	Tariffs, Duties, and Cost-Related Measures	Restrictions on Capital Transactions
Argentina	1970	Decreasing restrictions for one year. Then highly restrictive	Short run liberalization; abrupt increase in tariffs 6 months after devaluation	Increased restrictiveness
Bolivia	1972	No significant changes	No change for 1 year. Rapid increase in tariffs 1 year after	No change
Bolivia	1979	No significant changes	Mild liberalization	Slight liberalization of capital movement ceilings
Chile	1982	No changes for 2 years	Slight increase in tariffs; no advanced deposits.	Slight reduction and then increase in restrictions
Colombia	1962	Decreasing	Liberalization of advanced deposits	No change
Colombia	1965	Short-lived liberalization	Short-lived liberalization of advanced deposits	After 14 months restrictions greatly hiked
Colombia	1967	Slow liberalization	Slow liberalization	Mild liberalization
Costa Rica	1974	Very short run liberalization	Short run liberalization tariffs were later raised	Restrictions on capital flows introduced
Ecuador	1961	No clear pattern	No change in tariffs; increase in advanced deposits rates	No change
Ecuador	1970	Slight liberalization	Mild reduction in tariffs; important liberalization of advanced deposits	Mild liberalization of capital movement restrictions

Table 4.13 (continued)

Country	Year	Payments Restrictions on Current Transactions	Tariffs, Duties, and Cost-Related Measures	Restrictions on Capital Transactions
Nicaragua	1979	Very slight liberalization	No changes	Very sharp increase in degree of restrictions
Peru	1967	Increased restrictiveness	Tariffs raised	Sharp increase in restrictions
Peru	1975	No significant change	Increase in tariffs levels	Slight liberalization
Venezuela	1964	Slight increase in restrictiveness	No change	No change

Source: Constructed from information obtained from various issues of the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions* and from various issues of *Pick's Yearbook* and *World Currencies Yearbook.*

stabilization effort when inflation was reduced from 40 percent to 9 percent per annum, there was a significant real exchange rate appreciation that reduced the degree of competitiveness of the tradables sector at a time when, because of the trade reform among other factors, the *equilibrium* real exchange rate had significantly depreciated. In the Chilean case this real appreciation was partially the result of the active use of exchange rate management to bring down inflation; in mid-1979 the nominal exchange rate was fixed relative to the dollar. As is well known by now this real appreciation played an important role in the disappointing outcome of the Chilean episode; it seriously deprotected the tradables sector, it generated perverse expectations of devaluation and, ultimately, it conspired with the high real interest rates to provoke the worst financial debacle of Chilean history (Edwards and Cox-Edwards 1987).

A crucial objective of any stabilization program and, as pointed out in section 4.2, indeed of those undertaken by the major debtors, is to reduce the magnitude of the fiscal deficit. Many times there will be an important trade-off between a trade liberalization that reduces import tariffs and the achievement of this fiscal objective. Surprisingly, the policy and theoretical literatures on trade liberalization policies have most times tended to ignore the fiscal role of tariffs in the developing nations. Most theoretical and policy discussions on trade liberalization assume, along the lines of traditional trade theory, that tariff proceeds are handed back to the public. In reality, however, things are very different, with governments using tariff proceeds to finance their expenditure. This is

particularly the case in many of the poorer developing countries where for different institutional reasons taxes on international trade represent a high percentage of government revenue. Table 4.14, for example, contains data on the fiscal importance of taxes on international trade for eight countries. As may be seen, taxes on trade are as high as one-third of the total revenue of the central government.

As long as tariff rates are below the maximum revenue tariff, there will be a trade-off between trade liberalization and the generation of the government surplus required to finance debt servicing. While the reduction of tariffs will generally reduce distortions, it will also have a negative effect on government finances. What is required, then, is to replace trade restrictions by less distortive taxes that can generate the same (or a higher) amount of revenue. This, of course, means that major reforms of the tax system would be required in most countries. As long as this tax reform effort also focuses on efficiency aspects, it will tend to be concentrated on the imposition of a value-added tax (VAT), among other taxes. This is not easy and takes time, as a number of efforts to implement sweeping tax reforms have recently shown. Tax reforms are not only politically difficult to have approved, but from an administrative perspective it is many times very difficult to get them going. This is particularly the case in the poorer countries where the preexisting tax system is extremely rudimentary. Indeed the recent Indonesian tax reform has very clearly shown the difficulties involved in these types of efforts. (See Conrad and Gillis 1984). However, in middle income countries where there is an operating tax system of some sophistication, a major tax reform can be implemented with some speed. The Chilean tax reform of 1975 is, in that sense, a good example;

Table 4.14 **Taxes on International Trade as a Percentage of Government Revenue: Selected Developing Countries, 1984**

	$\left(\frac{\text{Import Tariffs}}{\text{Total Tax Revenue}}\right)^a$	$\left(\frac{\text{Taxes on Trade}}{\text{Total Revenue}}\right)^a$
Argentina	4.9%	13.3%
Bolivia	25.6	30.0
Chile	13.4	10.8
Indonesia	3.5	3.3
Korea	16.1	14.0
Mexico	3.0	2.7
Peru	10.2	n.a.
Philippines	22.1	23.7

Source: Constructed from raw data from the International Monetary Fund's *Government Finances Statistics Yearbook.*

[a]Refers to central government.

n.a. = not available.

in little over a year a major tax overhaul that introduced a VAT, full indexation, and unification of corporate and noncorporate tax rates was successfully implemented (Corbo, de Melo, and Tybout 1986).

Although in most cases the implementation of a major tax reform will take a substantial amount of time, there are some policies conducive both towards improved efficiency and higher revenues in the short run. The most obvious one is the replacement of QRs, (i.e., licenses, prohibitions, and so on) by import tariffs. A well-known feature of QRs is that unless they are auctioned, the government misses the revenue associated with the trade restriction. By replacing the QR by a tariff it is possible for the government to recapture this revenue.

The replacement of QRs by tariffs has two other potentially desireable effects. First, there is a potential for a positive effect on income distribution. This is be cause in most cases large (or even multinational) firms or large established merchants get the import licenses and, thus, the rents. By replacing the QRs by tariffs these rents are passed on to the government, allowing it to reduce other taxes, or even increase expenditures on social programs. Second, the replacement of tariffs by QRs will generally increase the effectiveness of devaluations. The reason is that the effects of devaluations are significantly different under quantity rationing (i.e., import quotas or licenses) than under import tariffs. In the latter case a (real) devaluation will result in a higher price of both importables and exportables relative to nontradables. Under QRs, however, while the domestic price of exportables will still increase, that of importables will usually not be affected. All the devaluation will do is reduce the rents received by the party that got the license.

A potential problem with the replacement of QRs by tariffs is that it is not easy to decide on the tariff level that should be imposed instead of the QR, since under a number of plausible conditions (domestic monopoly being perhaps the most common) tariffs and quotas will not be equivalent. In this case there is *no* tariff that will exactly replicate both the domestic price and quantity resulting from the QR. One possible alternative policy that has been used with some success in a few countries is to auction the quotas rather than allocate them in an arbitrary way.[32] Among the attractive features of this option is the fact that it is possible to maintain certainty on the volume imported, while at the same time the government captures back the rent associated with the quota allocation.

To sum up, in many countries, and in particular in the poorer ones with rudimentary tax systems, taxes on trade are a very important source of government revenue. This introduces an important trade-off between trade liberalization reforms and the maintenance (or achievement) of fiscal balance. In terms of the sequencing of reform, then, an

important principle is to make sure that tariff reduction reforms should only be undertaken once the fiscal sector has been reformed and other sources of revenue have been found.[33] Replacing QRs by tariffs or devising a QRs-auctioning system are measures that can be implemented without producing fiscal costs, while at the same time they improve efficiency. Also, by solving the fiscal imbalance first, the possibility of real exchange rate overvaluation is reduced.

4.3.3 Tariff Reform and Unemployment

The effects of trade reform on employment are a key consideration when evaluating the short-run effects of these policies. This is particularly the case under the current conditions, where countries are already experiencing very high levels of unemployment. Moreover, from a political economy perspective the unemployment effects of any policy are crucial; democratic governments—and even those not so democratic, but in a weakened position—will try not to generate massive unemployment: The costs of unemployment are recognized in the short run, while the benefits of the structural policies that provoked it usually are reaped in the medium run, when a different government is in office.

According to the simplest textbook approach, in a small developing economy with capital-intensive imports, fully mobile factors of production, and flexible prices, the reduction of import tariffs will have no effect on total employment even in the short run. In this simple setup the only labor market effects of trade liberalization will be a reallocation of labor out of importables and an increase in the real wage rate. However, in reality there are a number of reasons why these textbook conditions do not hold, and why tariff reforms can result in a decline of employment in the short run.

The Ricardo-Viner model with downward real wages inflexibility provides the simplest model for illustrating the possible short-run unemployment effects of a tariff reform. In this model capital is, in the short run, fixed to its sector of origin; only slowly through time (and possibly via investment) can capital be reallocated. Contrary to the more traditional textbook case with full flexibility of price and resource movements, in this more realistic model a tariff reduction can result in a reduction of the *equilibrium* real wage rate required to maintain full employment.[34] However, if for some reason such as government imposed minimum wages, indexation, or staggered contracts there is downward inflexibility of real wages, the required reduction in the wage rate will not take place, and unemployment will result. (See Edwards 1988a for a formal exposition on how this model works in a world with importables, exportables, and nontradables.) This unemployment, however, will only be of a short-run nature. As capital moves out of the importables sector and into the exportables and nontradables sec-

tors, there will be forces working for the equilibrium real wage to increase, and those workers previously laid off will be rehired. A requirement for real wages to increase and for unemployment to disappear in the longer run is that capital is indeed reallocated. However, if the reform lacks credibility as has been the case very often with liberalization episodes capital will not be reallocated and unemployment will persist (Edwards 1986).

A shortcoming of the version of the Ricardo-Viner model discussed above is that it assumes economy-wide real wage inflexibility and no initial unemployment. In fact, in most developing countries minimum or inflexible wages do not cover all sectors, and usually apply to the urban sector only. In that regard, a more satisfactory model can be built using a three-goods open economy version of the well known Harris-Todaro model with short-run sector-specific capital. (Throughout we maintain the very realistic assumption that importables are the most capital intensive, while nontradables are the most labor intensive goods.) Assume that while the importables (i.e., manufacturing) sector is subject to a minimum wage (in real terms), in the exportables and nontradables sectors there is wage flexibility. Initial equilibrium will be characterized by a positive amount of unemployment that will generate an equalization between the real wage in the exportables and nontradables sectors and the *expected* real wage in the importables (manufacturing) sector covered by the minimum wage. Under our assumptions the post-tariff reform short-run equilibrium (with capital still fixed to its sector of origin) will be characterized by (1) lower employment in the sector covered by the minimum wage (importables); (2) lower wages in the uncovered sector, expressed in terms of exportables; (3) either higher or lower equilibrium unemployment; (4) either lower or higher employment in nontradables; (5) higher employment and production of exportables. (see Edwards 1988a for a detailed analysis).

Not surprisingly this case of partial minimum wage coverage generates very different results from the case of an economy-wide minimum wage discussed above. First, we now have an increase in production and employment in exportables. Second, it is possible that in our partial-coverage case employment in nontradables will also increase. Also, in this case a tariff reduction reform may generate smaller unemployment in the short run, whereas in the case of an economy-wide minimum wage greater unemployment always resulted in the short run as a consequence of a decline in the tariff (see Edwards 1988a for a detailed discussion).

These models suggest that, contrary to the simplistic textbook view, as long as it takes time to reallocate capital from one sector to the other and (real) wages are inflexible, a tariff reduction reform may very well result in unemployment. A first-best solution to this problem is to (fully)

eliminate the sources of real wage rigidity; with complete flexibility wages will, in the short run, go down until all the labor force is absorbed. However, if for political or other reasons real wages cannot fall sufficiently, a second-best solution is to proceed slowly with the trade reform; tariffs should be reduced gradually in a preannounced fashion. In theory, in this way capital owners will have time to reallocate capital, avoiding the unemployment effects of the trade reform (see Edwards 1988a). Once again, for this solution to work, capital allocation should, in fact, respond to the *announcement* of reform; that is, the reform should be *credible*.[35] (See section 4.3.5 below.)

The NBER multicountry study on trade regimes and employment directed by Anne Krueger (1983) has provided ample evidence suggesting that countries that have followed outward-oriented policies have generally had a better employment record, both in terms of employment creation and lower unemployment rates over the long run, than those nations that have adopted import substitution industrialization strategies. This study, however, refers to the long-run characteristics and performance of the labor markets and does not say much about the aggregate employment effects during the transition immediately following a tariff reform.

The limited existing evidence on the short-run aggregate employment consequences of trade liberalization indicates that in the case of mild reforms there have not been significant aggregate unemployment effects. This, indeed, would seem to be one of the preliminary conclusions of the exhaustive cross-country study undertaken at the World Bank and directed by Papageorgiou, Michaely, and Choksi (1986). It is, however, somewhat difficult to interpret the evidence from this massive investigation. For example, the episodes analyzed many times refer to exceedingly mild liberalizations; for example, the 1970 Turkish devaluation, included in the study, would barely qualify as even a very timid liberalization. Also, from these studies, it is not possible to know in a precise way whether specific changes in aggregate employment respond to the trade reform, or if they are the result of other policies. This is the case, for example, of the slight increases in aggregate unemployment observed after a number of trade reforms, including the Turkish liberalization of 1980, the Korean reform of 1979–80, the Philippines' liberalization of 1981, and the Israeli reform of 1972–77.

Once again the Chilean experience, with its textbook-type policies is educational. As already mentioned, between 1974 and 1979 Chile underwent one of the most, if not the most, ambitious trade liberalization of modern times: Quantitative restrictions were fully eliminated, a multiple exchange rate system consisting of up to 15 different exchange rates was unified, and tariffs were slashed to a uniform 10 percent. During this same period unemployment in Chile was very high,

reaching more than 20 percent in 1975 and never falling below 15 percent. A subject extensively debated in Chile's popular media, as well as in the specialized press, is the extent to which the process of tariff reduction "contributed" to the unemployment problem. There is little doubt that as a result of the tariff reform a number of contracting, and even disappearing manufacturing firms laid off large numbers of workers. On the other hand, expanding firms from the exporting sectors increased employment, partially offsetting the negative effect. The net result, however, was an increase in unemployment generated by the trade reform. This negative effect was particularly marked in manufacturing where firms worked their way out of the difficult situation created by increased foreign competition by trimming their payrolls and increasing productivity (Edwards and Cox-Edwards 1987).

There were two main ways in which the tariff liberalization generated short-run unemployment in Chile. First, there was a natural adjustment period where laid-off workers took time to start searching for work in a different, expanding sector. Second, the fact that in reality—contrary to the simplest textbook case—physical capital is fixed in its sector of origin made the expansion of production in a number of the exporting sectors somewhat sluggish at first. Only as additional investment took place through time was it possible to fully increase production and employment in these expanding sectors. However, the existence of wage rigidity and in particular of a minimum wage in real terms made the absorption of labor by the expanding industries more difficult.[36] It is argued in Edwards (1985) that a slower reform would have resulted in a reduced unemployment effect. The proportion of *total* unemployment that can be attributed to the tariff reform is, however, relatively small when compared to the magnitude of the overall unemployment problem. Edwards (1985), for example, calculated that an upper bound for the unemployment effects of the trade reform was 3.5 percentage points of the labor force, or 129,000 people, with the bulk of this unemployment located in the food, beverages, tobacco, textiles, and leather products subsectors (57,000 people). More recently, de la Cuadra and Hachette (1986) have calculated that the trade reform generated a reduction of employment in the manufacturing sector of approximately 50,000 workers. Even though these are not negligible numbers, they clearly indicate that an explanation for the bulk of the Chilean unemployment should be sought elsewhere.

The above discussion has concentrated on the possible beneficial effects of a gradual trade reform on employment. However, there are other channels, mainly via an intertemporal effect on expenditure, through which a gradual tariff reform can have positive effects on the economy. For example, a slow reduction of tariffs will generally have a positive impact on the savings rate and on the current account. To

the extent that the gradual trade liberalization process is a credible proposition, it will have a nontrivial effect towards reducing the consumption rate of interest. As the public expects tariffs, and thus the domestic price of importables, to be lower in the future it will postpone current consumption. Consequently savings will increase and the current account will improve.

In sum, a gradual lowering of tariffs offers a number of attractive features for economies such as those in the debt-ridden countries. First, this strategy is likely to reduce the short-run unemployment consequences of the trade reform. Second, there will likely be positive effects on savings, helping growth prospects. Third, it will tend to improve the current account. And finally, a gradual reduction of tariffs will have positive effects on the government budget. On the negative side a gradual trade reform may lack credibility, in which case it may even induce perverse responses (see section 4.3.5).

4.3.4 Structural Adjustment and Devaluation

Nominal devaluations are an important component of most stabilization programs, and as discussed in section 4.2 they have played a central role in the adjustment efforts following the debt crisis. The purpose of these nominal devaluations is to generate a *real* exchange rate adjustment, that would reverse the real appreciation that most times precedes the balance of payments crisis. In turn, by improving the degree of domestic competitiveness and raising the domestic price of tradables the real devaluations are supposed to improve the external sector accounts of the country in question. Historically, however, when implementing stepwise discrete nominal devaluations, many developing nations have found it difficult to sustain the real devaluations for a long period. In a large number of cases after some time, usually ranging from one to two years, the real exchange rate effect of the nominal discrete devaluation has been fully eroded. In almost every instance this erosion can be traced back to the failure to implement consistent macroeconomic policies alongside the devaluations (see Edwards, forthcoming).

Devaluations have also played a key role in the trade reform component of structural adjustment programs. It is generally accepted in policy circles that in order for a tariff reform to be successful, it has to be accompanied—if not preceded—by a real devaluation (see, however, Edwards forthcoming for a critical evaluation of this proposition). The argument usually given is based on a partial equilibrium interpretation of the elasticities approach to exchange rate determination, and runs along the following lines: A lower tariff will reduce the domestic price of importables, and consequently increase the demand for imports. This, in turn, will generate an external imbalance (i.e., a trade

account deficit), which assuming that the Marshall-Lerner condition holds, will require a (real) devaluation to restore equilibrium. This view is clearly captured by the following quotation from Balassa (1982, 16): "[E]liminating protective measures would necessitate a devaluation in order to offset the resulting deficit in the balance of payments." It is along these lines, then, that the proponents of major liberalizations by the debt-ridden countries have insisted that these tariff reductions should be accompanied by significant nominal devaluations (Balassa, Kuezynski, and Simeonsen 1986).

The "required" amount of devaluation will depend on a number of factors, including the initial conditions, the extent of the trade reform, the magnitude of the disequilibrium gap to be closed, and the accompanying macroeconomic policies.[37] In addition, and perhaps more importantly, the required devaluation will also depend on the speed at which the trade reform is implemented. Since, for a number of reasons including the short-run fixity of capital, short-run supply elasticities are much lower than long-run elasticities, under most circumstances a rapid trade reform will necessitate a higher real devaluation to maintain external equilibrium.[38]

Until quite recently most traditional structural adjustment programs in the developing nations have contemplated discreet nominal devaluations where the official nominal exchange rate is abruptly adjusted by a fairly large percentage. More recently, however, more and more countries are opting for the adoption of some sort of crawling peg after the devaluation. In a recent study on 18 devaluation episodes in Latin America, Edwards (1988b) found that those countries that had adopted a crawling peg had been significantly more successful in sustaining a real depreciation than the discrete devaluers. This, of course, is not in itself surprising, since the crawlers maintained their real devaluation targets by "fighting off" the real exchange rate erosion with additional nominal devaluations in the following years. Typically, under this type of regime, after the initial exchange rate adjustment the authorities further devalue the currency in magnitudes approximately equal to the domestic rate of inflation. Of course, a potential problem with this policy is that it can lead to an explosive (nonconvergent) process, where the devaluation generates inflation, which partially erodes the real effect of the devaluation; this leads to a higher devaluation and even higher inflation and so on, *ad infinitum*. This possible unstable path could happen in those countries where the structural macroeconomic disequilibrium, and in particular the fiscal deficit, have not been corrected to a significant extent. An alternative scenario is one where macroeconomic equilibrium is attained and the process is stabilized at some mild rate of inflation, as in Chile in the recent period and in Colombia since 1967. The cited study by Edwards indicates that among

the Latin American crawlers in Bolivia (1982), Peru (1975), and Mexico (1982), the higher real exchange rate was sustained at the cost of a substantial permanent increase in the rate of inflation.

In spite of the prominent role of devaluations in conventional adjustment programs, very little work has investigated empirically the effects of devaluations on the real level of economic activity or on income distribution. A recently revived strand of literature has argued that although devaluations may have a positive effect on the external accounts, they will achieve this at the cost of significant reductions in real activity. This is the so-called contractionary devaluation hypothesis. Edwards (forthcoming), has analyzed in detail the behavior of a large number of key economic variables during 39 devaluation episodes in developing countries. In this study the evolution of some key variables during the period going from three years prior to the devaluation to three years after the devaluation was analyzed and compared to the behavior of the same variables for a control group of 24 nondevaluing countries. Table 4.15 provides a summary of the distribution of the rate of growth of real GDP for the devaluing countries and the control group. Notice that three years prior to the devaluation this distribution is very similar to that of the control group. In fact, using a chi-square test for homogeneity we are unable to reject the null hypothesis that these data come from the same distribution ($\chi^2(2) = 0.046$).

Things, however, are very different as we approach the devaluation. Already during the two years prior to the devaluation we can see a significant difference between the devaluing and control groups, with the former exhibiting substantially lower levels of growth in every quartile. The chi-square test strongly rejects the null hypothesis of

Table 4.15 **Growth of Real GDP in Devaluing and Nondevaluing Countries (in percent)**

	First Quartile	Median	Third Quartile
A. 39 Devaluing Countries			
3 years before	7.4	6.0	4.7
2 years before	8.4	6.1	3.6
1 year before	7.3	5.4	2.3
Year of devaluation	6.1	4.2	1.2
1 year after	6.4	4.7	3.1
2 years after	6.4	4.7	3.1
3 years after	9.2	5.8	3.2
B. Control Group of 29 Nondevaluing Countries			
	7.4	6.4	4.5

Source: Edwards (forthcoming).

homogeneity for the year of the devaluation ($\chi^2(2) = 7.02$) and all three years following devaluation. Notice, however, that the years following devaluation a fairly fast recovery in the rate of growth of real GDP is detected. Although the information presented in this table is quite revealing, it does not allow us to know whether this behavior of real GDP growth is caused by devaluation or if it is the result of some of the policies preceding the devaluation. This problem can be partially avoided by using regression analysis. The following result was obtained using instrumental variables on a variance component model of 12 countries for 1965–80:

$$\begin{aligned}\log y_{tm} = {} & \underset{(1.146)}{0.102}\,[\Delta\log M_t - \Delta\log M_t^*] + \underset{(2.331)}{0.210} \\ & [\Delta\log M_{t-1} - \Delta\log M_{t1}^*] \\ & + \underset{(3.023)}{0.112}\log(GE/Y)_t - \underset{(2.103)}{0.083}\log e_t + \underset{(2.086)}{0.069}\log e_{t-1} \\ & + \underset{(1.431)}{0.044}\log\tau_t - \underset{(-0.265)}{0.008}\log\tau_{t-1} \qquad \bar{R}^2 = 0.998 \\ & \qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad SEE = 0.038\end{aligned}$$

where y is real output, $[\Delta\log M - \Delta\log M^*]$ is the unexpected rate of growth of money, (GE/Y) is the ratio of government expenditure to GNP, e is the real exchange rate, and τ is the terms of trade. According to these results then, in the short run devaluations have led to a slight fall in output: A 10 percent depreciation leads to a one-time loss of almost 1 percent of GNP. In the second year, the economy returns to trend.[39]

Income distribution data are very scarce in the developing countries. This undoubtedly explains, at least partially, why there have been practically no studies on the effects of devaluations on income distribution. However, there is little doubt that income and wealth distribution considerations enter heavily in the decisions of what kind of policies to implement. In table 4.16 I present, as an illustration, some very preliminary data on devaluation and income distribution in 23 developing nations. This table contains the ratio of labor compensations to GDP for a period that goes from four years prior to a major devaluation to three years after the devaluations. The first column in the table provides information on the year of the devaluation. Although the ratio of workers' compensations is a very rudimentary measure of income distribution, and this type of "before" and "after" methodology has well-known shortcomings, the data are quite revealing. They confirm that in *some* instances devaluations have been followed by major worsenings in income distribution (i.e., Peru 1975). This trend, however, cannot be found in all cases, and not even in the majority of episodes. In

Table 4.16 **Devaluations and Income Distribution (percentage of compensation to employees with respect to GDP)**

	Year of Devaluation	Devaluation Year −4	−3	−2	−1	0	+1	+2	+3
Argentina	1970	40	41	40	40	41	42	39	43
Bolivia	1971	37	37	34	36	35	32	30	33
	1979	33	34	35	35	36	36	n.a.	n.a.
	1982	35	36	36	n.a.	n.a.	n.a.	n.a.	n.a.
Chile	1982	39	36	38	40	n.a.	n.a.	n.a.	n.a.
Colombia	1962	n.a.	n.a.	34	36	38	38	36	37
	1964	34	36	38	38	36	37	36	37
	1965	36	38	38	36	37	36	37	36
	1967	38	36	37	36	37	36	38	38
Costa Rica	1974	47	48	48	45	45	46	47	45
Cyprus[a]	1967	87	87	88	87	88	88	88	88
Ecuador	1961	n.a.	n.a.	n.a.	28	29	29	29	28
	1970	27	27	28	28	29	30	28	26
	1982	28	28	32	30	29	n.a.	n.a.	n.a.
Egypt[b]	1962	n.a.	n.a.	39	41	42	42	40	41
	1979	46	39	38	37	33	34	n.a.	n.a.
Guyana	1967	47	47	48	49	49	49	48	49
India	1966	73	72	74	72	74	77	75	74

Indonesia[a]	1978	89	89	89	89	89	89	90	90
Israel	1962	n.a.	n.a.	44	44	44	44	45	48
	1967	44	45	48	50	50	46	44	47
	1971	50	46	44	47	46	43	45	43
Jamaica	1967	50	50	50	46	47	48	49	50
	1978	54	56	57	56	52	51	51	53
Kenya	1981	32	34	35	35	n.a.	n.a.	n.a.	n.a.
Korea	1980	32	33	37	36	37	35	38	
Malta	1967	49	50	49	47	47	47	47	50
Mexico	1976	37	36	37	38	40	39	38	38
	1982	38	38	36	37	36	n.a.	n.a.	n.a.
Nicaragua	1979	54	55	54	56	n.a.	n.a.	n.a.	n.a.
Pakistan[a]	1972	87	81	84	85	85	86	88	86
	1982	86	84	83	84	84	n.a.	n.a.	n.a.
Peru	1975	36	38	39	37	37	37	37	32
Philippines[a]	1962	n.a.	n.a.	88	87	87	86	86	86
	1970	86	86	86	86	84	83	83	82
Sri Lanka	1967	45	41	43	42	41	41	39	36
Venezuela	1964	45	45	42	43	43	43	44	45

Source: United Nations, *Yearbook of National Accounts Statistics*.

[a](Compensation to employees + operating surplus)/GDP.

[b]Year beginning July 1.

n.a. = not available.

fact, in a number of them the ratio of labor compensation increased following the devaluation. More than anything, however, these data indicate that in order to have a full understanding of the income distribution consequences of devaluations, it is necessary to look at more detailed data and at alternative categories, including the effect of devaluations on the rural/urban distribution of income.

To sum up then, the discussion in this section reveals once again the existence of important trade-offs associated with the different goals of the adjustment program. While devaluation will generally have a positive effect on the external sector, helping generate the necessary excess supply for tradables, and easing the transition following a trade liberalization, it will have a negative impact on the cost of foreign exchange to the government and on real GDP growth. In addition, devaluation will usually have important effects on income distribution and on inflation. Since the magnitude of "required" (real) devaluations will be closely related to the speed at which structural reforms are implemented, this discussion points out, once more, the desirability of proceeding gradually both with respect to debt payment and to structural reforms.

4.3.5 Credibility, Sustainability, and Reversibility of Trade Reforms

Credibility is a fundamental ingredient of successful structural reforms. If the public attaches a nontrivial probability to policy reversal, it will try to anticipate this event, generally introducing strong destabilizing forces into the structural adjustment process.

Latin America's history is replete with frustrated economic reforms that have failed because of their lack of credibility. In that respect, the frustrated Argentine trade reform during the Martinez de Hoz period is very educational. Because of lack of credibility on the future of the preannounced trade reform, firms used foreign funds in order to survive in the short run. As Carlos Rodriguez (1983, 28) has put it in his evaluation of the Argentine experience of 1978–82: "As a consequence of the *lack of credibility* on the continuity of the economic program, many firms—which would have disappeared due to the tariff reductions—decided to get into debt in order to remain operating while waiting for a change in the economic strategy"[emphasis added].

A fundamental aspect of establishing credibility is related to the perception the public has of the internal consistency of the policies being pursued. In that respect, for example, the inconsistency of the Argentine fiscal policy, which maintained a very large deficit, and the preannounced exchange rate policy severely undermined the degree of credibility of the reform process. In the case of Chile the markedly overvalued currency in 1981 was seen by large segments of the public

as inconsistent with the long-run viability of the liberalized economy. In general, if the real exchange rate experiences an unprecedented real appreciation, the public will think that exports will not be able to develop and that there is a nontrivial probability of the reform's being reversed in the future. Under these circumstances it will be optimal for consumers to get into debt today in order to acquire "cheap" importables.

The inability to establish consistency between fiscal and exchange rate policies has many times been at the heart of the trade reform credibility crises in Latin America. For example, in most cases where (mild) trade reforms have been reversed, the public early on perceived that the inflation tax required to finance the fiscal dificit was inconsistent with maintaining a predetermined nominal exchange rate. Under these circumstances expectations of overvaluation, speculative attacks, exchange controls, and future devaluations developed. In trying to anticipate these events the optimizing private sector will usually take steps—such as diversifying its portfolio internationally (i.e., "capital flight")—that will sometimes move the economy in the opposite direction from that intended by the reform. Edwards (1988c) has found that more than 80 percent of reversals of trade liberalizations in Latin America can be traced to inconsistent fiscal policies.

An important question is whether a gradual (i.e., slow) trade reform will be less or more credible than an abrupt one. Theoretical models of credibility of economic policy are only now being developed, and have not yet reached a level that enables us to answer this question with enough precision.[40] In principle, it is possible to argue that gradualism has characteristics that work in both directions, at the same time enhancing and compromising credibility. On the one hand, by reducing the unemployment effect, and by allowing for a firmer fiscal equilibrium, a gradual trade reform will tend to be more credible; on the other hand a slow reform will allow those groups negatively affected by it (i.e., the import substitution manufacturing sector) to organize and lobby against the policies. At the end, as is so often the case in economics, whether gradualism will enhance credibility will depend on factors specific to each country. What is clear, however, is that policymakers should always pay special attention on the establishment of credibility when persuing important long-term structural changes.

Although at this point, given our knowledge of the policymaking process and its interaction with the private sector, it is not possible to derive a precise theorem, the arguments presented in this section—including unemployment, fiscal, and other considerations—suggest that, in general, it would be more prudent to implement the trade reform component of an outward-orientated policy in a gradual way.

4.4 Concluding Remarks and Summary

The adjustment packages of 1982–87 sought "effectiveness." On some grounds, and especially in terms of the turnarounds of the current accounts, the results have been quite impressive. The costs, however, have been high. Not only did real income decline, as illustrated in table 4.2, but real wages declined in most countries, and unemployment soared. There is little doubt that this is not a sustainable adjustment path. A successful adjustment means that debtor countries will have to bring down their debt-to-GDP ratios to a level consistent with the reestablishment of creditworthiness, while recovering their growth of output and consumption. The first objective means that the country has to transfer a given discounted value of resources to the rest of the world. The second means that the country has to increase its rate of capital formation and the efficiency of resource use. The problem faced by the highly indebted nations can be posed as follows: how to minimize the present value of the foregone consumption from making a transfer of a specific discounted value. The problem then has two dimensions: how to minimize the cost of the transfer at each moment of time, including its distributive aspect, and what should be the flow of transfers over time consistent with a given present value of the flow.

The speed with which the transfer to the rest of the world is made will affect the (discounted value of the) cost of achieving creditworthiness. A very fast increase in the trade surplus can only be obtained at a very high cost in terms of nontraded goods and losses in employment, both because it takes time for factors to be retrained and to move, and because of wage inflexibility in the short run. It also takes time to implement efficient fiscal instruments to generate the fiscal surplus, particularly if one wants to eliminate the present reliance of taxes on trade and the inflationary finance of the deficit. Finally, improving the allocation of investment and promoting the return of capital flight may involve liberalizing financial markets, which will increase the fiscal cost of servicing internal debt. Thus, improved efficiency and capital accumulation will require important increases in nondistortive taxes and cuts in public expenditures: but this takes time. In sum, there are important trade-offs between effecting the transfer rapidly and minimizing its cost at one moment of time. Instruments that help generate the trade surplus quickly—like quantitative restrictions—increase the resource cost of achieving the transfer. Instruments that solve the fiscal problem quickly—like using tariffs or QRs instead of a devaluation—also increase that cost.

A slower speed of adjustment can only be achieved if the magnitude of the transfer countries have to make is reduced during the initial years. One way of achieving this is by providing these countries with

additional lending during the transition. In principle this will allow the implementation of slower expenditure-switching policies and the implementation of more efficient fiscal instruments to raise public resources. Most importantly, it will allow the investment rates to be kept up without unduly sacrificing consumption. Thus there is a complementarity between extra lending during the transition and the recovery of growth while transferring abroad a given present value of resources.

A longer-run solution of the debt crisis will clearly require the adoption of policies that rely more heavily than in the past on export growth. Even ECLA/CEPAL, the former champion of import substitution development, has recommended outward-oriented policies. Export promotion requires some kind of trade liberalization and tariff reduction, especially of imported inputs and capital goods. Indeed, the historical evidence clearly shows that those countries that have successfully pursued export promotion (i.e., the East Asian nations), have had a trade regime substantially more liberal than those countries that have followed indiscriminate import substitution based on protectionism. A crucial question, however, is how much trade liberalization is needed. It is argued in the chapter that although outward orientation requires *some* trade liberalization, there are no reasons, either theoretical or empirical, that suggest that the "optimal" degree of liberalization implies zero, or even very low, tariffs coupled with no government intervention in any sphere of the development process. The successful experiences with export-led growth in the East Asian countries support this view; although in these countries the trade regime has been significantly liberal, government intervention has been important and tariffs have never been anything close to zero or a very low (i.e., 10–15 percent) uniform level.

An important policy question is whether the trade liberalization component of an outward-oriented strategy should be attempted at the same time that a country is embarked on a severe stabilization program. It is argued in the chapter that, in general, it is not recommended to undertake substantial trade reforms at the same time that a major anti-inflationary program is underway. This is both for fiscal and real exchange rate reasons. However, there are some measures, such as the replacement of quotas for tariffs, that can help both the anti-inflation drive as well as the quest for improvement of efficiency.

Under the most plausible circumstances a fast trade liberalization will generate short-run unemployment effects. Indeed, the empirical evidence from the Southern Cone tends to confirm this presumption. This suggests that trade liberalization should be a gradual and pre-announced process. This, however, brings up serious credibility issues. Only if the announced gradual trade reform is "credible" will economic agents react as expected by the authorities. The analysis of devaluations

presented in section 4.3 clearly suggests that under many circumstances abrupt devaluations can generate nontrivial short-run costs in the form of output reductions and unemployment. It is argued that gradual liberalizations will require smaller devaluations, possibly reducing the associated costs.

A sustained increase in the indebted countries' exports—which is, of course, a prerequisite for a long-term solution to the crisis—will not only require an efficient tradables sector and a "realistic" real exchange rate but, more important, that the current protectionist trend in the industrial countries and in particular in the United States be reversed. Data presented by Edwards (1987a) indicate that at this time the extent of nontariff barriers, as a form of protection in the industrial countries, is very significant. Moreover, the data show that these trade impediments are particularly important for goods originating in the developing nations, and that their tariff equivalents are in many cases very significant. Asking the highly indebted developing countries to pay their debts while impeding their exports from reaching the industrialized markets is not only unfair, but also politically unwise.

Notes

1. It should be noticed, however, that most experts now agree that in some of the poorer countries it would be highly implausible to reduce the debt-export ratio to the levels required for access to new voluntary financing. In these cases some innovative and less orthodox solutions, including debt forgiveness, may be the most efficient way out.

2. See, for example, Balassa et. al. (1986) and Krueger (1987).

3. The IMF's 15 highly indebted countries are: Argentina, Bolivia, Brazil, Chile, Colombia, Ivory Coast, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.

4. On the Brazilian experience see Cardoso and Fishlow (1987); on Mexico see Buffie and Sangines (1987); Celâsun and Rodrik (1987) deal with Turkey. These papers are published in the country studies volumes of this project. On Chile see Edwards and Cox-Edwards (1987).

5. See Dornbusch (chap. 8 in this volume) for discussion of the role of the developed countries' macropolicies on the development of the crisis.

6. See Bianchi, Devlin, and Ramos (1987).

7. Notice, however, that it is not completely rigorous to talk about overvalued real exchange rates without first analyzing the way in which the equilibrium real exchange rate has evolved (see Edwards, forthcoming). In the case of the debtor countries, however, the existing evidence clearly suggests that significant overvaluations developed.

8. On the Chilean experience see Edwards (1985) and Edwards and Cox-Edwards (1987).

9. On Argentina see Calvo (1986a) and Corbo, de Melo, and Tybout (1986).

10. On Colombia see Thomas (1986). See Collins and Park (1987) on Korea and Woo and Nasution (1987) on Indonesia.

11. The exact time periods are Argentina, 1982–85; Ecuador, 1982–83; Mexico, 1983–84; Uruguay, 1982–84; and Venezuela, 1982–83.

12. Computed from raw data published in IMF, *Government Finance Statistics Yearbook*, 1986.

13. See Edwards and Cox-Edwards (1987).

14. Although real devaluations will increase the servicing of public debts in real domestic currency, they can have some other positive effects on the public sector's budget. This will be the case in those countries where the main exporting firms are government owned.

15. On the Argentine exchange rate guarantees scheme, see Calvo (1986a); on Chile see Edwards (1985).

16. For a detailed analysis on the nonequivalence between quotas and tariffs see Bhagwati (1978). See also Hillman, Tower, and Fishelson (1980).

17. Note, however, that in spite of Khan and Knight's description in the past not every Fund sponsored program included exchange rate actions. It is in fact important to recognize that historically the IMF has exhibited significantly more flexibility than its critics have given it credit for. There has been, to some extent, a case-by-case approach. From the record it seems, however, that the Fund staff considers that the vast majority of the cases are quite similar.

18. Balassa et al. (1986) and Krueger (1987) are good representatives of this view. See also Fischer (1986).

19. The other policies advocated by Balassa et al. (1986) include financial reform, stable real exchange rates, and a much reduced role for the government.

20. On the evidence on the performance of outward- vs. inward-oriented strategies see, for example, the World Book, *World Development Report 1987* and the literature cited therein. On CEPAL see, for example, Bianchi, Devlin, and Ramos (1987).

21. See Krueger (1978) and Bhagwati (1978). On earlier discussions on liberalization see Little, Scitovsky, and Scott (1971). For a recent treatment of many of these issues see the volume edited by Choksi and Papageorgiou (1986).

22. This was indeed the meaning given by some to the concept during the Southern Cone experiences with market-oriented policies in the late 1970s and early 1980s. In a recent paper Bhagwati (1986) has made an effort to define in a precise way export promotion, import substitution, and ultra trade-promoting trade policies. In the rest of this paper we will stick to trade and commercial policies when referring to trade liberalization.

23. See, for example, Bhagwati's (1986) splendid paper on outward orientation. To date the most impressive accumulation of empirical evidence supporting the better performance of outward orientation has been compiled in the 1987 *World Development Report*. See also Bhagwati and Srinivasan (1978).

24. See, for example, World Bank (1986).

25. On Colombia see Thomas (1986).

26. Naturally, the welfare effects of trade liberalizations fall within the realm of second-best economics. Rigorously speaking if there are other distortions, as invariably there are in the real world, it is not possible to know a priori if a partial trade liberalization will be welfare improving. If there are no other distortions, it is possible to establish a positive relation between the level of tariffs and the level of *income*. Still however, no traditional growth model will link no tariffs to higher growth (see Lucas 1985).

27. Notice, however, that even the Koreans made mistakes when they pushed the government role too far. In that respect, the fiasco of 1974–79 when the government picked the wrong "winners" is well known. See World Bank (1986).

28. See, for example, Krueger (1981) and Little (1982).

29. See, for example, Edwards (1988b) for a detailed analysis of 18 stabilization with mild liberalization episodes in Latin America.

30. Naturally, although very common, this is not the only scenario leading to a stabilization with structural adjustment program. In an alternative scenario that fits some country's experiences during the period leading to the debt crisis, the fiscal expansion is financed with foreign borrowing instead of money creation. In this case the path leading to the need to adjust in not necessarily characterized by a piling up of trade and exchange controls.

31. The recent Bolivian experience is also characterized by a tremendous trade liberalization. However, the fact that this was part of a package to defeat *hyperinflation* sets the Bolivian case apart.

32. While a number of countries have successfully used foreign exchange auctions—Jamaica, Sierra Leone, Uganda—only a few have implemented generalized auctions for imports of goods. See Krumm (1985) for a discussion on different experiences with exchange auctions.

33. Notice, however, that from a welfare perspective this is by no means a trivial proposition. Indeed, from a purely theoretical point of view it is not clear that reducing tariffs and increasing other taxes will be welfare improving. Moreover, at least at the theoretical level, it is not clear that welfare will increase if, as liberalization advocates have sometimes proposed, consumption taxes are raised as tariffs are reduced. This, of course, is a simple application of the second-best theorem.

34. Whether this reduction in the equilibrium real wage will actually take place will depend on the weight of exportables in the price level relevant for determining real wages. If, as in a large number of developing countries, exportables (i.e., foodstuffs) have a large weight in the consumer price index the equilibrium real wage will indeed decline (see Edwards 1988a).

35. On theoretical models of the labor market effects of trade reforms see Edwards (1986; 1988a) and the references cited therein.

36. See chapter 6 of Edwards and Cox-Edwards (1987) for a detailed discussion of the evolution of wages in Chile.

37. We are referring to the extent of *real* devaluation. However, since the real exchange rate is not a policy tool, economic authorities face the additional difficulty of deciding by how much to adjust the *nominal* exchange rate in order to generate a given real devaluation.

38. This statement assumes that a tariff reduction will result in an equilibrium real exchange rate depreciation. Although this is the more plausible case, theoretically it is not the only possible result (see Edwards 1987b).

39. The countries included in this regression are: Brazil, Colombia, El Salvador, Greece, India, Israel, Malaysia, Philippines, South Africa, Sri Lanka, Thailand, and Yugoslavia. The equation was estimated using a fixed effect instrumental variables procedure, where country-specific dummy variables were included. The following instruments were used: all the exogenous variables, twice-lagged money surprises, twice-lagged terms of trade, twice-lagged real exchange rates, contemporary, lagged and twice-lagged growth of domestic credit (for details, see Edwards 1986).

40. Guillermo Calvo, however, has recently made important contributions to this key area of the theory of economic policy (see Calvo 1986b; 1987).

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