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by
Juan Antonio Morales

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Universidad Católica Boliviana

The most extreme example of the Latin American crisis of the 1980s is given by the Bolivian case. The rate of growth of Gross Domestic Product (GDP) were negative every year in the period 1982-1986, and in 1984-1985, Bolivia suffered from hyperinflation. The economic recovery after a successful inflation stabilization is being hindered by a host of internal and external factors, and is slower than expected. The international debt crisis of the early 1980s had an especially pronounced effect of the Bolivian economy. To this should b added the collapse in export earnings in 1985-1986. However, not only external disturbances explain the onset and the development of the crisis since domestic factors also played a very important role. Without ignoring the external determinants it seems appropriate to focus on the Internal ones. To many Bolivian observers the hyperinflation appeared to be more than a transitory monetary disarray; rather, to them, it constituted an indictment of the development model followed by Bolivia in the preceding three decades and the culminating phase in the effects of the accumulation of economic-policy mistakes.

The main purpose of this chapter is to provide a long view of economic policy in Bolivia. Bolivia is a small open economy, with a special dependence on a few export products and on a small number of large trade partners. The performance of exports as well as a normal access to foreign financing are crucial to Bolivia's welfare. The other dominant feature of Bolivia's economy has been the size of its public sector. Bolivia's governments have been overburdened with economic functions that they have poorly fulfilled on the whole. The weight of the public sector has unduly affected investment rates and the patterns of foreign trade and indebt ness.

The chapter is organized as follows. In section I, a short overview of Bolivian contemporary history is provided. Emphasis is given there to the structural constraints. In section II, the scope of government intervention in the economy is examined. The development model based on state capitalism is a main theme in this section. Specific foreign trade and exchange rate policies are analyzed with some detail in section III. In August 1985, the Bolivian government announced a set of very profound economic policy reforms that break away with the traditional pattern. The content and implications of the policy reforms are viewed in section IV. Finally, section V provides a summary of the main policy lessons.

I. A Short Review of Contemporary Bolivian Economic History

Table 1 and Figure 1 depict the main characteristics of the period encompassed between 1952 and 1987, in regard to growth and over-all performance of the economy. The division in sub-periods in Table 1 is rather arbitrary but conveys some dominant patterns. The sub-period 1953-61 is marked by low growth rates of the economy and high inflation. In 1962, the Bolivian economy initiated a sustained take-off: high rates of growth of GDP and low inflation rates characterize indeed the period. The period 1972-1978 was also of high rates of growth of the economy and low inflation rates, but is differentiated from the preceding period because is featured a rapid accumulation of external debt. The short period 1978-1981 was defined by extreme political instability and by the beginning of difficulties in servicing the foreign debt. The period 1982-1986 covers the economic crisis at its height. Finally, in the recent period 1986-1987, Bolivia has made a successful attempt at stabilization and is fighting hard to achieve economic recovery.

The sustained growth over the relatively long period of 1962-1978 was engined by high investment rates, and by availability of foreign exchange. The econometric estimates of Morales (1988) show indeed that investment rates, growth in the capacity to import, and political and macroeconomic stability are the main explanatory factors of GDP growth rates. The capacity to import is given by the sum of export proceeds **and** foreign capital inflows, computed in constant prices. Ram (1987) finds that export performance in itself is a very significative explanatory factor of Bolivian economic growth, however his results are difficult to replicate.

Table 2 shows the main changes in the structure of production that occurred between 1952 and 1987. The most salient aspect in the table is the increase in the share of Services II in GDP. Services II consists principally of the production of non-tradeables in foreign trade. Notice that production in the Primary sector, that comprises agriculture, mining and hydrocarbons, reduced its share in GDP until around 1977. During the crisis years, this share has somewhat increased. The manufacturing sector was greatly affected by the crisis of the 1980s, as can be inferred from the strong fall in its share in GDP.

Table 1

Key Indicators of Bolivian Development

	1953-61	1962-71	1972-78	1979-81	1982-85	1986-87[p]
Average Annual Rates of Growth (%):						
- GDP	-0.4	5.9	5.4	0.9	-3.0	-0.8
- Population	2.2	2.4	2.6	2.8	2.8	2.8
- Per Capita GDP	-2.6	3.5	2.7	-1.8	-5.6	-3.5
- Consumer Prices	56.6	5.1	17.4	32.6	982.7	107.1
- Exports	-9.5	11.6	19.5	13.2	-9.1	-14.5
- Import Capacity[a]	-5.9	5.5	8.2	-4.3	-14.0	4.5
Average Ratios (%):						
- Investment/GDP	15.8	19.0	16.5	14.0	9.1	7.2
- Gross Domestic Savings/GDP	6.1	11.8	18.4	13.3	10.7	-.-
- Exports/GDP	13.3	19.7	21.9	18.8	15.3	12.9
- Exports of Tin and Natural Gas/Merchandise Exports	63.5	68.7	56.5	65.9	81.7	73.6
- Current Account						
- Deficit/GDP	-.-	3.1	2.3	7.8	4.8	10.7
- Public External Debt/GDP	-.-	36.3	45.2	63.0	80.0	93.2[b]
- Public External Debt/Exports	-.-	199.3	194.4	229.5	361.5	516.1[b]

Sources: Basic data from: Central Bank of Bolivia, Statistical Bulletin, Several Issues; UDAPE, Dossier de Información Estadística 1980-1987, La Paz, October 1987; Afcha and Huarachi (1988); International Monetary Fund, International Financial Statistics Yearbook, 1987Edition; and, World Bank, World Debt Tables, 1987-88 Edition

Notes: [a] Import Capacity is defined as the sum of export receipts and long-term foreign capital inflows deflated by import price index

[b] Value for 1986

[p] Preliminary

Table 2

Sector Composition of GDP-Selected Years[a]
(Percentages)

Sector	1952	1962	1972	1977	1982	1985[e]	1987[e]
Primary	46.5	39.9	29.1	25.8	35.2	32.2	33.3
Manufacturing	14.2	14.1	14.6	15.9	12.0	9.8	10.8
Services I[b]	4.6	5.4	5.4	5.9	4.0	4.2	3.7
Services II[c]	34.7	40.6	51.0	52.5	46.2	50.7	50.5
Indirect Taxes	[d]	[d]	[d]	[d]	2.6	3.1	1.6
GDP[f]	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Planning, Revista de Planificación y Desarrollo, 1970. Central Bank of Bolivia, Statistical Bulletin, Various Issues

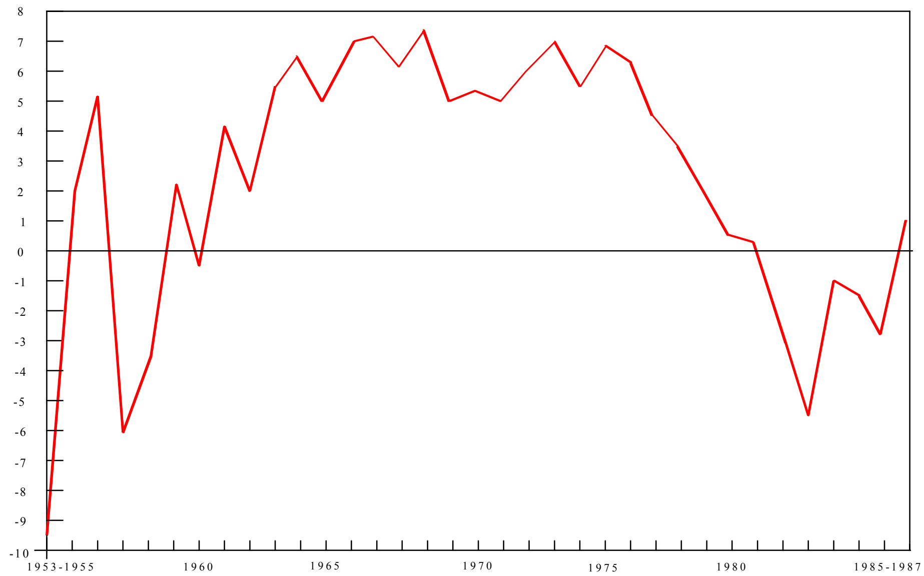
Notes: [a] Percentages are computed from basic data in real terms

[b] Services I: Electricity, Gas and Water, and Construction

[c] Services II: Commerce, Transportation and Storage, Communication, Finance General Government, and Other Services
[d] Indirect taxes are included in each sector
[e] Preliminary
[f] Basic data on GDP is at market prices

Figure 1

Annual Growth Rates of GDP, 1953 - 1987



Geography is a very important determinant in the pattern of Bolivia's foreign trade. With a large share of the population concentrated in the highlands, with no direct access to the sea and with few waterways free of natural obstacles, with few roads and railways because the topography of the country causes very steep building costs and transportation costs are very high. Exports have to be therefore of high value added per unit of weight.

Bolivia's export base has been very dependent on a handful of commodities: tin and other minerals, petroleum, and more recently natural gas. In the mid-1970s illegal exports of cocaine-related products made a strong appearance; they have important distortional effects on the legal economy. Table 1 shows that exports of tin and, since 1973, of natural gas have accounted for more than 55 percent of total (legal) merchandise exports during most of the period. With the crisis that has started in the late 1970's, more concentration of exports on tin and natural gas is observed. Geographical concentration has also increased as can be observed in Table 3. Notice there that 56 percent of Bolivia's exports were directed to Argentina in 1985. With these features, it is no wonder that Bolivian exports show a high vulnerability to international market conditions.

Table 3

Bolivian Exports by Destination (Percentages)

	1960	1970	1980	1985
Argentina	5.7	4.7	23.7	55.9
Brazil	5.9	0.4	3.5	0.7
Chile	0.4	1.1	4.5	1.6
Peru	0.2	2.7	3.1	1.9
Other LAFTA/LAIA countries[a]	0.0	0.0	1.9	0.6
Total LAFTA/LAIA[a]	12.2	8.9	36.7	60.6
Rest of the world	8.78	91.1	63.3	39.4
Total	100.0	100.0	100.0	100.0

Source: Basic data from the Central Bank of Bolivia, Statistical Bulletin, Various Issues
Note: [a] LAFTA/LAIA stands for the economic integration organization Latin American Free Trade Association, that became the Latin American Integration Association in the late 1970s

Despite the crucial role of exports in the Bolivian economy, their long run performance has been very poor. Between 1952 and 1985, the volume of exports had grown at the meager average annual rate of 1.5 percent. The attempts ar import-substitution have been short-lived and of scarce impact. In fact, the Bolivian strategy appears to have been geared more to grab Terms-of-Trade improvements than to a long-run expansion of the production of tradeables. Table 4 shows that between 1960 and 1984 there was a continued improvement in the Terms-of-Trade. This period of improvement overlapped to a large extent with the period of sustained growth of the economy. In 1985 the Terms-of-Trade took a nose dive.

Exports and imports have had a continued relatively high participation in the national economy during 1952-1987. Foreign trade-of-GDP ratios can be observed in Table 5. The ratios show a general stable trend, except over short periods associated with severe disruptions in the economy.

Another important feature of Bolivia's development from 1952 on has been its continued heavy dependence of foreign capital and transfers. During the 1960s, the flow of foreign funds took essentially two forms: 1) foreign aid, bilateral or multilateral trough the official development banks, to finance social overhead projects and subsidized small loans to the private sector; and, 2) Direct Foreign Investment, heavily concentrated in the hydrocarbons sector. In the 1970s, Bolivia gained access to credits from the international commercial banks, as other countries in the region. The overhang of the heavy indebt ness in which Bolivia incurred in the 1970s continues to be a main obstacle to economic recovery.

Table 4

Terms of Trade Indices, 1952-1987
(1980 = 100)

Year	Index of Export Unit Values	Index of Import Unit Values	Index of Terms of Trade
1952	22.9	28.1	81.5
1953	21.5	22.7	94.7
1954	20.3	22.5	90.4
1955	19.0	22.5	84.6
1956	19.5	24.0	81.1
1957	16.9	20.9	80.7
1958	16.4	19.5	83.9
1959	16.7	21.1	79.2
1960	19.9	17.8	111.6
1961	20.5	19.9	103.1
1962	21.1	19.7	107.4
1963	21.1	20.7	102.1
1964	21.8	27.7	78.5
1965	21.6	32.9	65.5
1966	20.7	30.0	69.0
1967	21.3	29.0	73.6
1968	22.0	28.6	76.9
1969	22.4	30.8	72.6
1970	23.2	32.3	72.0
1971	22.5	32.9	68.4
1972	25.2	34.9	72.1
1973	25.5	40.7	62.8
1974	50.7	49.9	101.5
1975	45.5	56.8	80.0
1976	48.3	59.1	81.8
1977	56.7	65.9	86.1
1978	63.1	73.0	86.5
1979	75.0	88.3	84.9
1980	100.0	100.0	100.0
1981	96.7	101.9	94.9
1982	93.3	99.3	94.0
1983	96.2	95.8	100.3
1984	99.1	98.5	100.6
1985[p]	98.8	93.5	105.7
1986[p]	76.3	88.9	85.8
1987[p]	79.3	92.0	86.2

Source: CEPAL, Statistical Yearbook for Latin America and the Caribbean, 1964-1985 Editions. Data for 1985-1987 has been spliced from CEPAL, Balance Preliminar de la Economía

The Revolution of 1952 is the main landmark in Bolivia's recent history.[1] The Revolution was led by Dr. Victor Paz Estenssoro. In the aftermath of the Revolution, the three largest mining firms were nationalized and an extensive agrarian reform was undertaken. Simultaneously, the government implement a policy of import substitution and production diversification. The need to lock in the wealth and income changes of the revolution gave birth to the state capitalism model that would prevail until 1985, and to which we refer in section II. It is also important to record that in the early 1950s started a very important population movement from the highlands to the eastern lowlands, particularity in the Santa Cruz region. The march to the east brought about very important shifts in economic and political power to the Bolivian landscape.

The period 1952-1956 was of very high social mobilization, accompanied by huge disruptions in the production, and by the eclosion of high inflation, that in 1956 reached 178 percent. The worsening of inflation, accompanied moreover by severe shortages of foreign exchange and food staples, gave to stabilization a top priority. In December 1956, a stabilization plan was announced, that ended indeed the high inflation, but that also spurned very significant modification in the development policies of the Revolution of 1952.[2] After stabilization of inflation, the emphasis was placed again on export-led growth, and the dependence on foreign capital inflows was increased. The recovery of the tin mines and new investment in the petroleum sector were to be central policies from 1956 to 1964. All remnants of popular mobilization and the policies of import substitution, except for some lip service, were abandoned. A strong recovery of the economy started in 1962. The inflow of foreign aid, especially with the resources of the Alliance for Progress program, had a strong impact on the investment rates and, therefore, on the GDP growth rates. Foreign aid funds financed, by and large, physical infrastructure projects. The government did not extend itself beyond the boundaries defined in the aftermath of the Revolution.

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[1] The main leaders of the Revolution were the centrists Víctor Paz Estenssoro, Hernán Siles Zuazo, Walter Guevara Arze, and the leftist leader of the labor movement Juan Lechín. Bolivian political and economic life has been determined by the alliances and disputes of those men of the Revolution. Paz Estenssoro presided over the main changes of the Revolution of 1952.

[2] The stabilization program of August 1985 that ended the hyperinflation is in many aspects similar to the stabilization program of December 1956. In deference with the former, the latter counted with the immediate financial support of the

After 12 years of civilian rule, that had started with the Revolution of 1952, a military coup led by General René Barrientos deposed President Paz Estenssoro, who was in his third term. Barrientos continued on the main with the economic policies set after the stabilization program of December 1956. Some changes were however observed. First, there was a resurgence of the private sector, as a consequence of increased inflows of foreign direct investment in the petroleum sector and the return of many qualified Bolivians with entrepreneurial skills that had fled the Revolution; and, second, substantial credits with a high grant element were made available to the private sector.

Barrientos died in an helicopter crash in 1969, he was succeeded by his civilian Vice-president Luis Adolfo Siles Salinas. Siles Salinas was shortly after overthrown in a military coup by General Alfredo Ovando. With Ovando and, later, with General Juan Jose Tórrez, who succeeded him after some confusing coups and counter-coups, Bolivia lived an area of open populism. Ovando nationalized, quite unwisely, the undertakings of the Bolivian Gulf Oil Corporation, and started to build the controversial state-owned tin smelters. Tórrez followed an even more populist course than Ovando, trying to co-opt the labor movement in government. Real wages reached an historical height during his period. A determined effort to collect more income taxes was also undertaken, but with relatively little success. Tórrez dealings with the labor movement were indeed the landmark of his presidency.

Tórrez lasted less than a year and was deposed in a coup by the conservative General Hugo Bánzer in August 1971. Bánzer ruled during seven years, a very long period indeed for Bolivia standards. He president an era of very high growth of the economy, with an average annual rate of growth of GDP of 5.4 percent. The high rates of growth and investment were prompted by two very important factors: 1) A very significant improvement in Terms-of-Trade from 1973 on, for instance, export prices doubled in the miraculous year of 1974. 2) Increased access to foreign capital markets. In addition to the factors given above, there is little doubt that political stability was a major force behind the good performance of the economy during those year. The Bánzer boom was however transitory. It was predicated on a short upsurge of export prices and high foreign indebt ness. The transitory nature of the high prices and

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United States government and the International Monetary Fund.

favorable interest rates was not fully realized by policy-markers (nor by critics) at that time.

After 1978, a reduction in the rates of growth is observed. They became negative in 1981. Reduced growth can be explained by political uncertainty and by the **lower efficiency** in the utilization of internal and external resources, that started in the last years of the Bánzer regime. The situation in the period included between 1982 and 1985 was aggravated by a **strong failure in resource expansion** in addition to the lower efficiency effects already mentioned.

Bánzer failed in the effort to constitute a large political base. The pressures of the Carter administration to redemocratize Bolivia, and the perception of the impending economic troubles, whose first symptoms appeared already by the end of 1977, made Bánzer abandon his stated purpose to stay in power until 1980. He called to general elections in 1978. The elections took place in mid-1978, without a clear winner and they were annulled. A period of political chaos ensued, that lasted until late 1982, with inconclusive elections, interim civilian presidents and coups and countercoups by the military. The political turmoil in that period undermined the government's capacity to recognize the nature of the economic crisis that was steadily building up, and to take appropriate action.[3] The fortune of Bolivia reached a low ebb with the military government of Luis Garcia Meza in 1980-1981, when Bolivian was cut off from international recognition and financial markets.

The military government of the second half of 1982, unable to cope with the deteriorated economy and the growing pressures for a return to democracy, decided to reconvene the Congress elected in 1980. The Congress, in turn, acting as an electoral college, elected as president the winner with a plurality of the elections of 1980, Hernán Siles Zuazo. Siles Zuazo inherited an economy that was already very severely strained. Indeed, the economy had experienced a negative rate of growth in 1982 and inflation in annualized terms in the year preceding Siles inauguration was already 170 percent. Siles' access to power coincided with the onset of the international debt crisis. As an effect of this crisis in Bolivia net resource transfers abroad were 2.4 percent of GDP in 1982. Siles Zuazo was completely unable to arbiter between the demands to redress a crumbling economy and the demands of his electorate, that asked for higher real wages and higher employment and investment in the public sector. In

[3] The attempt at stabilization made by the civilian interim president Ms. Lydia Gueiler stands out as an exception in this

addition, he faced irrational opposition to his policies in a Congress that he did not control. His policies and his timid (and sometimes belated) attempts at stabilization, if anything worsened an already difficult situation. Inflation jumped from the hundreds to the thousands during his government; from April 1984 to August 1985, prices had increased by a factor of 623, averaging close to 50 percent per month, and reaching in February 1985 the astounding value of 182 percent. Bolivia had a clear case of hyperinflation.

Table 5

Trade as Percentage of Bolivia's GDP, 1952-1987[a]

Years	Exports	Annual Average	Imports	Annual Average	Total Trade	Annual Average
1952	17.2		18.6		35.8	
1953	5.9		7.9		13.8	
1954	4.4		5.3		9.6	
1955	4.8	8.1	5.8	9.4	10.6	17.5
1956	13.4		16.0		29.3	
1957	22.5		30.8		53.3	
1958	16.0		25.4		41.4	
1959	20.4		27.1		47.5	
1960	16.2		23.9		40.1	
1961	16.4		23.3		39.7	
1962	16.4		24.9		41.4	
1963	17.4		26.5		43.9	
1964	20.7		23.5		44.2	
1965	21.5	18.5	26.6	25.0	48.1	43.4
1966	21.9		26.3		48.2	
1967	22.4		26.0		48.4	
1968	19.7		24.0		43.7	
1969	19.3		23.6		42.9	
1970	20.2		20.3		40.5	
1971	17.3		20.0		37.3	
1972	17.2		19.9		37.1	
1973	22.6		23.5		46.0	
1974	28.7		22.2		50.9	
1975	21.3		26.9		48.2	
1976	22.5	21.4	24.7	22.5	47.2	43.9
1977	22.3		25.1		47.3	
1978	18.6		25.3		43.9	
1979	19.3		25.2		44.6	
1980	25.6		20.2		45.8	
1981	22.4		21.7		44.1	
1982	21.3		14.8		36.1	
1983	20.1		15.7		35.8	
1984	19.0		12.9		31.9	
1985	16.5	19.9	14.6	15.9	31.1	35.8
1986	14.5		18.8		33.3	

chaotic period.

1987	11.3	12.9	19.1	19.0	30.4	31.9

Source: For 1952-1981, derived from basic data of Central Bank of Bolivia, Statistical Bulletin, Various Issues. For 1982-1987, derived from data of UDAPE (1987) and Afcha and Huarachi (1988)

Note: [a] Percentages are derived from national accounts data in current prices for years 1952-1981; percentages for 1982-1987 are estimated from Balance-of-Payments data
[b] Preliminary estimates

As a companion to hyperinflation, there was a decline in real per capita GDP close to 23 percent between 1982 and 1985. Shortages of food and other essential goods and services were everyday's fare. Strikes and work stoppages altered normality, and several threats to democracy surfaced. It should be noted that hyperinflation and the economic crisis were as much the result of very difficult external conditions, coupled with poor domestic economic design, as of political weakness. Siles Zuazo was forced to call to early elections in late 1984.

Elections took place in July 1985, and former president Victor Paz Estenssoro was elected by Congress for the time. Three weeks after his inauguration, he unveiled a package of stabilization and deep policy reforms. The stabilization package halted inflation almost immediately, and the policy reforms have set the stage for very significant changes in Bolivia's production and foreign trade.

In the last quarter of 1985, the international tin prices went into free fall. By the end of 1985, the price of tin was halved in regard to the one prevailing in August of the same year. Too compound matters, in the first quarter of 1986, oil prices dropped and this was to have a consequence on the other main Bolivian export, natural has. In 1986, export prices fell 23 percent and the decrease in Terms-of-Trade was of 19 percent. The difficult external conditions continued to prevail during 1987, hampering the prospects for a strong recovery of the national economy.

II. The Size of the Public Sector and the Model of Indebted Industrialization

a. The Size of the Public Sector

Bolivia's development between 1952 and 1987 cannot be fully understood without a scrutiny of her public sector. Even after the reforms in 1985, the share of the public sector in total investment is probably the largest in the market economies of the Western Hemisphere. Table 6 shows the importance of public investment in total investment. Political scientists (e.g. Malloy, 1970) see in this feature a manifestation of state capitalism. It is interesting to review some of the main aspects of the state capitalism model. First, and most important, the bulk of capital accumulation is Performed by the public sector, both in social overhead works and in the state enterprises. Second, the government exerts a heavy doctoring of the system of incentives and penalties to the private sector. Third, the political side of the model is given by a large bureaucracy that frequently pursues its own ends. Fourth, the state develops, frequently but not necessarily, a symbiotic relationship with favored segments of the private sector to carry out a particular distributional agenda.

The several development plans that were prepared between 1952 and 1985 contain the philosophy underlying the Bolivian state capitalism model. The most influential development plan was the Socio-Economic Strategy for National Development (henceforth SSND), unveiled during the regime of General Ovando in 1970. In the SSND, more than elsewhere, the guiding principles of the state capitalism model are spelled very clearly. Investment in sectors defined as "strategic" was reserved to state enterprises. The SSND included a system of incentives and penalties that was so heavy, that impinged upon the normal development of the private sector, Another important feature of the SSND was the importance given to a natural resource-based industrialization with heavy participation of public investment. In the conception of the SSND, only that type of industrialization could generate the big surpluses (or profit margins) to give the necessary big push to the economy. The SSND was abandoned by President Bánzer in 1972.[4] The SSND had however a powerful influence in the formation of policy in Bolivia that went well beyond 1972. The strongly nationalistic content of the SSND appealed to the Bolivian left as well as to the right-wing officers in the military.

Table 6

Main Characteristics of the Public Sector[a]

	1958-61	1961-71	1972-78	1979-81	1982-85
Share of Public Investment in Total Investment (%)	42.8	54.7	51.0	58.2	49.9
Share of Foreign Trade Taxes in Central Government Revenues (%)	-.-	51.4[b]	61.2	60.9	55.4
Consolidated Public Sector Deficit as % of GDP	-.-	-.-	7.9[c]	8.4	17.5

Source: Basic data from: International Monetary Fund, Government Finance Statistics Yearbook, Vol. X, 1986; Morales (1982); World Bank, Bolivia. Structural Constraints and Development Prospects, Report 4194-BO; and Morales and Sachs (1987)

Notes: [a] Period Averages
[b] Over period 1964-1971
[c] Over period 1974-1978

In the discussion of the role of government in the economy, a special mention has to be made of the state enterprises. Most foreign exchange earned by Bolivia since 1952 has been provided by the export activities of the mining company, Corporación Minera de Bolivia (COMIBOL), and the petroleum company, Yacimientos Petrolíferos Fiscales Bolivianos (YPFB). The fact that COMIBOL and YPFB were the main suppliers of foreign exchange gave them a privileged status, that led to frequent abuse both from their management and their workers. To be fair, these crucial export companies have also suffered from the mismanagement of macroeconomic policy, especially from grossly overvalued exchange rates.

From 1962 to 1982, the largest state enterprises generated small surpluses in their

[4] Bánzer announced a Five-year plan in 1975. The plan aimed at export promotion led by state investment. The public sector was targeted with 71 percent of total investment over the period, focused heavily on hydrocarbons. Financing of the plan was to rely on the profits of the petroleum exports, which in the event never materialized, and on foreign borrowing, which did.

current accounts, but those savings were very small to finance their capital expenditures. During the high inflation years of 1982-1985, current account deficits of the consolidated public sector became very important due to two factors, the interest servicing of a large foreign debt, and growing wages and employment in the public sector.

The state enterprises have seldom been able to constitute sufficient savings to finance their investments. The state enterprises have generally worked with weak budget constraints, as they lack incentive and sanctions to stick to their targets of production and uses of resources. Exchange rate and domestic price adjustments for their output have frequently been met with an almost immediate cost accommodation, because of their weak budget constraints. The problem of weak budget constraints was especially severe during the high inflation years of 1982-1985, since it was relatively easy to find ways to escape from the constraint, for instance, by delaying tax payments, accumulating liabilities and then shifting them to Treasury, accessing to heavily subsidized Central Bank loans, or contracting foreign debt beyond their legitime needs.

If the investment record was dismal, the employment policies of the state enterprises did not fare better until recently. Employment in the public enterprises grew at annual rate of 4.6 percent between 1970 and 1982, a period of strong military presence in government. The return of the democracy in 1982 did not reduce the rate of growth of jobs in the most important public enterprises.[5] Overstaffing, together with completely misaligned prices for the public sector were the main causes of the big deficits of virtually all state enterprises in the crisis years of 1982-1985.

It is worth looking at the financing of the expenditures of the government in more detail. One striking fact is the narrowness of the tax base. Most taxes are related to the performance of the foreign sector. They are either export taxes, import tariffs, or "regalias" that bear on petroleum and mineral products that are mainly export products. The fate of tax collections in thus very closely related to what happens in the vulnerable export sector. Given the narrowness of the tax base, taxation could be at punitive rates for the few taxpaying activities. Punitive taxation of the mining sector in the past, and of the petroleum sector nowadays, has of course long-run costs. Table 6 gives an idea of the dependency of tax

[5] The distribution of ministries and public enterprises among the parties in the Siles coalition led to an unwarranted race of

revenues on foreign trade. By the way, it should be mentioned that the level of the exchange rate is also important for fiscal reasons. Not unsurprisingly, Bolivians view the exchange rate frequently as a fiscal instrument.

The narrowness of the tax base and the extreme difficulties, political and over wise, confronted with the needs to finance growing redistributive claims, explains in part the extension of the public sector. The search of tax revenues became for the governments over 1952-1985 tantamount to the search of investment opportunities for the public sector. It was hoped that profits generated in the public sector investments would be mobilized to pay for a larger bill of expenditures on social programs and development projects. The easy access to foreign loans in the 1970's, made possible to postpone the necessary reforms to broaden the tax base. Had a tax reform been carried out in that period, Bolivia could have withstood in a better shape the earthquake brought about by the sudden severance from foreign credits in 1982.

b. The Model of Indebted Industrialization

Frieden (1981) calls "indebted industrialization" the strategy of rapid growth take off based on foreign financing of large scale public investment projects. For most of the period encompassed between 1952 to 1985, the distinct Bolivian governments have followed this strategy. In fact, the state capitalism model and the strategy of indebted industrialization are very closely related. The over-all deficits of the consolidated public sector were financed during most of the period 1952-1985 with foreign savings, either aid or loans, and to a lesser extent by the forced savings produced by inflation, except during the periods of great disruption, when the latter form of financing predominated over the former.

The foreign financing of investments in the sector of state-owned enterprises started with the rehabilitation of the state-owned mining enterprise COMIBOL in the 1960s. In the so-called Triangular Plan credits were gathered from the U.S. government, the Inter-American Development Bank and a Consortium of German Banks. It is important to underscore two significant elements in this deal: (1) The heavy foreign financing of a state enterprise. (2) An U.S. official loan to a nationalized enterprise. The Triangular Plan to rehabilitee COMIBOL

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political patronages.

set a precedent for further use of foreign financing of investments in the state-owned firms.

With the growth in world liquidity in the 1970s, it seemed that long-held Bolivian aspirations could rapidly materialize by finding development funds in an expanding international market of loans. With the access in large scale to loans from commercial banks, the process of indebted industrialization received a big push and was deepened. In the second half of the 1970's, the capacity of the tin smelters of the Empresa Nacional de Fundiciones (ENAF) was very significantly expanded, COMIBOL built mills to concentrate low-grade ores as an intermediate first step of the smelting process, a huge poly-metallurgic mill was built in Karachipampa in Southern Bolivia, the oil refining installations of the state company YPFB increased several times, and new factories were built or expanded to process agricultural products like sugar, soja and even milk. Foreign financing loomed very large in those public investments.

In some cases, the governments contracted debts with foreign commercial banks to pay for compensations to the foreign companies nationalized in 1969 and 1971. It is quite ironic that once more, foreign savings contributed to the expansion of the public sector.

The tin smelting company ENAF and the poly-metallurgic smelter Complejo Minero Karachipampa (CMK) exemplify the troubles of public investment financed with foreign indebtness. The creation of ENAF responded to a long-held Bolivian wish to reduce transportation costs and dependence from foreign oligopolystic smelting firms for its main export tin. But, of course, domestic refining could make economic sense only if the savings in transportation and foreign refining costs per unit were lower than the expenditure on domestic smelting per unit of final output. Unfortunately, because of technical problems, related in part to the very low metal content of the ores and to poor design and management, smelting costs went well beyond what it was assumed before the smelting plant started to function. The CMK case is even sadder, the project was predicated on the assumption of a sufficient supply of ores, that failed to materialize. In a **ex-post facto** analysis, it seems that the strategy of pushing the creation of value added on minerals of existing deposits at the expense of investing in more prospection, exploration and development of new mines was misguided.

Public debt also served to finance the undertakings of the private sector. The private sector borrowed very heavily abroad, with guaranties of the government. Also, loans contracted directly by the government were intended for and channelled to the private sector. The loans intermediated by the government to the private sector contained frequently a high subsidy element and, worse, many of them were never repaid. In addition, many foreign loans to the private sector guaranteed by the government went unpaid and the debt was shifted to the guarantor. The diversion of loans obtained from the government (and of government guaranteed loans) from their intended investment uses was common. In view of those facts, there is a solid case to sustain that the foreign debt financed more consumption (and accumulation of assets abroad) than domestic capital formation. Consumption loans had to be repaid by a drop in consumption as actually happened.

Table 7 traces the evolution of Bolivia's external debt with emphasis on the public external debt. By 1982, Bolivia had accumulated a large foreign debt, amounting to 71.2 percent of GDP. The debt was mostly incurred by the public sector, or by the private sector but with public guaranties. It should be underscored that, given the interest rates in the mid-1970s, a growth strategy based on access to foreign loans was not unreasonable. The problem was not indebtness **per se** but the extremely inefficient use of those external resources as has been mentioned above. The debt crisis did not have to wait. Already in 1980, Bolivia faced difficulties to make principal repayments.

Table 7

Bolivia's External Debt, 1962-1986
(millions of U$ Dollars)

	1962	1971	1978	1982	1985	1986[p]
TOTAL EXTERNAL DEBT	-.-	-.-	-.-	3.169.0	4.143.2	4.619.1

of which:						
Long-Term Debt	-.-	534.2	1.671.9	2.897.9	3.744.9	4.077.6
Public and Publicly Guaranteed	174.0	527.0	1.649.0	2.769.1	3.189.9	3.522.6
Private Nonguaranteed	-.-	7.2	22.9	128.8	555.0	555.0
Short Term Debt	-.-	-.-	91.5	185.0	347.0	397.0
Public External Debt (% of GDP)[a]	35.5	42.8	43.7	71.2	109.6	122.2
Public External Debt (% of Exports)[a,b]	251.0	260.5	233.6	301.5	432.6	516.1
PUBLIC EXTERNAL DEBT SERVICE[a]	19.1	31.0	355.0	287.1	242.1	160.8
Interest Payments	5.5	9.0	84.0	181.0	100.0	86.7
Principal Repayments	13.6	22.0	271.0	106.1	142.1	74.1
Total Debt Service (as % of Exports)[b]	27.6	11.9	49.6	31.3	32.8	23.6
Total Debt Service (as % of GDP)	3.9	2.5	9.4	7.4	6.4	4.3
MEMORANDUM ITEMS:						
Net Resource Transfers of Public Sector	-.-	65.0	17.0	-92.7	-131.9	138.4
Net Resource Transfers of Public Sector (as% of GDP)	-.-	5.3	0.5	-2.4	-3.5	3.7
Gross Domestic Product (GDP) in Current Dollars[c]	490.2	1.232.5	3.777.2	3.890.7	3.781.5	3.779.5

Source: Debt Figures for 1960 through 1978 from Inter-American Development Bank, Economic and Social Progress in Latin American, 1983 Edition; other figures from World Bank, World Debt Tables, 1986-1987 Tables

Notes: [a] Public and Publicly Guaranteed Debt
[b] Exports of Goods and Services
[c] GDP dollar values are derived from GDP values in current Bolivian pesos divided by a PPP exchange rate
[p] Preliminary

The situation was compounded by the severe political problems at that time. In 1982, the drastic reduction in foreign inflows precipitated a severe domestic crisis. On average, between 1982 and 1985, Bolivia transferred in net terms to foreign creditors around 3.5 percent of her GDP.

The overextension of the public sector in face of the growing difficulties to finance it, once the sources of foreign savings dried up, reached a climax during the crisis years of 1982-1985. A significant share of the eclosion of hyperinflation in those years can indeed be attributed to this fiscal crisis and the attendant debt problems.

The accumulation of debt continued at a very fast pace, notwithstanding the lack of new commitments and disbursements. In other words, the debt accumulation between 1982 and 1985 was made without new resource inflows, indeed they were negative in net terms, and a fortiori, without a counterpart in investment. The debt growth resulted from arrearages and the need to resort to (involuntary) distress financing.

After a valiant struggle against inflation, by the end of 1987, Bolivia had made strides in the way to economic recovery. But she still has to face formidable obstacles. One of them is the overhang of a huge external debt. There is no doubt that the overborrowing of the 1970s, and especially the misuse of the foreign credits, are important explanatory factors of the current difficulties.

III. Foreign Trade and Exchange Rate Policies

a. Export Policies

It is worth distinguishing between the export policies and the import policies. In regard to export policies, the most important and systematic one until 1982 was the adhesion to the International Tin Agreements (ITAs). In the period 1965-1980, Bolivia also signed agreements of lesser scope for tungsten and antimony, other important Bolivian mineral exports. Bolivia participated in all the ITAs, except the last one signed in 1982.[6] Bolivia, being a high cost

[6] The ITAs were agreed upon by the main producer and consumer countries, with some very important exceptions. The main, but not the only instrument to achieve price stabilization was a buffer stock of tin metal. Interventions of the International Tin Council, the governing body of the ITAs, with its buffer stock, and in some cases and to a lesser extent, with the setting

producer, systematically lobbied for a joint policy of high intervention prices. The other countries did not always follow Bolivia in her demands for higher prices, since they feared that the upkeep of the buffer stock, the main instrument of price stabilization, would be too costly. More importantly, they feared that a long-run policy of above equilibrium prices would backfire to the loss of producing countries. Time proved them right. Bolivia did not sign the last ITA, out of a balance between the costs of participation and the refusal made to her pretensions of higher intervention prices. She felt then, having lost its place as an important producer, that she could ride on the back of the agreement. i.e. benefit from the above-equilibrium prices without incurring in the costs, as Brazil was doing. In the 1970s, in addition to the policy of price support through the ITAs, Bolivia systematically lobbied in the United States to forestall the tin sales of the General Service Administration.

In spite of all the efforts of the producer countries, in October 1985, the tin market collapsed when the London Metal Exchange ceased operations with this metal. Table 8 and Figure 2 depict the evolution of tin prices. It would be notices they tin prices (in real terms) strongly fluctuated between 1950 and 1987, but around an increasing trend until 1980. From 1980, a process of steady decline started that continued until 1985. In 1985, the price of tin took a nose dive.

Table 8

International Prices for Tin and Natural Gas, 1962-1987

Years	Exports	Annual Average	Total Trade	Annual Average
1952	15.8	58.0	-.-	-.-
1953	12.0	45.1	-.-	-.-
1954	11.8	45.4	-.-	-.-
1955	12.2	46.0	-.-	-.-
1956	12.9	47.2	-.-	-.-
1957	12.4	44.3	-.-	-.-
1958	12.1	42.4	-.-	-.-
1959	12.9	45.9	-.-	-.-
1960	13.1	45.6	-.-	-.-
1961	14.6	50.0	-.-	-.-
1962	14.7	49.6	-.-	-.-
1963	14.9	51.2	-.-	-.-

of production quotas, helped to achieve the price objectives of producers until the third quarter of 1985. In particular, after 1981, the ITC sustained prices that were well above long-run market equilibrium prices.

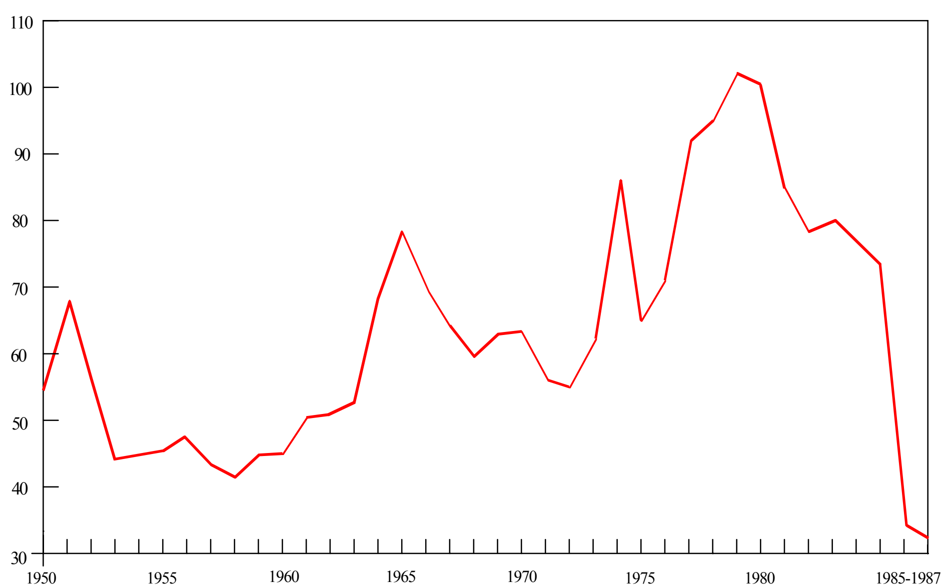
1964	20.3	68.2	-.-	-.-
1965	23.2	77.4	-.-	-.-
1966	21.3	68.5	-.-	-.-
1967	19.9	63.2	-.-	-.-
1968	18.6	59.7		
1969	20.4	62.3		
1970	21.9	62.7	-.-	-.-
1971	20.9	56.7	-.-	-.-
1972	22.5	56.2	-.-	-.-
1973	28.8	62.0	10.6	22.9
1974	48.9	86.5	17.4	30.9
1975	41.0	65.2	25.2	40.1
1976	45.2	71.0	32.3	50.7
1977	64.2	91.6	37.6	53.8
1978	76.9	95.6	45.8	57.0
1979	92.1	101.0	56.2	61.6
1980	100.0	100.0	100.0	100.0
1981	84.4	84.0	141.6	141.6
1982	76.5	78.3	153.4	157.2
1983	77.4	80.3	156.8	162.7
1984	73.2	77.3	136.7	144.4
1985	69.0	73.9	147.1[d]	154.0
1986	38.8	34.3	128.1[d]	113.2
1987	41.7	33.1	108.2[d]	85.7

Source: Basic data from: World Bank, Commodity Trade and Price Trends, 1986 Edition; Central Bank of Bolivia, Statistical Bulletin 259, June 1987; and International Monetary Fund, International Financial Statistics Yearbook 1987.

Notes: [a] Standard, minimum 99.75% settlement price
[b] Derived from Central Bank of Bolivia data
[c] Current Prices deflated by the World Bank Manufacturing Value Added Index
[d] Price adjusted to the Austral real exchange rate to take into account Argentinean payments in goods and services
[e] June, 1987
[p] Preliminary estimates

Figure 2

Real Price of Tin Index, 1950 - 1987



The production and exports of tin (and other mineral) were severely affected by punitive taxes in the 1970s, and also by the exchange rate policy. Moreover, these developments took place in the context of a secular decline of the Bolivian tin industry. Very few important mines were opened since the Great Depression of 1929, and the metal content in the ores of the old mines substantially decreased since then. By 1980, Bolivia had lost her place as a major would tin supplier.

Policies on the other significant Bolivian export, natural gas, were less clear cut. Bolivia signed in 1972 treaty with Argentina for the sale of natural gas for twenty years. The natural gas deal included provisions on the quantities to be sold and a fixed price, with rather unclear clauses on the procedures for readjustments. Shortly after the treaty was signed, the first oil shock occurred and world prices for energy skyrocketed. Bolivia's exports of natural gas did not benefit for quite a long period of time of this price increase. Until 1980 the prices of natural gas evolved less rapidly than the prices of petroleum. (See Table 8 and Figure 3). Only after the second oil shock of 1979, important revisions of the unit price of natural gas were agreed between Bolivia and Argentina. After this second shock, natural gas prices have either increased more rapidly or have decreased more slowly than petroleum prices. The natural gas negotiations in the 1980s have been extremely difficult since Argentina has found very important deposits of this resource in her soil, that have not been exploited to their full potential because of the agreement with Bolivia. The steady fall in energy prices since 1982 has aggravated the problem. Bolivian export volumes and prices have been reduced. Moreover, payments between 1982 and the last quarter of 1987, were made only in the proportion of 40 percent in dollars with the rest being made in Argentinean goods and services. With the frequent overvaluations of the Argentinean peso and the Austral, the effective price received by Bolivia from her natural gas sales to Argentina were substantially smaller than the price indicated by the dollar value. In addition, the frequent delays in the Argentinean payments in the 1980s have caused liquidity crunches, with strong repercussions in the domestic economy. In 1974 a far-reaching agreement for sales of natural gas to Brazil was signed, but internal opposition in Bolivia killed the deal.

The promotion of non-traditional exports came relatively late, in 1977, although with very strong incentives. In addition to tax rebates, the scheme included subsidies at varying rates depending on "embodied value added". The concept of embodied value added used to determine the base of export subsidies included labor and capital services as well as all domestically sourced inputs. The base for the benefits was clearly incorrect and heavily discriminated against traditional exports and was a source of corruption.[7] The law of promotion of non-traditional exports was reformed in 1982 widening the benefits. With the policy reforms of August 1985, to which we refer below in Chapter IV, the varying rates of subsidy (or more appropriately, tax rebates) were simplified in two rates: 10 percent for non-traditional exports and 5 percent for traditional exports.

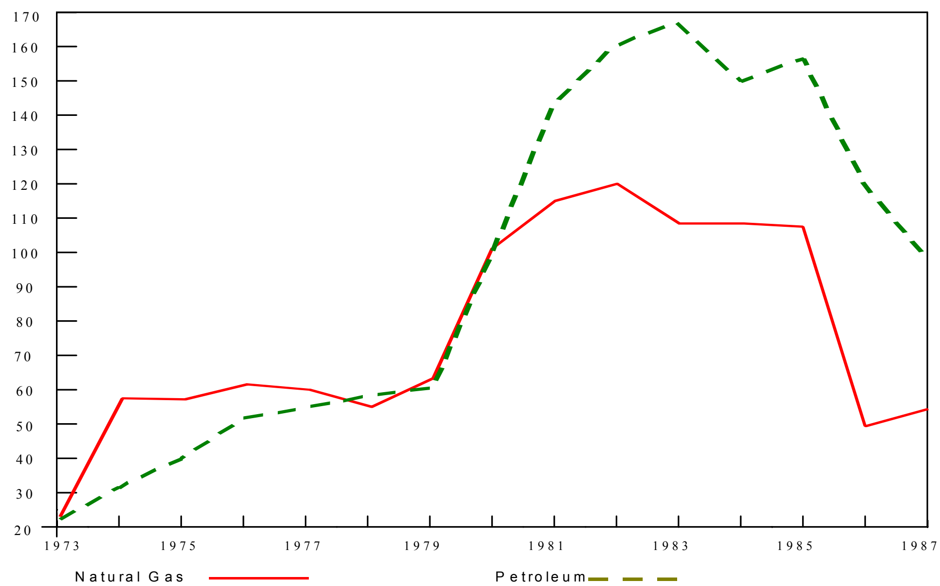
A mention should also be made to the economic integration agreements to which Bolivia has adhered in order to promote manufactured exports, and to a lesser extent, agricultural exports. Bolivia joined ALALC, the Latin American Free Trade Association inn 1966, that became later ALADI, the Latin American Integration Association, and the Andean Group in 1969. Bolivia's participation in both agreements has been very modest in spite of the considerable expectations that were held when they were signed. The scant benefits (and costs) are mainly explained by Bolivia's initial conditions of extreme industrial underdevelopment, and by the uneven quality of the economic policies followed domestically and in the partner countries. While movements to a freer trade, may have been beneficial to Bolivia, she was on the other hand completely unprepared to follow the detailed joint industrial programming, that was the landmark of the Andean Group, and to adopt a high common external tariff.[8]

Figure 3

Natural Gas and Petroleum Real Price Indices (Base 1980 = 100)

[7] For instance, Bolivian gold jewels were priced internationally entirely for their gold content and not for whatever artistic features they could exhibit, yet they benefitted from the highest subsidy.

[8] The agreements above do not imply that Bolivia should forsake integration agreements, rather, that a fresher approach is needed bases on the enlargement of markets for both agricultural and manufactured products and with less emphasis on detailed industrial programming and highly protective common external tariffs.



b. Import Policies

Import policies, as in the case of export policies, did not have well defined economic purposes either, at least until the policy reforms of August 1985. Domestic industry was protected from competitive imports by the structure of import tariffs, as well as by quantitative restrictions and credit subsidies. The tariff structure responded to a multiplicity of objectives. It was intended to provide fiscal revenues, to substitute for devaluations in face of transitory Balance-of-Payments difficulties, and to grant protection. The tariff schedules differentiated the rates that applied to finished products, intermediate inputs, and capital goods. The rates on finished goods (especially luxury goods) were frequently determined more by fiscal revenue considerations than by protection, although ultimately this created unintended protection for the domestic production in luxury goods. (See Table 9 for estimates of Effective Rates of Protection yielded by the tariff structure around 1982). Many domestic industries were also protected until 1985 by quantitative restrictions on competitive imports, especially by bans; the use of quotas and import licensing was on the other hand infrequent.

Both high tariffs and bans were in practice difficult to enforce in face of the extension of the Bolivian borders, that are moreover sparsely populated, and the extreme administrative weakness of the government. The particular geographical features of Bolivia precluded any substantial control of contraband imports.[9]

The import substituting industries benefited frequently from two additional forms of subsidy. First, the availability of credit at concessional interest rates, that were moreover negative in real terms on occasion. Secondly, they benefitted from preferences in government's purchases. The **effective rate of subsidy** was probably very high. The question then arises, why Bolivia made so little progress in developing a manufacturing base? This is a relevant question when one observes that countries of similar market sizes have had frequently substantially better performances. There are three tentative answers to this puzzle.

First, the prolonged periods of the Bolivian peso overvaluation reduced the net effective subsidy rate quite substantially. Second, macroeconomic and political uncertainty greatly penalized long-term investment. Industrialists entered more in a grab race of quick above-normal profits provided by the structure of protection than in a process of long-run investments. Their high profits were seldom reinvested as they feared political turmoil and, on occasions, exppropiatory measures. The best example of the costs imposed by uncertainty appeared during the hyperinflation years.

Table 9

Effective Rates of Protection Yielded by Tariffs, About 1982
(Percentages)

	Tariffs on		Effective Rates of Protection
	Immediate Goods[a]	Finished Goods	

[9] The price set by the smugglers is not of course independent of the tariff. Assuming rising marginal smuggling costs, it can be shown that high tariffs crowd out legal imports, and hence reduce government's revenue, but they continue granting protection to domestic producers although to a lesser extent than in the absence of smuggling. The assumption of rising marginal costs of smuggling seems realistic as brides and other costs of this illegal operations have to increase at the margin with imported volume.

Agricultural Products	2.0	8.1	31.9
Livestock Products	0.0	0.0	-1.2
Forestry Products, Game and Fish	25.8	17.5	17.5
Processed Meats	8.3	8.3	80.4
Dairy Products	2.0	2.8	2.1
Mills and Bakeries	10.0	17.5	65.0
Sugar and Sugar Products	26.3	41.7	114.5
Other Foodstuffs	13.4	19.9	40.0
Beverages	13.3	60.2	88.4
Tobacco[b]	17.6	100.0	195.7
Textiles, Clothing, Leather and Leather Products	38.7	72.2	169.1
Wood and Wood Products	35.4	62.1	145.8
paper and Paper Products	10.8	35.0	76.0
Chemicals	11.7	37.2	64.8
Stone, Earth and Clay Products	16.9	45.6	56.1
Metallic Products, Machinery and Equipment	19.0	45.7	57.4
Others	29.9	43.3	49.9
Other Inputs	4.0		
Crude Petroleum and Natural Gas	11.9		
Metallic and Non Metallic Minerals	4.5		
Petroleum products	12.6		
Basic Metals			
Summary Measures[c]			
Weighted Mean for All Sectors		27.6	44.4
Standard Deviation for All Sectors		20.1	43.9
Variation Coefficient for All Sectors (%)		72.7	99.1
Weighted Mean for Manufacturing Sector		47.7	94.1
Standard Deviation for Manufacturing Sector		19.6	44.5
Variation Coefficient for Manufacturing Sector (%)		41.1	47.3

Source: National Chamber of Industry, Estudio Integral del Arancel de Importaciones, 1987
Notes: [a] Intermediate goods with origin in the sector
[b] Quantitative restrictions applied in this sector, hence equivalent tariffs have been computed
[c] Weighted by Value Added at International Prices

In these years, in spite of the high effective rates of subsidy granted by a myriad of factors, like very negative real interest rates and high walls to foreign competition resulting from a system of foreign exchange controls, investment in the industrial sector was almost nil. Manufacturing value added actually declined in a staggering 36 Percent between 1981 and 1985. Third, excessive protection, especially during the 1970s may have had high long-run efficiency costs.

c. Exchange Rate Policies

After the high inflation episode of the 1950s, and until the 1980s, Bolivia maintained a policy of fixed exchange rates. The conservative monetary policies between 1957 and 1982 allowed, except occasionally, to sustain the policy. The fiscal policies were expansive **but as long as the fiscal deficits could be financed by borrowing abroad**, they had no effect on the exchange rate. Most of the period the parallel market premiums were very low.[10] One of the main tenets of economic policy was indeed exchange rate stability, and the peso was devalued only twice between 1967 and 1981. Prompted by the debt crisis of 1982, the peso went in a free fall until the stabilization program of August 1985, to which we refer below.

An overvalued peso has been a permanent feature in the economy of the last thirty years. Mild overvaluation hampered the export potential in the agricultural and manufacturing sectors, more than in the actual traditional exports, who benefited from high international prices during most of the 1960s and, especially, the 1970s. The severe overvaluation of the official exchange rate greatly hurted legal exports between 1982 and 1985 by reducing the profitability of the enterprises that produced them. On the other hand, however, contraband exports benefited from the very favorable parallel market exchange rate and flourished.[11]

Although the presumption of overvaluation during most of the 1960s and 1970s is sustainable, the extent of overvaluation is more difficult to assess. The noticeable improvement in the Terms-of-Trade from 1960 to 1980 impedes the computation of what should have been the right exchange rates. The computations of real exchange rates in Table 10 give an idea of what happened, but the numbers are rough and subject to methodological questionings. Export prices and real exchange rates show a strong negative correlation. The sudden and relatively long-lasting jump in export prices in the 1970s allowed the exchange rate to diverge from its higher long-run value needed for a sustained development.

Table 10

Real Exchange Rate Index[a]
(Base 1980 = 100)

[10] The exchange rate was de facto pegged to the dollar over the whole period 1957-1982, although some statutory provisions allowed for: (a) the possibility of floating, and (b) the rate being fixed in terms of gold.

[11] The rapid depreciation of the peso in the parallel market during the high inflation period led to exports of the most incredible goods, even of those that because of their physical characteristics (like bread that can get stale very soon) or of the high incidence of transportation costs in their price (like bottled softdrinks) are not normally traded. Even tin ores were smuggled out to Peru and this country started to appear in the official statistics as a tin producer.

Year	Real Exchange Rate	Year	Real Exchange Rate	Year	Real Exchange Rate
1960	171.1	1970	110.5	1980	100.0
1961	155.1	1971	114.2	1981	82.6
1962	142.4	1972	120.1	1982	98.6
1963	142.0	1973	157.3	1983	95.2
1964	131.4	1974	115.7	1984	66.9
1965	134.0	1975	115.4	1985	114.0
1966	128.5	1976	115.7	1986	128.0
1967	112.7	1977	115.6	1987[p]	123.5
1968	108.7	1978	111.4		
1969	112.9	1979	107.2		

Source: Elaborated with basic data from the Central Bank of Bolivia, Statistical Bulletin (Various Issues) and IMF, International Financial Statistics, Yearbook 1987.

Notes: [a] Official Exchange Rates deflated by the ratio of Bolivian Consumer Prices to U.S. Wholesale Price, and converted to index. Bolivian rates and price indices are annual averages.

[p] Preliminary estimates

More important than a precise computation of real exchange rates, is the political economy problem of why, no significant lobby of exporters and other interested groups appeared to push for exchange rate correction. Indeed, the lobbying of tin producers was essentially geared to decrease the tax burden on their output and, eventually, on their export sales. Increases on their **effective** exchange rate were sought trough a reduction on taxation rather than by devaluation. The other main exporter, the state owned petroleum company YPFB, made significant profits on its exports of petroleum and natural gas, even during the worst years of presumed overvaluation in the 1980s, and therefore never lobbied for devaluations. In an **ex-post facto** analysis it seems that the situation called for a more activist exchange rate policy, as the one followed for instance by Indonesia, a country also dependent on resource-based exports, in that period.

On the import side, overvaluation was reflected in the relatively high tariffs and the extent of quantitative restrictions. Between 1978 and 1982, except in 1980 when a favorable Terms-of-Trade shock occurred, the high tariffs and quantitative restrictions were insufficient to restrain imports and impede a deterioration of the current account of the Balance-of-Payments. Trade deficits were financed with increased foreign indebt ness and losses in foreign exchange reserves.

Overvaluation was also an explanatory factor, but not the only, in the huge amount of capital flight between 1976 and 1982. The perception that the exchange rate was below equilibrium, however defined, prompted the public to substitute pesos for dollars and deposit their dollar assets abroad. Capital flight worsened during the military governments of 1980-1982.[12] With increased awareness of the forthcoming difficulties in obtaining new loans and in the service of the old loans, speculators and the public at large hedged against several risks by increasing their assets abroad. The main risks were of future peso depreciation and more importantly, of foreseeable limits on the peso convertibility. The continuing capital flight between 1982 and 1985 was almost entirely explained by political uncertainty and macroeconomic instability.

Between 1983 and 1985, exchange rate controls restrained imports more effectively and limited the losses in reserves. However, the internal costs of the exchange rate controls were huge in terms of efficiency in production and, especially, in the flight against inflation.[13] With the high black market premiums for foreign exchange prevailing then, legal exporters felt frequently penalized. They tended to view the premium as a tax on their profits. As a consequence, their strategy was frequently geared to minimize the burden of this tax. The mining enterprises, for instance, would accumulate on the average higher-than-normal stocks of their output and sell them at the moment when the premium was lower. The financing of high stocks was possible because of the access that they had to highly subsidized domestic credit. Less scrupulous exporters would sell abroad circumventing the exchange rate regulations.

It is also interesting to note that foreign exchange users, for instance in the manufacturing sector, viewed the black market premium as a tax on their inputs and pressed for more access to the already very scarce official foreign exchange reserves. The complaints in the press about not having enough foreign exchange to pay for imported inputs were very frequent. In fact they did not have access to all the foreign exchange that they wanted at the official rate, although the parallel market could always meet their demands. On the output end,

[12] See Ugarteche (1986), pp. 137-144.

[13] The public's belief in the corruption of those persons that either administered the allocation of the rationed foreign exchange as functionaries or had access to it, seems to have been a more important factor than corruption itself, in discrediting the system of controls. Indeed, the Congress committees, created to investigate the misuse of foreign exchange, have not yet reached cleat indictments. Moreover, the amounts involved seem to be rather small. Further investigations are still pending.

with very few exception, they priced their products in dollars, although payable in domestic currency at the black market rate of exchange. Their complaints on the scarcity of foreign exchange at the official exchange rate were in fact pleas for more subsidies. The uncertainty that producers had to bear in regard to the availability of foreign exchange, at the official rate, to purchase imported inputs was a main factor in reducing production.

In the high inflation period on 1982-1985, exchange rate management was indeed one of the most difficult tasks that the government had to face. Because of incomplete or, in some occasions, defective fiscal and monetary policies, the government was cornered in almost unsolvable dilemmas. On the one hand, a rapid depreciation of the official exchange rate would have pushed the inflation rate even more and increased the burden of the foreign debt as indeed it happened. On the other hand, trying to repress inflation with the exchange rate was very costly and ultimately ineffective, since huge black market premiums surged, that eventually led to the needed official exchange rate corrections and to more inflation. Moreover, the policy of exchange controls led to a high degree of corruption.

In view of the arguments above we need to admit that of the most important accomplishments of the package of policy reforms of August 1985, to which we refer in Section IV, is indeed the obtention of an initial huge real devaluation of the official exchange rate, followed by stability and unification with the parallel market exchange rate.

IV. The Policy Reforms of August 1985

The new government of Mr. Victor Paz Estenssoro unveiled a package of deep policy reforms in August 1985. The package has two main components: (1) a stabilization program; and (2) a trade liberalization program. The package of reforms of August 1985 was followed by a string of other measures that collectively are known as the New Economic Policy. It is important to note that in the August 1985 package, stabilization and liberalization proceeded simultaneously. Liberalization was intended to reinforce stabilization by providing a natural check to domestic price increases starting from an initial situation of strong disequilibrium in many markets. Symmetrically, liberalization without first achieving stabilization would have probable been impossible to carry out, given the pressures on the current account of the Balance-of-Payments.[14]

The core of the stabilization package is given by a policy of stable and unified exchange rates, supported by very tight fiscal and monetary policies. The description of the contents of the stabilization program and its achievements can be found for instance in Sachs (1986), Sachs (1987), Morales (1987a), Morales (1987b) and Morales and Sachs (1987). A summary of the main policy reforms is provided in Table 11.

Exchange rate unification has also very important implications for trade liberalization and the expansion of exports, in view of the discussion in the preceding section. The program of August 1985 and the subsequent measures completed the exchange rate unification with other far-reaching liberalization measures. All quantitative restrictions on exports and imports were abolished. The only exceptions are related to imports of sugar and health and sanitation regulations. The exception made with quotas for the imports of sugar constitutes a violation of the general spirit of the liberalization measures. Although it must be said that, given the highly manipulated nature of the international market for sugar, the Bolivian regulation of imports has to be viewed as an anti-dumping measure. In addition, to the elimination of quantitative restrictions, import tariffs were lowered to a uniform rate of 20 percent, with the important exceptions of imports of the petroleum enterprises and standing economic integration agreements.

Table 11

Summary of Main Policy Reforms

Exchange Rates	Unified floating exchange rates. Rates determined in auction. Exports obliged to surrender 100 percent of export proceeds to Central Bank.
Foreign Trade	All quantitative restrictions on exports and imports lifted.

[14] This argument follows a similar one given in Sachs (1987).

	Uniform import tariff rate of 20 percent.
Foreign capital movements	All restrictions of foreign capital inflows and outflows are eliminated. Normalization of relations with multilateral official creditors. Negotiations in Paris Club. Negotiations under way to buy back debt owed to foreign commercial banks with discounts given by secondary market.
Domestic market for goods and services	Price controls eliminated in almost all markets. Price for gasoline and other oil derivatives fixed by government at border prices. Most public utility rates and urban transportation fares are fixed by local governments after negotiations with concerned parties. Only a handful of public utility rates are set by central government.
Domestic financial markets	Interest rate ceilings are eliminated. Bolivian residents allowed to freely open deposits in foreign currencies in the domestic banking system. All contracts in foreign currencies among residents are authorized. Development loans are to be channeled through private banks. Requirements on capital/debt ratios for ex-post supervision of banks portfolio is enforced.
Labor reform	Job protection clauses in legislation are attenuated and the principle of marginal market adjustments is stated. Wage indexation is eliminated.
Fiscal reform	Tax reform is enacted with Value Added Tax and wealth taxes as main taxes.
Reorganization of state enterprises	Several mines of state-owned mining enterprise COMIBOL are closed and several thousand miners are dismissed. Worker dismissals are envisaged in the state-owned petroleum company YPFB.
Decentralization in sector	Enterprises of state-owned holding Corporación Boliviana de Fomento are ceded to regional development corporations. Assets of National Transport Company are transferred to municipalities.

It is important to note that after the liberalization program of August 1985, Bolivian industrialist did not object so much to the lowering of tariffs and the dismantling of quantitative restrictions on imports that were competitive with their production, as to the higher duties on their inputs and capital goods purchases. In fact, in the old tariff schedule, many of the tariffs on finished goods were redundant (redundancy was almost immediately made apparent by the competitive contraband imports) and for most of those goods the really protective portion of the tariff was around 20 percent. Effective protection principally came from the fact that the tariffs on inputs and capital goods were, before reforms, substantially lower than 20 percent.

In order to offset the tariffs that bear on their inputs, exporters get from the government a reimbursement equivalent to 5 percent and 10 percent of the FOB value of traditional and non-traditional exports respectively. This peculiar rebate system, combined with the tariff structure, yields of course different effective rates of protection to different exporters. In other words, the rebate scheme overcompensates some export sectors and penalize some others. It has however the advantage of simplicity, and avoids delays in the rebates to the exporters.

The liberalization of international trade is accompanied by the liberalization of domestic markets. Ceilings on prices on almost all markets have been eliminated. Only petroleum derivatives and a handful of public utilities, most of them state-owned, have regulated prices. The liberalization of the labor market may have particular relevancy for the development of the external sector. Job security clauses in the Bolivian legislation have been softened making easier to dismiss workers; wage-indexing has been suppressed; the institution of collective bargaining with arbitration of the Ministry of Labor has been greatly weakened leaving most wages, at least in the private sector, to be set in market adjustments through individual negotiations. It should also be noted that, as a combined consequence of the policy reforms and the collapse of export markets, the main export enterprises, both in the public and private sectors have very significantly trimmed their personnel.

Liberalization of the current account of the Balance-of-Payments has proceeded simultaneously with the liberalization of the capital account. All capital inflows and outflows are allowed with no restriction whatsoever. In addition, the domestic capital market has been completely liberalized with the following two measures: (1) interest rate ceilings and floors have been eliminated; and (2) dollar and dollar-indexed demand and time deposit accounts can be opened in the Bolivian domestic banking system. In the aftermath of the stabilization program, interest rates have soared and this has led to a very significant repatriation of capital by Bolivians ($ 350 million, or about 8 percent of GDP) in two years. Most of the inflow has gone however to time deposits in dollars or dollar-indexed of very short maturities (between 30 and 60 days).

The August 1985 program also contains several measures of divestment of state-owned enterprises. The enterprises of the state-owned holding Corporación Boliviana de Fomento (CBF) and a small state-owned public transportation company have been transferred to the Regional Development Corporations and the municipalities, as a first step towards privatization. Some other small state-owned enterprises have been dissolved.

It is much too early to give a complete assessment of the accomplishments of the policy reforms. Inflation stabilization was very rapidly achieved, and in 1987 a positive rate of growth was obtained, the first in the last six years. Normalization with the official creditors, multilateral and bilateral, has also been obtained. This normalization implies a very significative debt relief and the obtention of new loans.

In the first two years after the policy reforms, an expansion of consumer imports was observed. There was also a jump in the current account deficit of the Balance-of-Payments, in absolute terms as well as a percentage of GDP (see again Table 2). This growth of imports may be however a transitory phenomenon, excepted after a process of rapid liberalization.

Most policy-induced anti-export biases have been eliminated with the reforms included in the New Economic Policy, but obstacles of a more structural character remain very much present. Among the remaining policy-induced obstacles there is the specter of currency overvaluation. The temptation to hold down inflation with overvaluation is a persistent danger.[15] Overvaluation is not severe yet but it is steadily increasing. Also, interest rates are too high and there is no doubt that they have to decrease if long term productive investment is to take place. An opportune disbursement of the foreign loans that Bolivia has contracted may help in achieving lower interest rates.

Bolivia has to entirely reconstruct her external sector. The collapse of markets for traditional Bolivian exports: tin and natural gas; and the poor price prospects for most basic commodities that Bolivia could reasonably export in the near future, make the situation very challenging. In addition, the burden of the external debt continues to hinge upon the recovery and growth prospects, compounding the problem of weak markets for exports. The policy reforms are a step in the right direction to recover previous export levels, but they are not sufficient. The structural obstacles to reconstruct the external sector and to achieve export diversification are indeed formidable. If agricultural exports are to take the place of tin and natural gas, for instance with soja and other grains where Bolivia is currently obtaining good yields per acre, unit transportation costs have to decrease from the current levels. Important and well designed investments in the transport infrastructure are a pre-condition for the resource shifts needed to rehabilitate the export sector. As has been repeatedly stated in the text, transport costs loom very large in the cost structure of exports and are very important determinants of the types of the export structure. Investments in the training of workers and

[15] See Dornbusch (19086) for the problems of bringing down inflation with the exchange rate in several Latin-American

managers are also very much in need, given that the technological content of exports, both agricultural and of light manufacturing, would probably have to be higher than now.

Last but not least, durable political stability is essential for Bolivian development, and especially for its foreign trade sector. Bolivia needs to attract foreign investment and to this goal, it is necessary, in addition to the legal guaranties against expropriation and punitive taxation, a good social overhead and political environment. In turn, durable political stability can be achieved only insofar that constructive solutions to close the current wide gaps in income and wealth are found. This may prove to be a difficult task in view of the current fiscal constraints.

V. Summary and Conclusions

countries.

In 35 years Bolivia has had to suffer two periods of great economic distress, with substantial decrements in GDP, in investment rates, and at the same time with very high inflations. The first economic crisis, in the 1950s, occurred in a period of profound social transformations. The second crisis, in the 1980s, followed a long-period of sustained growth but also of accumulation of deep development problems. The interplay of external shocks and domestic factors triggered this extraordinary crisis. One of the most important internal factors was the over borrowing abroad. Over borrowing depended in turn on the extension of the public sector, the pattern of resource-based industrialization, and the misuse of investment funds.

Bolivia's development depends crucially on the performance of her foreign sector. But, geography (and topography) difficult a good insertion in the international economy and are conducive to overspecialization. Export earnings that depend on a basket that contains only a handful of basic products are subjected to wide fluctuations. The vulnerability is increased moreover by the direction of trade, with more than 50 percent of export proceeds dependent on natural gas sales to Argentina. Import substitution is very incipient. The industrialization process has essentially aimed at increasing the value added in exports of basic products. This resource-based industrialization has been very capital intensive and dependent of foreign financing.

The jump in export prices and the easy access to foreign debt in the 1970s allowed a substantial discrepancy between the short-run values of the exchange rate and its long-run value needed for sustained growth. The lasting overvaluation impeded a more diversified export basket and a more adaptable production structure to withstand external shocks.

The public sector has had a very important role in Bolivia's development, as well as on her troubles. The extraordinary incursion of the public sector in investment is principally explained by the government's inability to achieve broad taxation, in face of an ambitious redistributive agenda and continuous innovations in terms of development goals. The search for new tax sources became tantamount to the search of new public investment opportunities. Taxation of a few natural resources is easier to implement than taxation on a broad base. A main problem in Bolivia's development has been indeed the over taxation of the natural resource sector. The state enterprises are also overburdened with the function of being the main providers of foreign exchange. In this ole they been a frequent victim of misguided macroeconomic policies that tried to subsidize consumption via the exchange rate.

The public sector was overextended but, without contradiction, it was also weak. The weakness of the state appeared quite clearly on the implementation of regulations on the external sector. For instance, the tariff structure was only virtual in face of thriving contraband imports. Smuggling has become a socially acceptable activity. A similar comment can be made in regard to the regime of exchange rate controls when it was applied. The Bolivian experience clearly shows that a weak state cannot support a heavy dose of regulations. Regulations become mimics and, worse, impose extraordinary costs to those few that abide, and also in welfare terms.

The political instability of some periods has taken a heavy toll in the economy. On several occasions, it impeded an opportune recognition of the shocks that were affecting the economy and delayed needed action. Moreover, the uncertainty that goes with political and macroeconomic instability has had also very heavy costs in terms of production and welfare. With a high degree of uncertainty, no system of incentives can work well and speculation thrives at the expense of productive long-run investments.

The policy reforms introduced in August 1985 hold a promise. They aim at very important structural changes and they have very ambitious goals. Their implementation meets however hard obstacles and is yet far from completed.

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