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ADJUSTMENT, STABILIZATION AND INVESTMENT PERFORMANCE: CHILE, MEXICO AND BOLIVIA

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Adjustment, Stabilization and Investment Performance: Chile, Mexico and Bolívia

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1. Introduction

What explains the diversity of investment performances amongst Latin American countries in the late 1980's and early 1990's? What role does structural and fiscal reforms play in explaining the diversity of experiences? Are there negative sequels and uncertainties associated with the adoption of these reforms? These are the main questions treated in this paper.

From the 1950's to the 1970's, Latin American economies performed quite well with high rates of growth of total and per capita GDP and relatively low rates of inflation. The import substitution (IS) strategy was successful in integrating the domestic industry and creating a congenial environment for private investments, both foreign and domestic, in many countries of the region. Public sector investments played an important ancillary role in the process by providing the private sector with the required externalities. In 1975, private investment as a percentage of GDP was 12% in Argentina, 21% in Brazil and 13% in Mexico. Total investment, i.e. private and public, as a percentage of GDP was 19% in Argentina, 30% in Brazil and 23% in Mexico.

The maladies of the IS strategy cum active State participation are very noticeable today. The IS strategy created a myriad of discretionary policies which are simply impossible to untangle. As a result, the survival of the IS system would imply the persistence of an incredible degree of distortion of market signals with strong negative effects on the determinants of industrial competitiveness. The corporatist nature of the State in most Latin American countries, on the other hand, is also an important source of inefficiencies.

Perhaps the economic and social problems faced by the countries in the region are not inherently associated with some degree of protection to domestic producers or vigorous State intervention. They seem to be associated with the lack of incentives to competitiveness of private agents which indeed developed as a result of ad-hoc or clientelistic industrial policies and state interventions. Accordingly, there is a strong feeling in the region that before restoring the notions of discretionary industrial policies and state intervention --if they are to be restored at all-- the current apparatuses must be annihilated. In other words, we must start from step zero again.

The external debt crisis of the early 1980's to a certain extent denounced the ingrained problems of the economic systems of most countries in the region. The debt crisis demanded some flexibility or capacity to respond to shocks which simply were not there. It took almost two decades to early starters --like Chile-- to recover. Some countries have started to respond in the mid-1980's and are giving signs of recovery in the last two or three years. Most countries were not able to respond and are still struggling with very fuzzy trade policies, huge fiscal deficits, and growing social disarray.

The aim of this paper is to look at the experience of three countries which have given important steps towards stabilization and adjustment, namely, Chile, Mexico and Bolivia. The study is based on a survey of the literature on structural adjustment and stabilization efforts in these countries. It will concentrate on such measures as fiscal restraint, privatizations and trade liberalization in order to evaluate their proximate roles in explaining the performance of private investment in these countries.

After a brief discussion of the factors affecting public and private investment in highly indebted countries (section 2) and a description of the design of the survey (section 3), the paper examines the experiences of Chile (section 4), Bolivia (section 5) and Mexico (section 6). The structure of these three sections follow a common pattern: first we look at the macroeconomic record of the country under consideration over the 1980's, then we examine the main changes in the public sector savings and borrowing requirements, next we discuss the major structural reforms and the stabilization effort, and finally we explore the proximate factors affecting the performance of private investment. The analysis of the Chilean case is a bit longer in face of its paradigmatic situation. Section 7 presents a summary of the findings and explores the diversity of experiences in order to advance a few conclusions.

2. An Overview of the Determinants of Public and Private Investment

The determinants of private investment can be divided in two broad sets. One which includes the determinants of savings and another which affects the incentives of private investment. Approaching the causes of the reduction in investment ratios from a purely 'Keynesian' perspective, i.e. focusing on the incentives to invest, is certainly misleading. There exists a limit to debt-financed investments, and indeed, the limits to external as well as domestic finance of public investments were quite stringent over the 1980's. On the other hand, to look at saving ratios alone may be very misleading as well. The incentives to invest range from the financial costs and the opportunity costs of private investment to effects of the economic and social environment on the psychology of the business community. The instability of the economic environment and the enlargement of the so-called social debt in most Latin American countries has certainly reduced the incentives to invest in the region.

The diagram below provides a simple picture of the factors affecting the saving ratios and the incentive to invest in highly indebted Latin American countries. We take the debt crisis as a causa causans factor which does not mean that the other elements do not have a life of their own. In particular, the institutions and power correlation in each country did affect the choice of public policies and hence all the elements considered on the diagram.

Debt Crisis

- Reduction in foreign saving (financial capital, direct investment) -----> Devaluations
- Fiscal crunch
  - Reduction in public saving and investment
  - Reduction in social expenditures
  - Increase in public debt and money expansion

-> Instability & Uncertainty

The direct effect of the external debt crisis of the 1980's is a drastic reduction in the flow of foreign savings to indebted countries. The resource balance deficit --i.e. the difference between domestic investment and domestic savings-- was significantly reduced since the early 80's. As a result, the generation of trade surpluses became a major policy objective of indebted countries. Massive devaluations, matched by inflationary spurs and drastic changes in the distribution of income, and the prospects of further attempts to alter relative prices, disturbed the stability of the economic environment.

The sequels of the debt crisis --epitomized by the Mexican moratorium in 1982-- on the fiscal stance of debtors is not uniform. Where the government is responsible for the external debt and state enterprises do not generate trade surpluses, a direct link is established between the external and the fiscal debts. In most Latin American countries governments gradually took responsibility for the private debts in order to protect private agents from exchange rate and interest rate shocks. As a consequence, the fiscal deficit became sensitive to these shocks.

In countries like the ones studied in this paper, where state enterprises are net exporters, the government 'owns' the dollars required to service the external debt. In countries where state enterprises do not generate significant trade surpluses (Brazil and Argentina for example), the Central Bank has to buy hard currencies from private exporters thus establishing a direct link between the developments at the external and the fiscal fronts.

The fiscal crunch required adjustments both in the structure of receipts and expenditures, and the delay in such adjustments, implied an increase in the domestic fiscal debt. As a consequence of the difficulties in raising taxes and cutting current expenses, in most countries public savings and investment, as well as social expenditures, became the adjustment variables. The reduction in public investment has an effect of its own on aggregate investment but also, due to the ancillary role that it plays in providing infrastructure, it affects private investment as well.

On the other hand, the increase in interest rates resulting from the growth of the fiscal debt discouraged private investments not only due to the increase in the cost of finance but also due to the increase in the opportunity cost of investments.

In countries where the difficulties in adjusting and stabilizing the economy are greater, the prospects of further policy shocks tends to dampen the incentives to invest. Where the crisis has affected the stability of the social structure, the incentives to invest have been even more affected.

Serven & Solimano (1991) have estimated an equation for real private investment taking as exogenous variables real GNP, real public investment, the foreign debt/GDP ratio, and a measure of environment instability (the coefficient of variation of the real exchange rate and the rate of inflation over the last three years). The latter is supposed to capture the effects of instability and uncertainty over private investment. Taking a sample of fifteen developing countries they show that real GNP and public investment have a positive influence over private investment whereas the foreign debt/GDP ratio and the measures of instability and uncertainty have a negative influence.

3. The Design of the Survey

As noted in the Introduction, the present survey will look at the experience of three countries, namely, Chile, Bolívia, and Mexico. The main objective is to understand what happened to public and private investment in these countries taking into account the elements mentioned in the previous section.

It will be important to consider the evolution of the public accounts, in particular, of current receipts and expenditures (including interest payments) and of investment expenditures. We will consider different measures of deficits of the consolidated public sector which includes the federal and state/local governments, state enterprises and parafiscal activities of the Central Bank. The latter include "the management of explicit subsidies, debt services, and transfers, the provision of preferential credit to priority sectors, the bail out of ailing industries, the running of special procurement programs, etc." (Blejer & Cheasty, p. 57) Emphasis will be given to the adjustment effort of the public accounts (fiscal reforms, cuts in expenditures, etc.) and the resulting effects over public savings and investment.

Also, it will be important to consider the role of structural reforms, in particular trade liberalization and privatizations, and stabilization efforts. These are measures which influence the stability of the environment, and therefore the psychology of the business community and the incentives to invest of private agents.

Before turning to the discussion of the specific experiences, it would be interesting to highlight elements which are common to all three countries. There are at least four common elements, namely:

- In the 1970's, they all had very interventionist governments in which state enterprises played an important part (Chile after 1973 being the obvious exception);

- In all countries, IS policies were at the core of the development strategy;

- They were all severely hit by the debt crisis and the deterioration of the terms of trade over the 1980's; and

- In all three countries, state enterprises are major net exporters.

The distinguishing element of the countries being surveyed is the last one. The three first elements are common to almost all Latin American countries. However, only in a few --amongst which Bolivia, Mexico and Venezuela are prominent-- state enterprises are major net exporters. This is an important aspect to highlight for the fiscal stance of these countries, and therefore their capacity to respond to shocks, are not affected by the internal transfer problem between exporters and the government.

What also unites the three countries is their relative success in the stabilization effort and in promoting fiscal and structural reforms. In this respect, they are well ahead of other countries, most noticeably Argentina and Brazil, where the reforms have faced different types of obstacles.

If all three countries have similar inherited traces and were all able to adopt identical reforms, the timing of the later and their results as measured by investment ratios and growth performance are dissimilar. In Chile, the reforms started in the mid-1970's; in Mexico, they started in the early to mid-1980's; and in Bolivia, the stabilization effort started in 1985, but some of the structural reforms are still on their way. In terms of investment and growth performance, Chile is ranked first, Mexico is ranked second, and Bolivia is ranked third. The extent to which the timing of the reforms have influenced the performances of the three countries is surely a subtle issue.

4. Chile

Chile is usually seen as the best example of a successful case of adjustment cum growth resumption in Latin America. Indeed, there are many signs of success in the Chilean story, namely, increasing investment ratios, high rates of economic growth, and low rates of inflation since 1988. There are of course some caveats. Most of the reforms took place under a very authoritarian regime which was able to impose significant costs (to part) of the population -- unemployment reached 30% in 1982-84 and real wages fell dramatically. The burden of the adjustment to the external shocks was carried by the public sector through the socialization of the external debt and rescue operations to avoid the insolvency of private banks and enterprises. The sequels of the adjustment process are the following: between 1980 and 1987 the domestic debt went from US $2,8 to US $8,3 billion (a threefold increase) whereas the external debt went from US $5,1 to US $16,4 over the same period. Estimates of the Central Bank losses due to quasi-fiscal operations over the same period amount to US $9 billion. [Eyzaguirre & Larrañaga, 1990, p. 1]

In this section we look at the adjustment cum growth resumption experience of Chile. Section 4.1 presents a broad picture of the macroeconomic performance of the Chilean economy over the 1970's and 1980's. In the case of Chile it is important to consider the developments since the mid-seventies because most of the reforms started in that period. Section 4.2 looks at the evolution of the public sector savings between 1970 and the late 1980's emphasizing the main fiscal policies and reforms, the evolution of the public savings and estimates of the quasi-fiscal deficit. The stabilization effort and main structural reforms are discussed in section 4.3. The macroeconomic environment, the evolution of private and public sectors investment as well as some conclusive notes are explored in section 4.4.

4.1 Macroeconomic Performance

It will be convenient to proceed by dividing the analysis into four sub-periods:

- 1. The first sub-period corresponds to the Allende government (1970-73). As seen in Figure 4.1, over this period, CPI inflation reached almost 500%, and as seen in Figure 4.2, after growing 9% in 1971, GDP fell 1.2% and 5.6% in 1972 and 1973, respectively.

- 2. The second goes from 1974 to 1981, and corresponds to the adoption of the initial liberal reforms. Inflation was still very high in 1974-76 but fell gradually to reach 19.7% in 1981. GDP fell 12% in 1975 but then started growing around 7%. The later part of this period is marked by a temporary boom;

- 3. Between 1982 and 1984 the Chilean economy experienced a critical situation in which the government intervened to rescue major banks and private enterprises from bankruptcy. Over this period, inflation was kept relatively low and GDP fell dramatically, especially in 1982.

- 4. Finally, the last period, of growth and stability, starts in 1985. Inflation is relatively low (around 15%) and GDP has been growing around 7%.

Figures 4.1 and 4.2

Figure 4.1

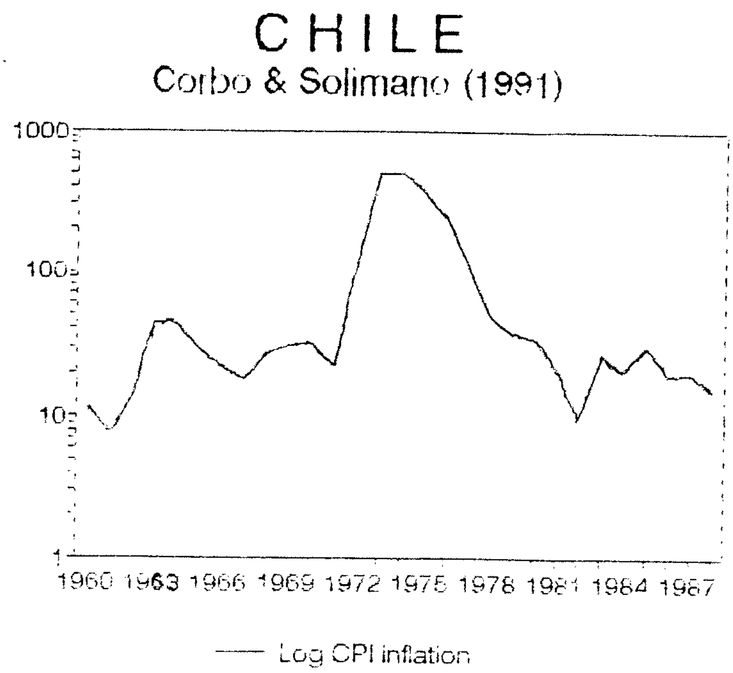

Figure 4.2

During the socialist government of Allende the degree of government intervention in the Chilean economy was quite high. As described in section 4.2, public sector current and capital expenditures increased dramatically between 1970 and 1973 while receipts fell. Quantitative controls on imports were put in place to diminish the current account deficits. Price controls were not efficient to deter the explosive path of inflation.

After 1974, the military government adopted a very liberal set of reforms. These included the privatization of enterprises nationalized during the Allende period and other public firms, a program of trade liberalization, the privatization of the social security system, and liberalization measures in the goods, labor and capital markets. Different approaches to stabilize the economy were also attempted over the military period. The reforms and stabilization attempts are discussed in section 4.3.

After a period of stringent contraction of public expenditures and restrictive monetary policy to fight inflation between 1975 and 1978, the government opted for a freeze of the exchange rate hoping that the prices of tradable goods would converge to international prices. The reduction and uniformization of import tariffs enhanced the prospects of success of the policy. However, in face of the downward rigidity of the prices of non-tradable goods, the freeze of the exchange rate led to a major over-valuation of the domestic currency in 1980 and 1981, creating strong pressures for a devaluation. The over valuation of the exchange rate (around 70% in comparison with 1978) led to a trade deficit of more than US $2,5 billions in 1981.

The reforms and stabilization program were severely affected by the external shocks of 1982. Table 4.1 provides the figures of private and public net external debt between 1975 and 1985. In 1980, public net debt amounted to no more than US $917 million whereas private debt amounted to US $6.9 billion. In 1981 private debt had jumped to US $11.3 billion, an increase of more than 60%. The private sector took advantage of the liberalization of the capital account and great liquidity in the international market.

Table 4.1
Net External Debt, Trade Balance
and Real Exchange Rate

	Net External Debt* (millions of US dollars)		Trade** Balance	Real** Exchange Rate
	Public sector	Private		
1975	4,176	969	---	---
1976	3,840	1,120	---	---
1977	3,598	1,584	---	---
1978	3,603	2,377	- 426	111.4
1979	2,673	3,896	- 355	114.8
1980	917	6,926	- 764	100.0
1981	1,621	11,253	-2,677	87.2
1982	4,020	11,730	63	98.7
1983	5,958	10,172	986	116.1
1984	8,157	8,719	363	122.4
1985	9,864	7,829	849	150.0
1986	13,985	---	1,100	164.6
1987	14,509	---	1,229	170.0
1988	12,123	---	---	---

(*) Source: Larrain & Selowsky, p. 122 for data between 1975 and 1985 and Larrañaga & Marshall for data between 1986 and 1988.
(**) Source: Larrañaga p. 40.

In 1982, with the Mexican moratorium, the suspension in the inflow of foreign lending and the surge of interest rates, the situation became unsustainable. In order to mitigate the effects of the pervasive insolvency of the private agents, the government decided to intervene by absorbing part of their external debt and guaranteeing the rest of it. This is why in 1985 the public sector net debt had grown to US $9.9 billion and the private sector debt had fallen to US $7.8 billion. We will return to this rescue operation in section 4.2.

Over the 1982-86 period public sector had to borrow from the domestic private sector and the foreign sector to finance its nominal deficit. The private sector played an important role in this respect over the critical years (most particularly 1981 and 1983) whereas the external sector was more important in recent years.

As a result of the deficits and quasi-fiscal expenditures, and as a consequence of the absorption of part of the private external debt, the domestic and public external debts increased dramatically over the 1980's. The total debt increased from US $6.9 billion in 1980 to US $16.3 billion in 1987.

Table 4.2
Public Domestic and External Debts
(in millions of US $)

	1980	1981	1982	1983	1984	1985	1986	1987
Domestic	1875	1599	1962	3696	4928	7485	8260	8314
External	5063	5465	6660	9795	12343	14079	15763	16380
Total	6938	7064	8622	13491	17271	21564	24023	24694

Source: Larrañaga, Table 13.

The most important factors determining the growth of the public external debt are: net capital inflows (US $7.7 billion between 1980 and 1987) and the absorption of private debts (US $2.7 billion). The main factor affecting the growth of the domestic debt was the transfer of funds from the Treasury to the Central Cank to cover quasi-fiscal operations.

As shown in Table 4.1, after 1986 the military government was able to instrument a major real devaluation with strong effects on the incentives to export as well as on the capacity of domestic firms to compete with imports. The success of the devaluation has been attributed to the de-indexation of wages. The extremely high rates of unemployment certainly helped in this respect. Experts see the devaluation and the persistency of the military government in pursuing liberal reforms as the main ingredients of the sustained growth regime of the last four to five years [see Corbo & Solimano (1991) and Fontaine (1987)].

4.2 Public Sector Saving

The first sub-period (from 1971 to 1973) which corresponds to the socialist administration of President Allende, was marked by an extraordinary growth of the public sector. Public spending increased considerably. As seen in Table 4.3, the wage bill of the consolidated government (federal & local governments and public enterprises) increased by 4.7 percentage points of GDP between 1970 and 1972 (falling slightly in 1973), the net purchase of goods and services increased by 2.1 percentage points between 1970 and 1973, and social security contributions went up 3.1 points between 1970 and 1972 (also falling in 1973). Meanwhile tax revenues fell by 2.7 percentage points of GDP, social security contributions fell by 2.4 percentage points, and in 1973, the operational surplus of public enterprises, which amounted to approximately 7% of GNP over the 1970-72 period, fell to 0.7%. As a result, the consolidated government accounts went from a primary surplus of 8.4% of GNP in 1970 to a deficit of 5.8% in 1972 and 7.6% in 1973.

Gross public sector fixed investment remained quite high --around 10% of GNP-- which implied that the public sector non-interest borrowing requirements went from 5.6% of GNP in 1970 to an unsustainable 18.3% in 1973. If we include the payment of nominal interest, the PSBR goes from 6.7% to 21% over the same period. The deficits were covered with internal sources of finance which amounted to 30.4% of GDP in 1973.

After the coup d'etat which overthrew the Unidad Popular government, dramatic changes were introduced. In a opposite move in relation to the socialist government, the military government was determined to reduce the size of the government. However, the reduction in the size of the state followed a peculiar route in at least two instances. First, important public enterprises, most notably CODELCO (one of the largest, if not the largest, copper mining firm of the world) were not privatised. The flow of net sales of these firms proved to be an extraordinary source of revenues to the government. Second, over the critical period of 1982-84, in order to avoid a wave of bankruptcies of private debtors which would have disturbed the stability of the military regime, a strong interventionist stance was adopted.

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	1970	1971	1972	1973	1974	1975	1976	1977	1978
1 Current Revenue	38.96	37.33	36.16	24.22	40.07	42.52	44.85	44.17	38.68
Taxes	18.55	17.85	15.41	15.80	20.41	24.19	23.58	22.87	21.81
Direct taxes (excl. copper)	4.63	5.81	4.23	5.13	5.76	8.33	6.92	5.42	5.28
Copper Taxation	3.10	0.38	0.05	0.55	1.73	1.26	2.63	2.55	2.81
Indirect taxes	10.82	11.66	11.13	10.12	13.02	14.60	14.03	14.30	13.72
Indirect taxes (domestic)									8.37
Taxes on imports									3.37
Import tariffs	1.71	1.84	1.61	0.44	1.97	2.95	1.87	2.36	1.98
Social Security Revenue	6.96	8.51	8.19	4.38	3.07	3.41	3.36	3.66	3.69
Public Enterprises' net sales	7.14	6.54	7.50	0.74	9.91	7.29	9.23	8.11	7.52
Codelco	4.77	3.38	3.97	2.36	5.46	3.41	3.87	2.51	2.82
Others	2.37	3.16	3.53	-1.62	4.45	3.88	5.36	5.60	4.70
Other non interest income	6.31	6.43	5.06	3.10	7.46	7.63	8.68	9.55	5.06
2 Current non interest Exp.	30.54	39.36	41.93	31.84	31.29	30.35	30.06	33.26	26.74
Wages & Salaries	15.83	19.54	20.50	15.76	15.55	14.80	12.10	15.78	14.51
Government	9.81	11.82	12.92	9.41	10.04	9.26	0.89	10.99	9.97
Public Enterprises	6.02	7.72	7.58	6.35	5.51	5.54	3.21	4.79	4.54
Net purchase of goods & services	0.82	1.66	1.68	2.96	3.61	3.31	1.48	1.79	1.44
Sales	1.76	1.57	1.07	1.21	0.68	1.04	2.19	3.12	3.26
Purchase	2.58	3.23	2.77	4.17	4.29	4.35	3.67	4.91	4.70
Transfers & Subsidies	3.43	1.82	2.26	1.73	1.76	3.08	5.35	5.20	2.89
Social Security	8.60	11.87	11.86	6.03	4.45	7.20	6.92	7.02	6.86
Others	1.86	4.47	5.43	5.36	5.72	1.76	4.21	3.47	1.04
3 Saving before Interest (1-2)	8.42	-0.03	-5.77	-7.62	9.58	12.17	14.79	10.93	11.34
4 Nominal Interest Exp.	1.13	1.75	1.55	2.67	2.95	4.25	3.14	2.37	2.75
Government	0.73	0.72	0.62	0.68	1.37	2.56	2.25	1.72	1.58
on net domestic debt	0.20	0.16	0.40	0.04	0.44	0.50	0.21	0.79	0.88
on net ext. debt	0.53	0.56	0.22	0.64	0.93	2.06	2.04	0.93	0.70
Enterprises	0.40	1.03	0.73	1.99	1.58	1.69	0.87	0.65	1.17
on net domestic									0.46
on net ext.									0.71
5 Inflation Corrected net interest Exp									
6 Saving after nominal net interest (3-4)	7.29	-1.78	-7.32	10.29	6.63	7.92	11.65	8.56	8.59
7 Saving after inflation corrected interest (3-5)									
8 Capital Expenditure	13.98	13.48	12.60	10.70	12.06	9.73	5.90	8.15	7.15
Net Capital Revenue	-3.57	-3.00	-2.96	-2.35	0.48	0.38	0.19	-1.25	-0.47
Capital Income									1.45
Financial investment									1.92
Gross Fixed Inv	10.41	10.48	9.64	8.35	12.54	9.15	6.09	6.90	6.68
Gov	6.26	7.38	7.38	5.04	8.68	5.69	3.13	4.18	3.51
Enterp.	4.15	3.10	2.26	2.51	3.86	3.46	2.96	2.72	3.17
9 PSBR (primary) (8-3)	5.56	13.51	18.37	18.32	2.40	-2.44	-8.89	-2.78	-4.19
10 PSBR (operational) (8-7)									
11 PSBR (nominal) (8-6)	6.69	15.26	19.92	20.99	5.43	1.81	-5.75	0.41	-1.44
12 Financing	6.69	15.27	24.33	30.48	5.35	2.02	2.50	0.42	1.54

	1979	1980	1981	1982	1983	1984	1985	1986	1987
1 Current Revenue	36.12	37.57	34.93	34.77	34.50	[illegible]	[illegible]		
Taxes	20.46	20.76	20.50	19.50	19.63	20.95	20.74		
Direct taxes (excl. copper)	5.22	5.40	5.51	4.75	3.10	3.40	3.14		
Copper Taxation	1.94	1.93	0.24	0.98	1.89	1.25	0.54		
Indirect taxes	13.30	13.43	14.75	13.77	14.64	16.30	17.06		
Indirect taxes (domestic)	7.97	6.87	7.92	8.76	8.64	8.85	8.70		
Taxes on imports	3.31	4.60	4.56	3.57	3.65	4.15	4.72		
Import tariffs	2.02	1.96	2.27	1.44	2.34	3.09	3.64		
Social Security Revenue	5.27	5.55	4.72	3.25	2.81	2.80	2.12		
Public Enterprises' net sales	4.51	6.19	4.05	6.50	7.75	[illegible]	8.11		
Codelco	2.42	2.19	1.29	1.91	[illegible]	2.01	3.21		
Others	2.09	4.00	2.76	4.59	5.07	5.11	4.90		
Other non interest income	5.88	5.09	5.66	5.51	4.31	4.31	6.00		
2 Current non interest Exp.	25.33	25.54	28.31	33.76	30.70	29.91	27.67		
Wages & Salaries	13.18	13.01	11.77	12.23	10.66	10.91	9.72		
Government	9.14	8.78	7.76	7.80	6.65	6.44	5.84		
Public Enterprises	4.04	4.23	3.99	4.43	4.00	3.71	3.80		
Net purchase of goods & services	0.61	0.67	0.74	0.88	1.00	0.91	0.56		
Sales	2.43	2.45	2.30	2.44	2.23	2.49	[illegible]		
Purchase	3.04	3.12	2.94	3.32	3.23	3.40	3.21		
Transfers & Subsidies	3.83	4.14	4.91	7.85	[illegible]	8.17	[illegible]		
Social Security	6.99	7.07	8.20	10.77	9.65	10.12	9.01		
Others	0.72	0.65	0.69	0.83	[illegible]	0.33	0.37		
3 Saving before Interest (1-2)	10.79	12.05	6.62	1.01	3.89	5.27	9.60		
4 Nominal Interest Exp.	1.74	1.66	1.51	2.35	4.26	[illegible]	6.04		
Government	1.23	0.84	0.42	0.55	1.78	[illegible]	[illegible]		
on net domestic debt	0.71	0.47	0.15	0.04	1.33	1.72	[illegible]		
on net ext. debt	0.52	0.37	0.27	0.51	0.45	0.60	0.84		
Enterprises	0.71	0.82	1.09	1.80	[illegible]	[illegible]	2.82		
on net domestic	-0.11	0.04	0.32	0.08	0.65	0.47	[illegible]		
on net ext.	0.82	0.86	0.77	1.72	[illegible]	2.10	[illegible]		
5 Inflation Corrected net interest Exp									
6 Saving after nominal net interest (3-4)	8.85	10.39	5.11	1.34	0.46	0.40	[illegible]		
7 Saving after inflation corrected interest (3-5)									
8 Capital Expenditure	4.24	5.03	4.72	2.58	2.98	4.94	6.43	[illegible]	5.51
Net Capital Revenue	0.86	0.21	0.36	2.10	1.70	1.06	[illegible]	[illegible]	[illegible]
Capital Income	2.43	2.24	3.21	7.79	3.87	[illegible]	[illegible]	[illegible]	4.54
Financial investment	1.57	2.03	2.85	5.87	2.09	2.46	[illegible]	[illegible]	[illegible]
Gross Fixed Inv	5.10	5.24	5.08	4.68	4.76	[illegible]	[illegible]	[illegible]	10.05
Gov	3.21	2.60	2.52	2.11	2.12	[illegible]	[illegible]	[illegible]	[illegible]
Enterp.	1.89	2.64	2.56	2.57	2.64	3.72	[illegible]	[illegible]	3.96
9 PSBR (primary) (8-3)	-6.55	-7.02	-1.90	1.57	[illegible]	[illegible]	[illegible]		
10 PSBR (operational) (8-7)									
11 PSBR (nominal) (8-6)	-4.61	-5.36	-0.39	[illegible]	5.44	[illegible]	[illegible]		
12 Financing	-4.35	5.32	0.84	[illegible]	[illegible]	[illegible]	[illegible]		

CHILE

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
External (net)	0.07	1.66	1.0[illegible]	0.08	0.30	-2.87	-3.09	0.27	2.70	0.36	-0.11	2.74	2.24	-1.09	2.60	4.01		
Domestic (net)	6.60	13.61	22.71	30.40	5.25	4.89	0.51	-0.15	4.24	4.71	-5.41	-3.58	1.12	4.12	1.65	1.41		

Source: Larrain & Selowsky for data on 1970-1977
Larrañaga for data on 1978-85

Important liberal reforms were nevertheless adopted, as discussed in section 4.3. From the standpoint of the public sector accounts, the most significant reforms were those associated with the reduction in current expenditures. If we consider the years of 1970 and 1980 as benchmarks, the following changes deserve notice:

- Public sector wages and salaries fell from 15.8% of GNP to 13.1%, and by 1985 had fallen to 9.7%. This is a result of reductions in both the level of public employment and the real remuneration of public employees. It is important to note that the reduction in the wage bill of the central and local governments was considerably greater than the cut in public enterprises' payrolls.

- The net purchase of goods and services went from approximately 0.8% of GDP in 1972/73 to 0.7% 1980, reaching 0.6% in 1985.

- Social security expenditures fell from 8.6% of GDP in 1972 to 7.1% in 1980.

All together current non-interest expenditures fell by 5 percentage points of GDP between 1970 and 1980. Public sector gross fixed investment went from 10.4% of GDP to 5.2% but the investment ratio of public enterprises remained practically the same. The bulk of the adjustment came from the central and local governments.

The tax reform introduced the correction for inflation of firms' assets, liabilities and profits and individuals' incomes in an attempt to avoid tax losses. A 20% tax on value-added replaced the tax on the total value of transactions aiming a reduction in evasion through the verticalization of production. Finally, the tax system was simplified with the reduction of most special treatment clauses. The reduction in inflation reduced the Oliveira-Tanzy effect. The net result of these effects was an increase of more than 5 percentage points of GDP in tax collections.

The result of the reduction in spending and increase in receipts was a dramatic change in the PSBR: in 1970 the primary PSBR amounted to 5.6% of GDP whereas in 1980 it was - 7%. If we take the nominal PSBR, it goes from 6.7 of GNP to - 5.4% over the same period.

As noted in section 4.2, the origin of the 1982-84 crisis was at the external front. The overvaluation of the domestic currency resulted from the exchange rate policy which fixed the annual rate of devaluation. Moreover, the increase in international interest rates, the fall in the terms of trade and the virtual suspension of foreign lending required a major adjustment. The adjustment to the external crunch included a major devaluation and a reduction in public expenses. As seen in Table 4.1, the exchange rate suffered a dramatic real devaluation starting in 1983, reaching 70% in 1987 in comparison with 1980.

The consolidated public sector payroll fell more than 3 percentage points of GDP between 1980 and 1985. Government finances were helped by the increase in indirect taxes but hurt by the reduction in direct taxation. An increase in transfers & subsidies resulted from the anti-cyclical movement of these items. Reductions in social security revenues and increases in expenditures were associated with the privatization of the system which reduced the contributions but not the benefits. The net result of these changes was a reduction in primary saving and a nominal deficit in 1982 and 1983.

Primary public sector savings recovered slightly in 1985 and then returned to levels comparable to those before the crisis. The total amount of interests payed by the consolidated public sector went from 1.7% of GNP in 1980 to more than 6% in 1985 as a result of the increase in the public sector domestic and external debt. Notwithstanding the significant increase in interest payed by the government and public enterprises on both the external and domestic debts, nominal public sector savings, which were negative in 1982 and 1983, increased after 1984. By 1988 nominal savings amounted to 8.4% of GNP --again comparable to the levels observed before de crisis.

Quasi-fiscal operations of the Central Bank became significant during the debt crisis. Some operations of the Central Bank cannot be considered part of the monetary policy. Rather, they are fiscal operations conducted by the Central Bank and as such should be considered an element affecting the levels of the public sector's savings. Quasi fiscal operations comprise different kinds of subsidies to private agents. In the case of Chile, as in other Latin American countries, the Central Bank played an important role in providing liquidity, subsidized credits and preferential exchange rates to private external debtors to avoid massive bankruptcies. In doing so, the Central Bank incurred in capital losses which should be added to other public sector's sources of expenditures. As described below, the Central Bank also absorbed part of the private external debt which explains the growth of the external public debt after 1982/83.

There are different ways of estimating quasi-fiscal expenditures. The difficulties in estimating them arise because not all Central Bank quasi-fiscal expenditures constitute effective or registered losses. The latter occur when, for example, the Central Bank provides preferential exchange rates to private debtors in dollars or absorbs the debts of an insolvent bank. Some losses are only potential in the sense that there is a possibility that they will not take place. For example, when the Central Bank provides subsidized credits there is always a possibility that the debtor will service the debt and eventually pay for the amortization. In these cases, the Central Bank does not register the losses.

Table 4.4
Consolidated Public Sector:
savings and quasi-fiscal deficits
(as a % of GNP)

	Public Sector Nominal Savings	Central Bank 'Losses'						
		Liquid. of banks (**)	Subsid credits (*)	Prefer. exchange rate (**)	Reprogra ming of debts (*)	Insur. exchange rate (**)	Abst. of exter debt (**)	Tot (+)
1980	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	-1.4	8.6	3.2	4.8	0.0	0.0	0.0	13.4
1983	-0.4	0.0	12.5	2.9	1.2	0.5	0.0	3.4
1984	0.4	0.0	- 1.0	1.5	3.7	2.8	2.9	7.2
1985	3.5	0.0	0.2	4.6	4.3	3.5	3.9	12.0
1986	5.3	-0.3	1.8	0.9	0.4	0.2	-1.5	-0.7
1987	6.0	-0.2	- 0.5	0.0	1.3	0.0	0.8	0.6
1988	8.4	0.0	- 0.4	0.0	0.0	0.0	0.0	0.0
1989	---	0.0	- 0.9	0.0	0.0	0.0	0.0	0.0

Source: Larrañaga & Marshall, Table 8.
(*) Potential losses.
(**) Effective losses.
(+) Considering only effective losses.

In what follows we report on the estimates of quasi-fiscal operations provided by Eyzaguirre (1990). All the operations are associated with the support program to debtors over the period 1982-87. The figures associated with each operation are reported in Table 4.4. We have called effective losses those which the Chilean Central Bank has recognized as such, and potential losses those which have not been recognized or registered yet. Here is a list of operations is as follows: 1. Liquidation of Banks (in 1982 the Central Bank provided emergency credits of US $397 million to insolvent banks); 2. Emergency credits to banks (the Central Bank provided subsidized credits to banks); 3. Preferential exchange rate program (a preferential exchange rate program for debtors was established in 1982); 4. Reprogramming of debts (the Central Bank financed the reprogramming of the domestic debts and provided subsidized credits to non-financial institutions); 5. Insurance against exchange devaluations (the Central Bank buyes dollars at the current exchange rate with the promise of selling them back one year later with a correction for inflation); 6. Absorption of private external debt (the Central Bank absorbed part of the private external debt and in doing so suffered losses associated with exchange rate devaluations).

When we add public sector savings to Central Bank losses the figures for the period 1982-85 are quite striking. In 1982, saving plus effective losses amounted to approximately 13.4% of GDP, and over the period 1982-85, the sum amounted, on average, to 7.8% of GDP. If we include potential losses, the figure for 1983 is 17.5% of GDP. These figures are an evidence of the extraordinary degree of intervention of the Chilean government in order to preserve the stability of the economic system during the crisis. As noted in section 4.1, the finance of these operations implied the growth of the domestic debt which went from US $1.6 in 1981 to US $8.3 in 1987.

4.3 Stabilization Effort and Structural Reforms

After bringing inflation to two-digit levels in three years of drastic cuts in public sector expenditures and tight monetary policy (1975-1978), the Chilean government faced a serious constraint to proceed with the stabilization effort. A type of constraint characteristic of small open economies, namely, the trade-off between real devaluations, on the one hand, and money wage rigidity and inflation, on the other hand. The military regime banned trade unions and collective bargainings, but was not able to de-index wages until 1982-3 when unemployment reached 30%.

Corbo & Solimano (1991, p. 40) note that "unlike in some other Latin American countries, in Chile the authorities did not have to use inflationary acceleration to erode real wages in order to make them consistent with a higher real exchange rate". However, they do recognize that "the combination of wage de-indexation ingeneered in 1982 and the persistence of considerable unemployment at least until 1987" were important to achieve a real devaluation without inflationary spurs. Indeed, between 1981 and 1987 the real exchange rate was devalued in approximately 80% whereas real wages fell more than 20%.[see Meller, 1989, p. 75]

Experts on the Chilean scene see the success of the exchange policy as the cornerstone for the sustained recovery of the late 1980's. Fontaine (1987, p. 17) notes that "the adjustment of relative prices induced by the devaluation of the peso has worked wonders in the promotion of exports, and the substitution of imports... In addition to (...) supply side effects, the devaluation has helped to curtail domestic expenditures keeping real wages significantly below pre-crisis levels. Lower real wages have stimulated employment and corporate savings".

As for the structural reforms, the most important were the privatization of state enterprises, trade liberalization, reforms in the labor code and the reduction in government spending. The latter has been documented in section 4.2. For the purposes of this paper it is essential to note that these reforms were applied in Chile ten years before they were adopted in other Latin American countries.

Immediately after Allende was deposed, most of the firms and farms which had been illegally seized returned to the previous owners. These included some 260 firms and 3700 farms, and did not involve monetary transactions. [see Meller, 1989, p. 80] Over the period 1974-78 a first round of privatizations took place involving the firms and banks which had been nationalized. The most significant privatizations however were those of traditional state enterprises such as electricity and telecommunications enterprises. Altogether, the privatization of firms gave rise to sale receipts of approximately US $3.6 billion. [see Meller, p. 81]

The process of trade liberalization started in the 1970's --well before other countries were seriously considering it. Its basic ingredients were the unification of the exchange rate system, the reduction and unification of import tariffs (with a flat 10% tariff), and the elimination of other non-tariff barriers.

The labor market was also affected by the reforms. Unions and collective bargainings were banned, job security clauses were relaxed and indirect labor costs were reduced.

4.4 The Macroeconomic Environment and the Performance of Public and Private Investment

What is striking in the Chilean case compared with most of the other experiences in Latin America is the trajectory of public investment. The latter is usually squeezed during adjustment programs but not in the case of Chile. As seen in Tables 4.5 and 4.6, public investment as a percentage of GDP fell slightly in 1982 and 1983, and then recovered, to reach an average of 7% of GDP between 1984 and 1988. In particular, the investment performance of public enterprises did not suffer during the 1982-84 crisis.

Table 4.5
Savings, Public Investment, PSBR and Financing
(as % of GDP)

	Public Sector Nominal Savings	Public Investment		PSBR * (nominal)	Financing	
		Govern-ment	Public enterprises		Domes-tic	Exter-nal
1980	10.4	2.6	2.6	-5.4	-5.4	-0.1
1081	5.1	2.5	2.6	-0.3	2.7	-3.6
1982	- 1.4	2.1	2.6	4.0	1.1	2.2
1983	- 0.4	2.1	2.6	3.3	4.1	-1.1
1984	0.4	2.3	3.7	4.5	1.7	2.7
1985	3.5	3.1	4.0	2.9	-1.4	4.1
1986	5.3	3.3	4.7	1.6	-1.0	3.1
1987	6.0	3.3	4.0	-0.3	-2.5	2.2
1988	8.4	2.9	3.3	-3.6	-7.3	3.7

(*) PSBR = Total Public Investment + Net Capital Income - Nominal Savings. Net capital income is not shown in the Table.

Source: Larrañaga & Marshall, Table 8.

The share of public investment in GDP was not squeezed over the adjustment process and increased in recent years. Moreover, the share of private investment has increased substantially after 1983. In 1988 the latter reached 10.3% and in 1989 14.5%. As a consequence total investment as a percentage of GDP has grown systematically since 1985, reaching 19.2% in 1989.

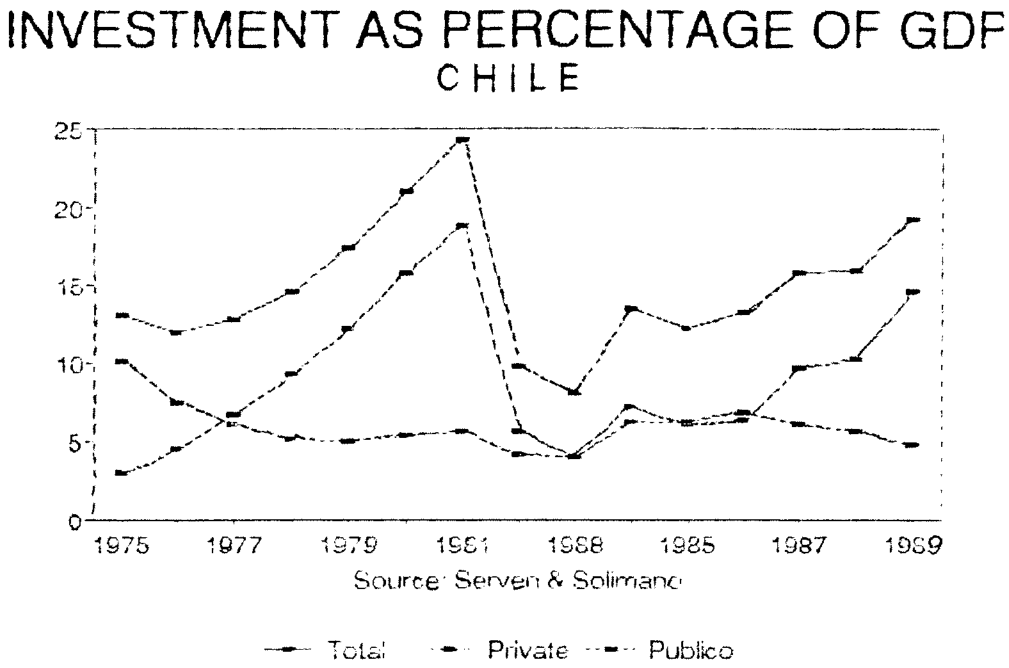
Experts tend to see Chile as a case where liberal reforms, after almost 20 years, have now become mature, this being the main reason for the resumption of investment and economic growth. If they are right, Bolívia and México seem to be in the right track. Serven & Solimano see the positive reaction of the business community to the liberal reforms of the 1970's as an important factor explaining the restoration of investment. They note that "the private sector responded forcefully to the new economic program offered by the military that assured full respect of private property, deregulation of markets, and tight political control of the defeated left and of a militant working class very active under Allende" (p. 10).

Table 4.6
Total, Public and Private Investment
as % of GDP

	Total		Public		Private		Relative price of investment
	Current Prices	Constant Prices 1980=100	Current Prices	Constant Prices 1980=100	Current Prices	Constant Prices 1980=100	
1975	13.9	13.21	10.7	10.1	3.2	3.0	1.06
1976	12.8	12.0	8.0	7.5	4.8	4.5	1.07
1977	14.5	12.8	6.9	6.1	7.6	6.7	1.14
1978	17.8	14.5	6.4	5.2	11.4	9.3	1.23
1979	17.8	17.3	5.2	5.0	12.6	12.2	1.03
1980	21.0	21.0	5.4	5.4	15.6	15.7	1.00
1981	22.7	24.3	5.2	5.6	17.5	18.8	0.94
1982	11.3	9.8	4.8	4.2	6.5	5.7	1.15
1983	9.8	8.1	4.9	4.1	4.9	4.1	1.21
1984	13.6	13.4	6.3	6.2	7.3	7.2	1.01
1985	13.7	12.2	6.9	6.2	6.8	6.1	1.12
1986	14.6	13.2	7.6	6.9	7.0	6.4	1.10
1987	16.9	15.7	6.6	6.1	10.3	9.6	1.07
1988	17.0	15.9	6.0	5.6	11.0	10.3	1.07
1989	20.5	19.2	5.0	4.7	15.5	14.5	1.07

Source: Serven & Solimano based on World Bank data.

Figure 4.3



It seems that over the second half of the 1980's Chile has proved to be a successful case of 'profit-oriented growth'. If we recognize that over the military regime the distribution of income and wealth has favored profits [see Larrañaga & Marshall, p. 23], and that supply-side policies were an important part of the strategy, we are led to the conclusion that the success story is really based on a strong response of investors to an increase in expected profits. However, perhaps as important as greater profits, or maybe even more important, is the reduction in the variance of prospective profits which the military regime was able to offer. In this connection, the consistency of the liberal reform was not as important as the determination of the government to protect profits against shocks. The rescue operations of the 1982-84 period are an outstanding example in this respect.

It seems obvious therefore that, at least in the Chilean case, the resumption of growth was traded against equity. It is reasonable to assume that the strategy might not be feasible in other countries under different political circumstances. Fortunately, the new democratic government in Chile seems aware of the distortions created under the military regime, and is attempting to mitigate them without creating negative effects on the incentives to invest of the business community.

5. Bolivia

In contrast with the successful Chilean case, the experience of Bolivia is marked by an extraordinary achievement in the stabilization front but a dreadful record in terms of investment (public and private) performance and economic growth. A set of factors tend to explain the astonishing low levels of private investment after the stabilization plan launched in 1985, amongst which the following are prominent: contraction of public investment, the drastic reduction in disposable income as a result of cuts in employment and wages in the public sector, very high interest rates, and the transference of real resources from the private to the public sector due to devaluations and greater taxation. The analysis of these factors in the context of the 1985 stabilization plan and the negative external shocks which ensued are the central topics of this section.

In section 5.1 we look at certain peculiar macroeconomic elements of the Bolivian case due to the importance of net exports of the public sector. Section 5.2 is dedicated to the public accounts over the 1980's. Section 5.3 examines the main elements of the 1985 stabilization plan and its aftermath combined with the decline of the terms of trade in 1985-86, and the advancements of the structural reforms. Finally, in section 5.4, we evaluate the proximate causes of the reduction in public and private investment.

5.1 External Trade and Fiscal Stance in Bolivia

Net exports of public enterprises and the taxes on external trade play a crucial role in the determination of the level of receipts of the public sector in Bolivia. The net exports of public enterprises are important for they are not only a major source of hard currencies but also the source of significant transfers from the enterprises to the Treasury. The distribution of receipts of the public sector is quite volatile over time in the 1980's mainly due to the biases introduced by the rapid acceleration of inflation between 1982 and 1985 and the incidence of external shocks in 1985 and 1986. There are years, as in 1985, in which transfers from public enterprises accounted for no less than 70% of the total receipts of the consolidated public sector. Taxes on external trade amounted to as much as 35% of total receipts in certain years.

Table 5.1
Bolivia: Receipts of the Public Sector, 1980-87
(as % of Total Receipts)

	1980	81	82	83	84	85	86	87
1.Tax revenues:	67	60	50	50	38	23	30	43
2. Transfers from public enterprises	21	31	41	39	56	70	60	47
3. Other Receipts	12	9	9	11	6	7	10	10
Total	100	100	100	100	100	100	100	100

Source: UDAPE as reported by Morales (1991).

Table 5.2
Bolivia: Structure of Taxes, 1980-87
(as % of Total Taxes)

	1980	81	82	83	84	85	86	87
1. Taxes on External trade:	52	49	41	31	68	76	25	28
-On exports of hidrocarbures	7	13	7	3	8	60	13	13
-On exports of minerals	16	6	9	4	28	3	0	1
-Other	29	30	24	24	33	13	12	14
2. Domestic Taxes	49	51	59	69	32	24	75	72
Total	100	100	100	100	100	100	100	100

Source: UDAPE as reported by Morales (1991.

Where the public sector is a net exporter, the effect of devaluations on the fiscal accounts is ambiguous. On the one hand, it tends to generate greater trade surpluses with positive fiscal effects. On the other, it increases the services of the external debt denominated in domestic currency with a negative fiscal effect. However, because the Bolivian economy is highly dollarized, domestic prices follow exchange rate devaluations quite closely, and for this reason, real devaluations have not been attempted after the program in 1985.

Second, negative external shocks have a direct influence on the fiscal front for they reduce the level of receipts. In such cases, the alternatives are either to finance the fiscal gap by increasing the supply of money, or reducing expenditures. Issuing government bonds is not really a very relevant alternative in the case of Bolivia for the market is very thin. Incidently, the small size of the domestic public debt is seen as a sufficient reason to ignore the differences between the nominal and operational deficits in Bolivia, notwithstanding the high levels of inflation up to 1985. On the other hand, it is true that a nominal devaluation increases the interest payments of the external debt thus creating a gap between the nominal and operational deficits.

Over the 1980's the Bolivian economy was hit by two negative external shocks. The first, in 1982, came with the surge of international interest rates and the reduction in the influx of external savings due to the Mexican moratorium. The second was the deterioration of the terms of trade in 1985-86. In the first situation the fiscal gap was closed with an explosive expansion of the monetary base. In the second --right after the stabilization plan was launched-- a drastic reduction in expenditures was the alternative chosen. [see Morales, 1991 for an analysis of these alternatives]

5.2 Public Savings

As shown in table 5.3, the main changes in current receipts and expenses over the 1980's in Bolivia are the following:

1. A very significant reduction in total receipts between 1980 and 1984: form 40% of GDP to 17.6%. After 1985 receipts increased moderately to achieve 23% in 1990.

2. After a period of downward rigidity over the first half of the 1980's, non-interest expenses fell from 34.4% of GDP in 1980 to around 17% in 1985 and thereafter.

3. As a consequence of (1) and (2) above, primary savings

went from 4.7% of GDP in 1980 to - 6.7% in 1984 increasing considerably afterwards to reach 5.1% in 1988.

4. It is worth noting the significant reduction in external finance from 1980 to 1984 with obvious implications for the path of the fiscal accounts.

The reduction in receipts between 1980 and 1984 was essentially due to the reduction in the value of operational surpluses of public enterprises (from 13.8% of GDP to 3.6%) and in domestic tax receipts which fell from 9.7% to 2.1% of GDP. The reduction in tax receipts must be ascribed in large degree to the Olivera-Tanzi effect. As shown in Table 5.5, the share of operational surpluses of public enterprises in their total receipts fell from 47.6% in 1980 to 21.1% in 1984, whereas the share of external sales went from 52.4% to 75.6%.

BOLIVIA

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 (p)
1 Current Revenue	40.07	34.65	31.74	22.17	17.59	20.60	24.40	22.04	22.35	22.15	23.03
Taxes	9.69	9.11	4.69	3.09	1.84	2.32	5.14	7.11	6.97	6.08	6.39
Non taxing revenue	1.49	1.21	0.89	0.64	0.26	0.60	0.82	0.81	0.81	0.38	0.44
Public Enterprises' net sales	28.88	23.44	24.80	17.82	14.98	16.72	18.43	13.85	14.36	14.75	15.24
Sales (domestic market)	13.75	11.17	8.53	6.16	3.27	7.93	10.14	8.37	8.72	8.72	9.12
Sales (ext. market)	15.13	12.27	16.27	11.67	11.71	8.79	8.29	5.49	5.63	6.03	6.12
Other non-interest income	0.04	0.09	1.36	0.61	0.52	0.97	0.00	0.27	0.55	0.93	0.96
2 Current non interest Exp	35.44	31.81	28.25	23.96	24.31	17.62	17.00	19.17	17.58	17.82	17.92
Wages & Salaries	12.77	11.34	9.20	7.96	12.08	7.76	6.13	7.06	8.22	8.66	8.92
Net purchase of goods & services	17.75	14.95	14.62	12.46	9.14	8.24	8.29	7.32	6.34	6.35	6.20
Transfer & Subsidies	2.59	2.49	1.22	1.88	2.00	1.37	1.50	1.02	0.93	1.72	2.17
Other	2.32	3.03	3.20	1.66	1.00	0.25	1.08	2.97	2.09	1.09	0.64
3 Saving before Interest (1-2)	4.66	2.04	3.49	-1.80	-6.71	3.06	7.40	2.88	4.77	4.32	5.11
4 Nominal Interest Exp.	3.63	3.61	4.20	3.90	2.68	5.89	5.12	3.81	3.58	3.12	2.70
5 Inflation Corrected net interest Exp											
6 Saving after nominal net interest (3-4)	1.03	0.77	0.71	-5.70	9.39	-2.82	2.28	-0.93	1.19	1.20	2.41
7 Saving after inflation corrected interest (3-5)											
8 Capital Expenditure	6.55	5.51	5.79	3.97	3.58	3.20	3.58	5.16	6.10	5.31	5.65
Net Capital Revenue	0.35	0.41	-0.09	-0.75	-0.37	-0.18	1.00	0.17	0.69	1.24	1.29
Capital Income	0.44	0.59	0.12	0.16	0.14	0.14	1.00	0.18	0.74	1.24	1.29
Financial inversion & others	0.09	0.18	0.21	0.91	0.52	0.31	0.00	0.01	0.05	0.00	0.00
Other Exp	0.40	0.57	0.27	0.37	0.44	0.21	0.58	0.06	0.03	0.07	0.12
Gross Fixed Inv.	6.43	5.35	5.44	2.85	2.77	2.81	4.00	5.26	6.77	6.40	6.82
9 PSBR (primary) (8-3)	1.90	2.67	2.30	5.77	10.29	0.14	-3.82	2.28	1.33	0.99	0.54
10 PSBR (operational) (8-7)											
11 PSBR (nominal) (8-6)	5.52	6.28	6.50	9.67	12.96	6.03	1.30	6.09	4.91	4.11	3.24

Source: UDAPE (1991)

Table 5.4
Bolivia: Structure of Receipts of the Consolidated Public Sector, 1980-88
(as % of GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Tax income	9.7	9.1	4.7	3.3	2.1	2.8	5.6	7.8	6.7
Operational Surplus of public enterps:									
Domestic	13.8	11.2	8.5	6.5	3.6	9.6	11.0	9.2	10.4
External	15.1	12.3	16.3	12.3	13.0	10.7	9.0	6.1	6.9
Other	1.9	2.6	2.4	1.4	1.0	2.1	1.9	1.4	2.7

Source: UDAPE as reported by Morales (1991)

Tale 5.5
Bolivia: Structure of Current Receipts of the Public Enterprises (% of total), 1980-87

	1980	1981	1982	1983	1984	1985	1986	1987
Operational Surplus of public enterps:								
Domestic	47.6	46.1	32.6	33.4	21.1	44.9	55.0	59.3
External	52.4	50.6	62.2	63.3	75.6	49.7	45.0	38.9
Total	100	100	100	100	100	100	100	100

Source: UDAPE as reported by Morales (1991)

A significant reduction in the contribution of external sales of public enterprises and of taxes on external trade took place between 1984 and 1988. As shown in Table 5.4, the share of external sales in GDP fell from 13% in 1984 to 6.1% in 1987 and

6.9% in 1988. The share of domestic taxes increased considerably in these two years.

On the expenditure side, as noted already, nothing really changed in the first half of the 1980's. After the stabilization plan, as we will note presently, the payroll suffered a drastic reduction. Interests on the government external debt increased from 1.6% of GDP to 3.12% between 1980 and 1984 climbing to 6.05% in 1985 and 5.44% in 1986 (Source: UDAPE 1990).

As reported in the document "El Deficit Cuasefiscal en Bolivia, 1986-90" prepared by the Central Bank of Bolivia and UDAPE, quasi-fiscal deficits where quite insignificant compared with the figures presented in the case of Chile. They amounted to no more than 0.5% of GDP over the second half of the 1980's.

5.3 The Stabilization Program and Structural Reforms

The stabilization program of September 1985 was based on a set of measures amongst which the following are prominent:

- A drastic devaluation of the currency and the alignment of public prices;
- A reform including the consolidation of all taxes in only a few taxes amongst which the value added tax with a 10% flat rate and the tax on corporations' assets with a 2.5% flat rate;
- The indexation of all public prices;
- A temporary freeze of money wages and a major cut in employment in the public sector.
- A freeze of public investments.
- The continuation of the external debt moratorium.

Figures 5.1 and 5.2

Figure 5.1

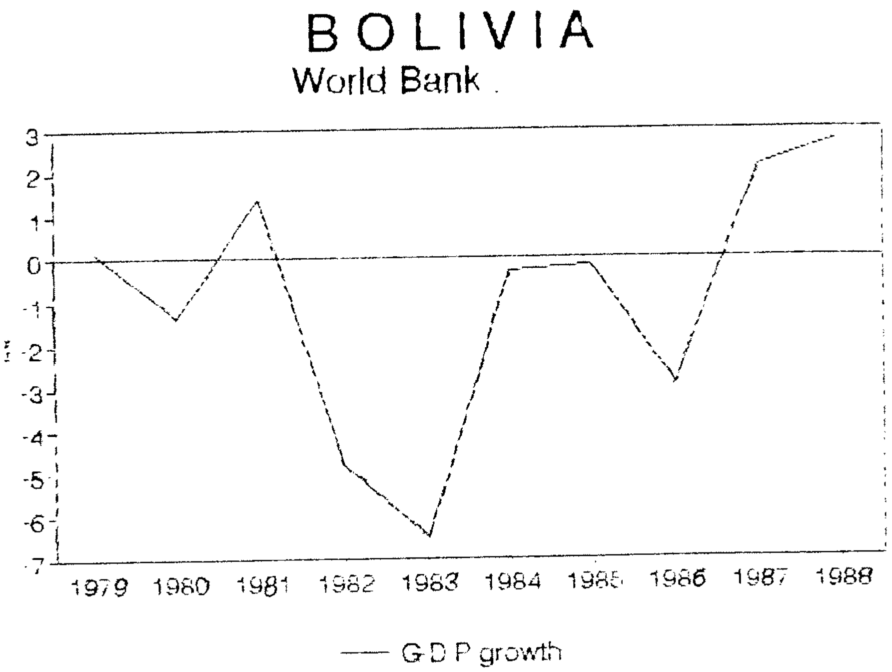
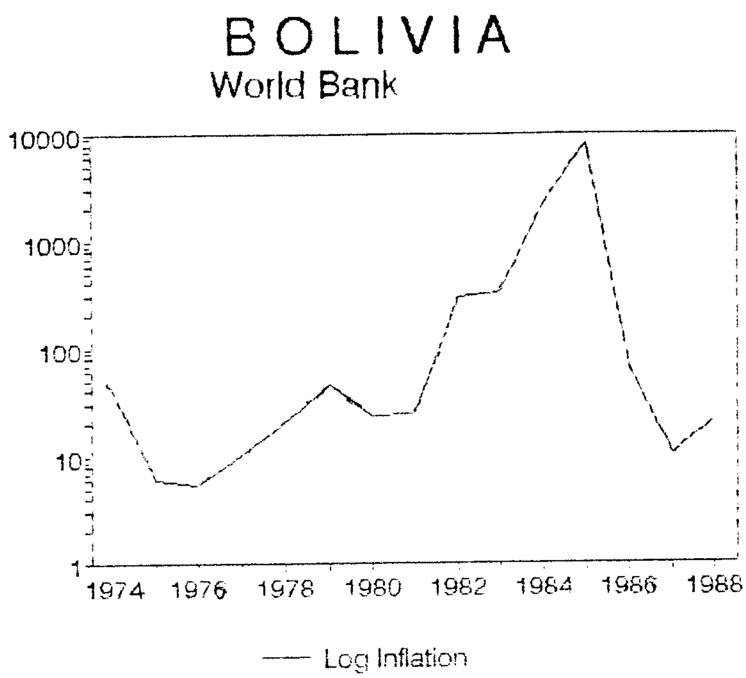


Figure 5.2



These measures implied a massive transfer of real resources from the private to the public sector which, on the one hand, reduced the huge primary deficits of 1983 and 1984, but on the other, created significantly contrationary pressures. It is worth noting the impact of the cut in the public sector's payroll.

Table 5.6
Bolivia: Employment and Salaries in the Public Sector, 1980-86

	Number of employees (thousands)	Share in formal labor market (%)	Salaries as % of GDP
1980	170.1	49.7	12.8
1981	174.6	48.1	11.3
1982	182.6	46.0	9.2
1983	190.2	47.8	8.4
1984	202.0	48.4	13.4
1985	211.5	47.0	9.4
1986	180.9	46.6	6.6
1987	174.9	44.6	7.8
1988	175.5	42.3	9.7

Source: UDAPE as reported by Morales (1991)

As shown in Table 5.6, in only two years the level of employment in the public sector went from 211,000 to 175,000 implying a reduction of approximately 35,000 posts. The payroll as a percentage of the GDP went from 13.4% in 1984 to 6.6% in 1986.

An ambitious plan of structural reforms was announced together with the stabilization program of 1985. It comprised the liberalization of international trade, the liberalization of the capital and labor markets, and the privatization of state enterprises. Some of the reforms are well under way, whereas others, most notably the privatization process, have not yet gained momentum. Two main reasons are associated with the delay in the process of privatization. One is that the main public enterprises, such as YPFB, generate significnat external as well as domestic surpluses, and their privatization would have negative fiscal effects. The other is that real interest rates are very high which so far have discouraged private investors.

The process of trade liberalization aimed at the reduction and uniformization of tariffs (around 10%) and the elimination of quantitative restrictions to imports. By 1990 these measures had already been adopted. On the other hand, a subsidy of 10% on the FOB value of exports was created (the Certificado de Reintegro Arancelario, CRA), and according to Morales (1991b), is responsible for the increase in exports of non-traditional goods in recent years. However, due to fiscal shortages and in face of commitments with international agencies (IMF and the World Bank), the CRA was eliminated in 1991.

The capital market was liberalized implying the suppression of interest ceilings, the opening of the capital account of the balance of payments, and the existence of local bank accounts denominated in dollars. These measures increased rather significantly the value of local banks deposits which went from US $20 million in 1985 to US $800 million in 1990. [Morales, 1991b, p. 20] Incidently, almost all bank accounts in Bolivia are denominated in dollars.

The labor market was also subject of liberalizing reforms.

Formal indexation of wages was abolished and job security clauses were eliminated.

The process of privatization of state enterprises is the only segment of the package of reforms which is lagging. Very little has been done in this respect. Due to the contraction of the public sector expenditures associated with the stabilization effort, state enterprises have been unable to invest, this being an important cause of the low levels of public investment. Accordingly, Morales (1991b, p. 27) suggests that the privatization of certain enterprises would be an important step towards a significant increase in public investment. However, as noted already, for the same reasons that CODELCO in Chile was not privatized, some state enterprises in Bolivia --most notably Yacimientos Petroliferos Fiscales Bolivianos-- cannot be privatized. The operational receipts of these firms are crucial from a fiscal point of view.

5.4 The Macroeconomic Environment, and the Performance of Public and Private Investment

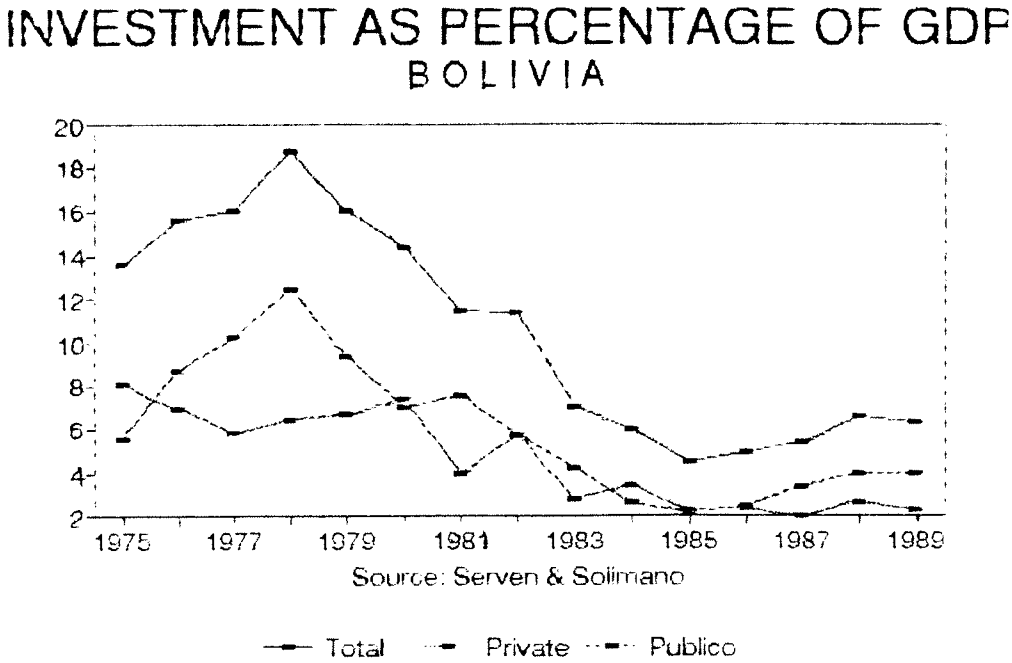
The stabilization program had very strong contrationary effects. Not only a formidable transfer of resources ocurred from the private to the public sector but also a reduction in disposable income due to the reduction in public employment and salaries. The multiplier effects of these measures implied a reduction of 73,000 posts in the formal labor market (estimate by Morales, 1991).

Table 5.7
Bolivia: Total, Public and
Private Investment, 1975-89
as % of GDP

	Total		Public		Private		Relative price of investment
	Current Prices	Constant Prices 1980=100	Current Prices	Constant Prices 1980=100	Current Prices	Constant Prices 1980=100	
1975	18.4	13.6	7.5	5.5	10.9	8.1	1.35
1976	19.0	15.6	10.6	8.7	8.4	6.9	1.22
1977	19.1	16.1	12.2	10.3	6.9	5.8	1.19
1978	20.2	18.8	13.4	12.5	6.8	6.4	1.07
1979	16.6	16.1	9.7	9.4	6.9	6.7	1.03
1980	14.4	14.4	7.0	7.0	7.4	7.4	1.00
1981	11.5	11.5	7.5	7.5	4.0	4.0	1.00
1982	13.7	11.4	6.9	5.7	6.9	5.7	1.2
1983	7.9	7.0	4.7	4.2	3.1	2.8	1.12
1984	7.2	6.0	3.1	2.6	4.1	3.4	1.20
1985	4.3	4.5	2.1	2.2	2.2	2.3	0.96
1986	3.4	4.9	1.7	2.5	1.6	2.4	0.69
1987	3.1	5.3	1.9	3.3	1.2	2.0	0.59
1988	7.0	6.6	4.2	4.0	2.8	2.6	1.06
1989	6.7	6.3	4.2	4.0	2.4	2.3	1.06

Source: Serven & Solimano based on World Bank data.

Table 5.3



The response to the adverse changes in the terms of trade, essentially based on a further reduction in public current and capital expenditures, led the economy not to a very serious recession. In comparing the experiences of Chile and Bolivia, one is led to conclude that although the basic principles driving the reforms in both countries were the same, the initial conditions and the timing were quite different. To begin with the external constraints in the case of Bolivia were more severe in the sense that the access to external finance was more restricted. Second, the hyperinflation required very strong and rapid adjusting measures which so far have led the economy to a situation of depression. Finally, the reforms and stabilization took 15 years to mature in Chile, and they only started in 1985 in Bolivia.

Morales (1991, p. 45) notes that not enough attention was given to the complementary relation between public and private investment. In this connection, there is not much space for optimism. The fiscal effort seems to have reached a limit in cutting current expenses, and the public sector savings are insufficient to finance public investments. The privatization of state enterprises would be an important move towards an increase in the saving capacity of the public sector.

6. Mexico

In Mexico, since 1988, after almost a decade of structural adjustments, and a mix of orthodox and heterodox stabilization policies, private investment has been showing signs of recovery. What makes the Mexican case peculiar is the apparent independence between public and private investment. Much like in the Bolivian experience, public investment was repressed over the adjustment process, falling from approximately 11% of GDP in the early 1980's to no more than 4% in 1989. However, it seems that the response of investors to the policies applied was such that, albeit the poor performance of public investment, in 1989 the ratio of private investment to GDP had returned to its historical level.

This section is organized in four parts. Section 6.1 is dedicated to the main characteristics of the Mexican economy and an overview of the macroeconomic performance of the economy over the 1980's. Section 6.2 deals with the evolution of the public sector accounts. We then look at the structural reforms, namely, trade liberalization and privatization in section 6.3. The final section examines the evolution of private and public investment and explores the proximate causes for the recovery of private investment.

6.1 Dutch disease and over-borrowing

It is worth mentioning a few characteristics of the Mexican economy and its performance over the 1980's before turning to a more detailed analysis of the public sector accounts. In Mexico, state enterprises are major net exporters which implies that the internal transfer problem does not impose any major extra pressure on the domestic fiscal deficit, except of course in the case of devaluations. However, the dependency on oil exports and external borrowing create the perfect scenario for situations of Dutch disease. The moratorium of 1982 came after three years of unsustainable current account deficits. Together with the reduction in the price of oil, the over valuation of the peso in 1984 and 1985, led to a serious balance of payment crisis again in 1986.

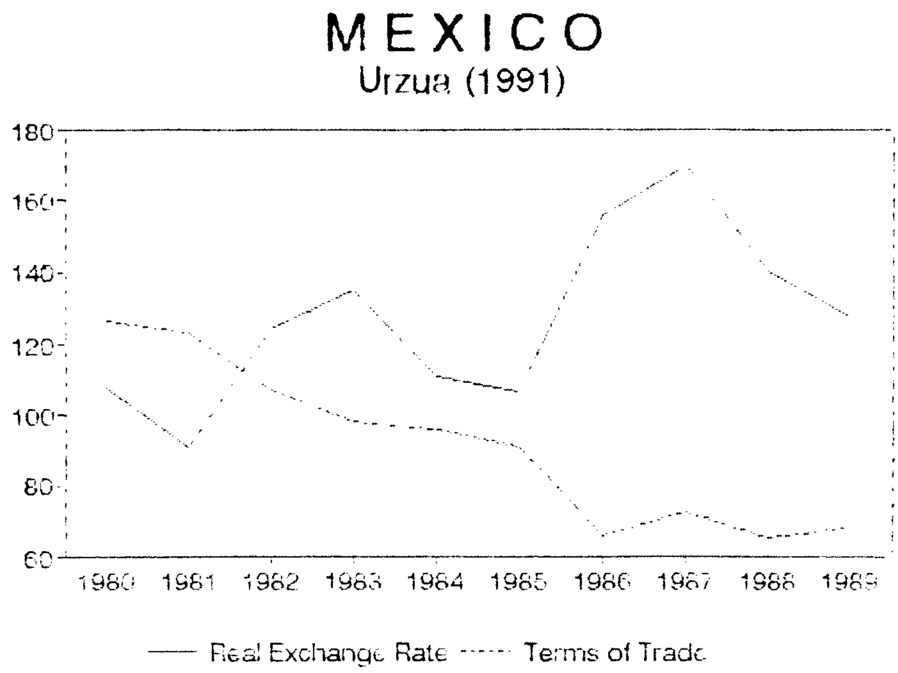
As shown in Table 6.1 and Figure 6.1, the crisis of 1982 and 1986 are strongly associated with the movements of the terms of trade and of the real exchange rate. The terms of trade dropped 20% from 1981 and 1983 whereas the peso:dollar real exchange rate in 1981 was 16% lower than in 1980.

Table 6.1
Mexico: Macroeconomic Indicators, 1980-89

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Real exchange rate (1970 = 100)	107	91	124	135	111	107	156	170	140	128
Terms of trade (1970 = 100)	127	123	107	98	96	91	66	72	66	68
Price of Mexican oil (US$ per bar)	31	33	29	26	27	25	12	16	12	15
Inflation (annual)	30	29	99	81	59	64	105	159	52	20
Trade balance (US$ million)										
Public	358	583	1283	1068	919	997	4305	7384	4482	5229
Private	-900	-1014	23	121	-187	-170	292	1049	-2815	-5874
Total	-542	-448	1306	1189	731	826	4598	8433	1667	-645

Source: Urzúa, C. 1991. Table 6.

Figure 6.1



In a response to the crisis in 1982, the government implemented an adjustment package based on three main instruments. First, a drastic fiscal adjustment --cutting in half the nominal public sector deficit as a percentage of GDP, reducing public investment in more than 30% in real terms, and increasing indirect taxes. Second, over 1982 and 83, a real devaluation of 50% took place in order to revert the deterioration of the balance of payments position. And third, the mechanism of indexation of the minimum wage was changed with a severe reduction in the rate of adjustment.

Ros & Lustig (1987) see the adjustment package of 1983 as a typical case of overkill. On the one hand, the transfer of resources abroad was much greater than what was required by the debt crisis. The trade balance went from a deficit of - US $ 542 million in 1981 to a surplus of US $1.3 and US $1.2 billion in 1982 and 1983, respectively. The current account moved from a deficit of US $ 5.5 in 1982 billions to a surplus of US $ 5.4 billions in 1983. On the other hand however, annual inflation jumped from around 30% in 1981 to 100% in 1982, interest rates went from 30% in 1981 to 60% in 1983, and real GDP fell 4% in 1983. Targeting a reduction in the nominal public sector deficit was the main reason for the overkill. Because "inflation, interest rates and nominal interest payments on public debt remained well above those planned, the fulfillment of the fiscal target for the nominal deficit implied a real fiscal contraction that was larger than expected, leading to a surplus of 4.3% of GDP in the fiscal balance excluding interest payments" (Ros & Lustig, pp. 21-22)

Amongst the deleterious effects of the adjustment package Ros & Lustig mention the fact that the program "under-estimated the complementary between private and public investment, as well as the depressive effect on investment resulting from a fall in real wages... The implicit assumption that private investment can play a complementary role in sustaining aggregate demand turned out to be highly unrealistic", at least in the short run. (pp. 23)

The peso becomes overvalued again in 1984 and 1985, and in 1986 the terms of trade fell almost 30% in comparison with 1985. The price of oil, in turn, fell from US $33.1 per barrel in 1981 to US $25.4 in 1985 and US $11.8 in 1986.

As a result of the maxi-devaluations of 1986 (100% in relation to 1985), and 1987 (120% in relation to 1986), the annual rate of inflation accelerated from 63.4% in 1985 to 105.7% in 1986 to 159.2% in 1987. Interest rates jumped to 100% per quarter in 1987 thus boosting the domestic fiscal debt. The acceleration of inflation led the government to launch a stabilization program in 1987 --known as the "Pacto de Solidariedad Economica"-- which mixed orthodox and heterodox instruments. Fiscal austerity remained a major instrument. On the other hand, an active incomes policy based on price controls and discretionary wage adjustments based on the inflation of basic wage goods was put in practice.

In 1989, the new president of Mexico, Mr. Carlos Salinas, inaugurates a new phase in the adjustment process based on a "Pacto para la Estabilidad y el Crecimiento Economico". The basis of the new package are the programs of trade liberalization and privatization which gained a prominent status together with the restructuring of the external debt.

As seen in Figure 6.2, the success of the stabilization plan in terms of the reduction in the rate of inflation is undisputable. The annual rate of inflation was stable around 25% over 1990, and has gradually fallen over 1991 from an annual rate of 27% in January to 22% in July. However, the costs of the adjustment process of the recent stabilization plan can be assessed by looking at the path of the GDP. As shown in Figure 6.3, the rate of growth of GDP was negative in 1983 and 1986.

Figures 6.2 and 6.3

6.2

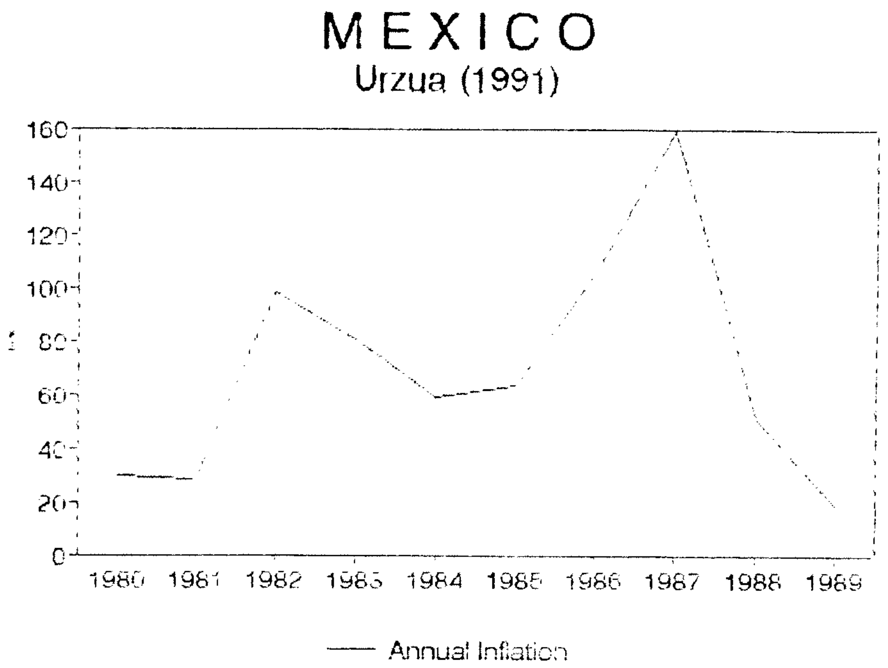
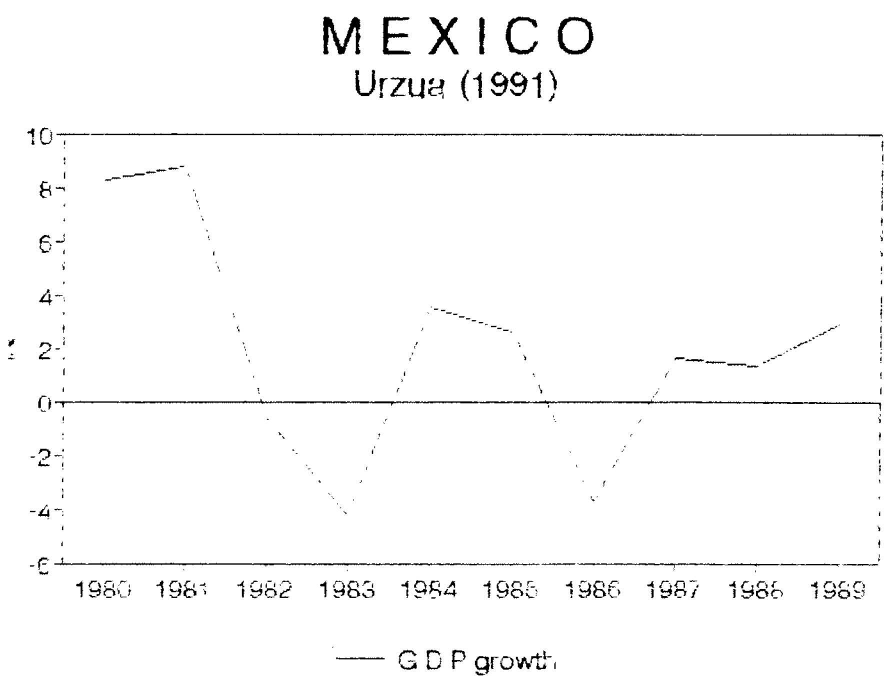


Table 6.3



On the external front, between 1987 and 1990, imports increased 100%, and over the first half of 1991 it increased another 50%. Exports have not grown as fast which explains why since 1988 the trade deficit has been increasing, reaching US $ 3 billion in 1990 and US $ 2.5 between January and April 1991, implying a tendency for a much greater annual deficit in 1991. The influx of financial capitals have been quite critical to sustain the growth of the trade and current account deficits.

6.2 Public sector savings

For the analysis of the public sector accounts in Mexico over the 1980's, it is convenient to divide the period into two sub-periods. The first goes from 1980 to 1983 when the first major adjustment effort took place. The other goes from 1984 to the present.

Before we turn to the analysis of the two sub-periods, it is worth noting that in the case of Mexico, the growth of the domestic public sector debt and the acceleration of inflation implied an escalation of nominal interest rates over the 1980's. As noted in the previous section the quarterly nominal interest rate went from approximately 23% in 1980 to 103% in 1987. Therefore, unlike in the case of Bolivia, the gap between the nominal and operational deficits is not insignificant. On the contrary, as shown in the following paragraphs, the difference between the two amounted to more than 10% of GDP in certain years.

As shown in Table 6.2, over the first period, the increase in public sector receipts (from 27% to 33% of GDP) resulted essentially from the increase in the net sales of PEMEX, which went from 7.3% of GDP to 14% of GDP. Current non-interest expenditures increased slightly. Public sector saving before interest payments almost doubled, going from 5% to 9.6% of GDP between 1980 and 1983 due essentially to the increase in oil related receipts.

However, nominal interest payments increased almost 4 times over the period implying a negative saving of approximately 3% of GDP in 1983. When interest payments are corrected for inflation, the saving ratio increases from 3.4% of GDP in 1980 to 6.5% of GDP in 1983. The public sector gross fixed investment fell almost 3 percentage points of GDP between 1980 and 1983. In 1983, primary PSBR amounted to 4.2% of GDP whereas the operational PSBR was approximately 1.2% of GDP.

MEXICO

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989*
1 Current Revenue	26.71	26.71	30.94	32.70	32.17	31.22	30.45	30.54	29.75	30.54
Taxes	10.00	10.64	9.93	10.25	10.31	10.19	11.31	10.69	11.98	12.77
Directed taxes	5.32	5.54	4.74	4.07	4.11	4.06	4.25	3.95	4.92	5.51
Indirect taxes	5.28	5.10	5.19	6.18	6.20	6.13	7.06	6.73	7.06	7.26
Domestic VAT	2.02	1.07	1.68	2.57	2.65	2.44	2.36	2.45	2.61	2.43
External VAT	0.67	0.72	0.54	0.46	0.55	0.68	0.80	0.79	0.93	1.11
Taxes on production & services	1.07	1.02	1.81	2.39	2.24	2.16	2.74	2.51	2.75	2.56
Import tariffs	1.03	1.09	0.86	0.48	0.49	0.65	0.86	0.77	0.45	0.78
Other taxes	0.47	0.40	0.30	0.28	0.27	0.20	0.28	0.21	0.32	0.30
Social Security Revenue	2.33	2.27	2.42	1.95	1.96	2.14	2.09	1.81	1.95	2.15
Public Enterprises' net sales	12.42	12.30	14.87	19.10	18.81	17.75	15.00	16.54	14.34	12.73
PEMEX	7.32	7.32	9.88	14.23	13.04	11.53	9.02	9.82	7.57	6.92
Others	5.10	4.98	5.01	4.87	5.77	6.22	6.70	6.72	6.77	5.81
Other non interest income	1.38	1.50	1.70	1.60	1.09	1.14	1.25	1.51	1.68	2.89
2 Current non interest Exp	21.97	25.38	28.49	23.33	22.38	23.10	23.74	20.88	18.65	19.66
Wages & Salaries	7.01	7.27	8.02	6.69	6.50	6.63	6.48	6.40	5.98	6.09
Government	5.00	5.17	5.81	4.70	4.67	4.51	4.31	4.23	3.94	4.11
PEMEX	0.52	0.57	0.53	0.57	0.51	0.59	0.65	0.68	0.61	0.60
Public Enterprises	1.47	1.33	1.58	1.42	1.32	1.53	1.52	1.49	1.43	1.38
Net purchase of goods & services	3.96	5.07	4.33	4.97	5.18	5.54	5.96	4.91	4.84	4.09
Government	0.73	1.27	1.25	1.20	1.12	1.16	1.33	1.14	1.20	1.21
PEMEX	0.69	0.69	0.65	0.61	0.73	1.10	1.15	0.64	0.47	0.49
Public Enterprises	2.34	3.11	2.43	3.16	3.33	3.28	3.48	3.13	3.17	2.39
Transfer & Subsidies	6.67	7.74	6.07	6.21	5.00	5.09	5.17	5.35	4.54	4.79
Social Security	0.57	0.59	0.62	0.54	0.55	0.66	0.71	0.61	0.60	0.79
Other	3.76	4.91	9.45	4.92	5.15	5.18	5.42	3.61	2.70	3.90
3 Saving before Interest (1-2)	4.76	1.18	0.45	9.37	9.79	8.12	6.71	9.66	11.29	10.88
4 Nominal Interest Exp	3.52	4.98	8.21	12.37	11.90	11.49	16.55	19.74	16.71	13.02
On net domestic	2.37	2.92	4.91	7.74	7.96	7.82	12.13	15.36	13.13	9.58
On net ext	1.13	2.06	3.30	4.63	3.94	3.67	4.42	4.38	3.58	3.44
5 Inflation Corrected net interest Exp	1.60	2.32	0.33	3.03	3.59	2.75	1.91	-2.01	8.23	9.15
6 Saving after nominal net interest (3-4)	1.44	3.85	-7.76	-2.80	2.11	-3.37	9.84	-10.08	5.42	2.14
7 Saving after inflation corrected interest (3-5)	3.16	1.39	0.12	6.54	6.20	5.37	4.80	11.67	3.06	1.73
8 Capital Expenditure	7.95	9.15	7.80	5.34	5.04	4.65	4.63	4.28	3.77	3.26
Net Capital Revenue										
Capital Income										
Financial inversion										
Gross Fixed Inv	7.95	9.15	7.80	5.34	5.04	4.65	4.63	4.28	3.77	3.26
Gov	2.41	2.95	2.68	1.60	1.69	1.64	1.67	1.56	1.13	0.95
PEMEX	2.83	3.75	2.91	1.95	1.59	1.26	1.20	1.18	1.03	0.91
Enterp.	2.51	2.45	2.21	1.79	1.76	1.75	1.76	1.54	1.61	1.40
9 PSBR (primary) (8-3)	2.99	8.02	7.35	-4.23	-4.75	-3.47	2.08	-5.38	-7.52	7.62
10 PSBR (operational) (8-7)	4.59	10.54	7.68	-1.20	-1.16	0.72	-0.17	7.39	0.71	1.53
11 PSBR (nominal) (8-6)	6.51	13.00	15.56	8.14	7.15	8.02	14.47	14.36	9.19	5.40
12 Deficit Otro Fiscal	0.47	1.35	-3.01	2.59	0.71	0.93	3.93	5.82	0.80	1.17

Source: Urzúa (1991)

When we look at the figures for 1989, that is, two years after the second adjustment effort started, the following figures are prominent:

- On the revenue side, 1. direct taxes recovered the 1980 level (as a percentage of GDP) after a continuous reduction between 1981 and 1987; 2. indirect taxes increased by 2 percentage points of GDP between 1980 and 1989; and 3. the net sales of PEMEX as a percentage of GDP went back to their 1980 levels. Total revenues increased 3.5 percentage points of GDP.

- On the expenditure side, 1. wages & salaries fell 1 percentage point of GDP; 2. transfers & subsidies fell 2 percentage points; and 3. net purchase of goods and services by the government remained roughly constant over the decade. Expenditures fell approximately 2.3 percentage points of GDP.

Therefore, in ten years, the adjustment effort led to an increase in primary savings (before interest payments) of approximately 6 percentage points of GDP. Nominal interest payments went from 3.5% of GDP in 1980 to 13% of GDP in 1989, whereas inflation corrected interest payments went from 1.6% of GDP to 9.2% of GDP over the same period.

Gross fixed public investment fell from 8% of GDP in 1980 to 3.3% of GDP in 1989. As a result, primary PSBR went from 3% of GDP to -7.6% of GDP --a major effort--, nominal PSBR went from 6.5% to 5.4% of GDP, after reaching 14.4% of GDP in 1987, and the operational PSBR fell from 4.6% to 1.5% of GDP.

When we consider the quasi-fiscal operations of the Central Bank, estimated by Urzúa (1991) and shown in the last line of Table 6.1, it becomes evident that they were far from insignificant especially in 1983, 1986 and 1987. Adding the quasi-fiscal deficit of the Central Bank to the operational deficit gives rise to the following estimates of the total operational deficit: 1.4% of GDP in 1983, 4% in 1986 and -1.6% in 1987 and -2.7% in 1989.

In sum, the basis of the Mexican fiscal adjustment effort are the increase in the primary non-interest saving and the reduction in public investments. The former resulted from the fiscal reform initiated in 1987 which had the following features: the increase in direct taxation based on measures to reduce the Oliveira-Tanzi effect, the reduction in fiscal evasion, and the introduction of a 2% tax on financial and real assets of all enterprises.

6.3 Structural Reforms

Three groups of reforms have been implemented over the second half of the 1980's in Mexico: a liberalization of international trade, the privatization of state enterprises, and the establishment of incentives to attract foreign investments. These reforms are seen as essential to reduce inefficiencies resulting from excessive regulation of trade and economic activities in general, to promote the up-grading and modernization of the Mexican industry, and to reduce the participation of the state in activities in which it does not have any good reason to participate.

The program of trade liberalization in Mexico started in 1985 and gained momentum in 1988 with the reforms introduced in December 1987. The main changes are the following: a reduction in tariffs and in the dispersion of tariffs, the gradual elimination of all kinds of administrative import controls, and the elimination of subsidies to exports. The average tariff (weighted by imports) fell form 27% in 1982 to 13% in 1989, whereas dispersion fell considerably (see Ros (1991)). Export promotion was restricted to the exemption of import tariffs to exporters.

Over the last three years, imports have exploded: they increased 55% in 1988, 24% in 1989 and 22% in 1990. Exports, on the other hand, have grown much slower than that, implying a continued reduction in the trade surplus which turned into a deficit in 1988. Hence, the degree of import penetration so far has been much greater than the incentives to export created with the liberalization of imports, i.e. the possibility of importing less expensive inputs of better quality.

The privatization of state enterprises gained momentum after 1989 when the biggest firms, such as the Mexican telecommunications corporation TELMEX, were sold. There are a few areas in which the state will continue operating. These are the extraction and refining of oil, the distribution of foodstuff, the railways transportation system, electricity, postal services and the extraction and manufacturing of radioactive minerals. Between 1982 and 1990, 194 state enterprises were sold (amongst which TELMEX) and 322 were eliminated. There are 182 firms in a process of privatization.

Finally, a series of legal reforms over the last few years have reduced the restrictions to the operation of foreign enterprises in certain sectors and incentives have been created to attract foreign capitals.

6.4 The Macroeconomic Environment, and the Performance of the Public and Private Investment

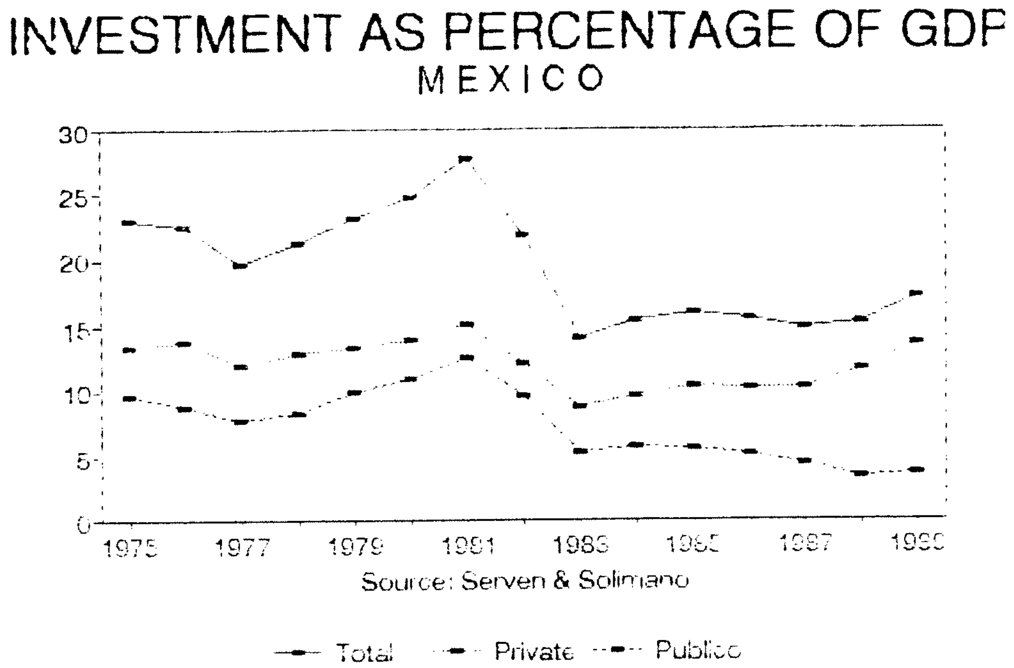
When we look at the data on investment ratios in Mexico over the 1980's, the most salient feature is the fact that whereas public investment as a percentage of GDP fell continuously (from 12.7% in 1980 to 3.6% in 1989), private investment dropped sharply between 1980 and 1983-4 --from 14% of GDP to around 9%-- but then started recovering to reach 13.6% in 1989. The Mexican case is peculiar in the sense that it does not seem to confirm the hypothesis that there exists a positive correlation between the movements of public and private investment --a hypothesis which seems to be confirmed in the cases of Chile and Bolivia.

Table 6.3
Mexico: Total, Public and Private Investment
as % of GDP

	Total		Public		Private		Relative price of investment
	Current Prices	Constant Prices 1980=100	Current Prices	Constant Prices 1980=100	Current Prices	Constant Prices 1980=100	
1975	21.4	23.0	9.0	9.7	12.4	13.4	0.93
1976	21.0	22.5	8.2	8.8	12.8	13.8	0.93
1977	19.7	19.7	7.8	7.8	11.9	12.0	1.00
1978	21.2	21.3	8.4	8.4	12.8	12.9	1.00
1979	23.7	23.2	10.2	10.0	13.5	13.3	1.02
1980	24.8	24.8	10.9	10.9	13.9	13.9	1.00
1981	26.4	27.6	12.1	12.7	14.3	15.1	0.96
1982	23.0	21.9	10.2	9.7	12.8	12.2	1.05
1983	17.6	14.1	6.6	5.3	11.0	8.9	1.25
1984	17.9	15.4	6.6	5.7	11.3	9.7	1.17
1985	19.1	16.0	6.6	5.5	12.5	10.5	1.20
1986	19.4	15.5	6.5	5.2	12.9	10.3	1.25
1987	18.4	14.7	5.5	4.4	12.9	10.3	1.25
1988	19.1	15.2	4.4	3.5	14.7	11.8	1.26
1989	18.2	17.2	3.8	3.6	14.4	13.6	1.06

Source: Serven & Solimano based on World Bank data.

Figure 6.4



The macroeconomic record of the Mexican economy over the last three or four years provides mixed signals as for the sustainability of high private investment ratios in the future. The positive signs are given by

- The substantial reduction in inflation rates;

- The steadiness of the fiscal and structural reforms most especially in the areas of trade liberalization and privatization of state-owned enterprises; and

- The restructuring of the external debt.

All these elements enhance the climate of macroeconomic stability, and therefore are very important for the sustainability of high rates of private investment. However, there are negative signs as well:

- The explosive growth of imports since 1987 and the very poor reaction of exports to the liberalization reforms have led to a very negative impact on the trade and current account balances;

- The reduction in the credibility of the private sector on the prospects of success of the liberalization process as measured by a survey conducted by the World Bank (reported by Ros (1991));

- The sharp reduction in real wages which has a negative effect on aggregate demand; and

- The poor performance of public investment which up until 1990 had not reached 5% of GDP (CIDE, 1991).

These factors tend to dampen the incentives to invest of the private sector, and provide a few question marks as for the prospects of sustainable growth.

7. Conclusion

In order to compare the experiences of Chile, Bolivia and Mexico, it is convenient to look at a few measures of their adjustment and stabilization efforts. The figures on fiscal restraint show that the adjustment effort was simply remarkable in all these countries. The change in primary savings between the critical period (which corresponds to the immediate pre-reform period) and the post-reform period ranges from 1.2 percentage points of GDP in Chile to 11.4 and 11.8 percentage points in Bolivia and Mexico, respectively. Despite the increase in interests over the 1980's, the figures for nominal and operational savings are also spectacular. In Bolivia, nominal savings went from -9.4% of GDP in the critical period (1984) to 2.4% of GDP after the fiscal reform. What these figures show is that the reduction in current public sector expenditures and the increase in receipts are far from marginal.

The three countries considered here are peculiar in the sense that their public enterprises are major net exporters. In Bolivia and Mexico, in particular, trade net revenues of state enterprises plus taxes on the value added of these enterprises amount to more than 10% of GDP. This of course affects favorably the relation between the payments of the external debt and the fiscal stance of the government. This is certainly a very important factor in distinguishing the countries surveyed in the paper and others like Brazil and Argentina where the public sector is not a big net exporter.

Table 7.1
Chile, Bolivia and Mexico:
Fiscal Restraint, Stabilization Effort and Structural Reforms

	Chile\1	Bolivia\2	Mexico\3
Fiscal Restraint:			
Primary savings (% of GDP):			
- critical situation	8.4	- 6.7	0.5
- after reform	9.6	5.1	10.9
- reduction in Expenditures	-1.7	6.4	8.9
- increase in Revenues	2.8	5.5	1.6
Nominal savings (% of GDP):			
- critical situation	7.2	- 9.4	-7.8
- after reform	3.6	2.4	-2.4
Operational savings (% of GDP):			
- critical situation	---	---	0.1
- after reform	---	---	1.7
Measure of public sector trade surplus (% of GDP)	4.1\a	15.1\b	12.2\c
Trade Liberalization	Compled	Compled	Advanc
Privatizations	Compled	Delayed	Advanc
Annual rate of inflation			
- Before stabilization	560*	182**	160*
- After stabilization	25*	20*	25*
Public Sector Investment (% of GDP):			
- 1980	5.4	7.0	10.9
- 1989	4.7	4.0	3.6
Private Sector Investment (% of GDP):			
- 1980	15.7	7.4	13.9
- 1989	14.5	2.3	13.6
Total Investment (% of GDP):			
- 1980	21.0	14.4	24.8
- 1989	19.2	6.3	17.2

Notes: a. Public enterprises external net sales; b. Net sales of CODELCO plus copper taxation; c. Net sales of PEMEX plus external VAT.
1. 1970-1985; 2. 1984-90; 3. 1982-89.
(*) Annual inflation; (**) Monthly rate of inflation.
Sources: Tables in other sections of the paper.

Turning to structural reforms, in all three countries trade liberalization is well advanced whereas the privatization process is delayed only in Bolivia. In all three countries tariffs have been reduced to around 10% and non-tariff barriers have been eliminated. This of course has ambiguous effects. In the case of Chile, after almost two decades and a profound pectoral adjustment, domestic producers seem to have adapted to a more competitive environment in which the distortions resulting from discretionary tariff and non-tariff restrictions are now absent. in Mexico and Bolivia, the effects are still uncertain. In Mexico, in particular, the explosion of imports has not been yet matched by the increase in exports.

The three countries have been successful in reducing and stabilizing the rate of inflation to around 25% annually. In Chile and Bolivia the therapies were essentially orthodox. In Chile, de-indexation of wages was helped by the persistent and profound unemployment of the 1982-84 period, after which a law was passed abolishing indexation mechanisms. In Mexico, heterodox measures were applied which does not imply that real wages did not fall. It seems therefore that successful stabilization programs do require a considerable amount of wage restraint.

After looking at all these figures and considering in detail the experiences of Chile, Mexico and Bolivia, we are led to the conclusion that the path towards growth resumption is both sinuous and socially painful. Even in the case of Chile, sustained growth came only after almost two decades of very authoritarian rule and a succession temporary failures. In Mexico, sustainability is still uncertain. In Bolivia, the system has nor yet taken off.

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