



*Instituto de Investigaciones Socio Económicas*

Documento de Trabajo No. 06/85  
Septiembre 1985

**Crisis and Economic Policy in the  
Siles Zuazo Administration**

*por*  
*Juan Antonio Morales*  
*& Flavio Escóbar*

## **Crisis and Economic Policy in the Siles Zuazo Administration<sup>\*</sup>**

by  
Juan Antonio Morales  
& Flavio Escóbar

### **I. Introduction**

The year 1982 marks the beginning of a long and cruel economic crisis that has not ended yet. All the structural economic problems that Bolivia had been building up since the Revolution of 1952 and especially during the mid-seventies surfaced.<sup>1</sup> The situation was greatly worsened by the effects of the world recession of 1981-1982 and the international debt crisis. When the democratic government of President Hernán Siles Zuazo was installed, in October of 1982, the economy was already in a difficult state. Unfortunately, Siles Zuazo was unable to overcome the challenge and, worse, his policies greatly aggravated the situation. Between April 1984 and August 1985, Bolivia experienced the rather uncommon disaster of hyperinflation with very destructive effects on the economy.

This paper documents the main characteristics of the economic problems involved, and the major trade-offs in the political decision-making process during the 1982-1985 period. Although the main emphasis in the Siles Zuazo administration, some reference is made to the economic policies in the beginning of 1982, since it was this period that there was a major impact on subsequent measures and policy design. Some scattered mentions to the stabilization

---

<sup>\*</sup> An earlier version of this article was present in the conference "Redemocratization in Bolivia: A Political and Economic Analysis of the Siles Zuazo Government, 1982-1985", in Tempe, Arizona, May 6, 1985. I thank Jerry Ladman for his useful comments.

<sup>1</sup> For an analysis of the structural problem of the Bolivian economy see e.g. Jerry R. Ladman, ed., Modern-Day Bolivia: Legacy of the Revolution and Prospects for the Future (Tempe, Arizona: Center for Latin American Studies, Arizona State University, 1982). The following papers in that volume provide a good deal of information on structural constraints: Juan L. Cariaga, "The Economic Structure of Bolivia After 1964"; L. Enrique García-Rodríguez, "Structural Change and Development Policy in Bolivia"; Juan Antonio Morales, "The Bolivian External Sector After 1964"; Morris D. Whitaker and E. Boyd Wennergren, "Bolivia's Agriculture Since 1960: Assessment and Prognosis". For more recent evaluations on the structural and debt problems see, The World Bank, "Bolivia, Structural Constraints and Development Prospects", Report No. 4194-BO (Washington, DC: The World Bank, January 1983); Bolivia, Ministerio de Planeamiento y Coordinación,

program of August 1985 of Siles Zuazo successor, President Víctor Paz Estenssoro are also made.

High inflation was the gravest economic problem that Bolivia confronted since early 1982, it was stopped only after the change of government in August 1985. The effects of high inflation were aggravated by very important losses in employment, production and income. The uncontrolled inflation plus measures to protect some social groups by suppressing its symptoms caused very serious distortions in resource allocation, leading to a significant expansion of an underground economy. To make matters worse, the economic crisis created acute political conflicts, which, in turn, aggravated the crisis.

The several stabilization programs that were tried were abandoned after meeting political opposition few months after they were announced. Between two programs economic policy frequently became very passive. In fact, policy-making between 1982 can best be characterized as stop and go process. Some of the packages of economic measures were inherently defective and their quick failure was predictable, but, some other, could have had a chance of success, had they been handled in a politically correct way. One of the main purposes of this paper is therefore to analyze and evaluate the stabilization measures of the 1982-1985 period.

The stabilization packages prepared by the Siles Zuazo administration differed in their degree of orthodoxy, with orthodoxy being defined as the set of economic policy rules that emphasize reductions in aggregate demand with both tight fiscal and monetary policies, and that pay no attention to incomes policies. Orthodox packages are closely related to the stabilization prescriptions of the International Monetary Fund. Heterodox policies on the other hand, insist both on fiscal corrections and income policies focusing on the doctoring of the evolution of nominal wages and the imposition of price freezes for key products and sectors.<sup>2</sup> The first stabilization program of the Siles Zuazo administration was the most heterodox. As time passed by and the crisis deepened, the stabilization packages gained in orthodoxy. All economic measures, either orthodox or heterodox, however, encountered strong political and

---

Plan Nacional de Rehabilitación y Desarrollo, 1984-1987. La Paz, 1984.

<sup>2</sup> The distinction between orthodox and heterodox stabilization programs has become classic in the literature on inflation stabilization in Latin America after 1985. A good presentation of this issue is given by Rudiger Dornbusch and Mario H. Simensen, "Inflation Stabilization with Incomes Policy Support", in Inflation Stabilization with Incomes Policy Support, (New York: Group of Thirty, 1987). The literature on orthodox packages and related IMF conditionality is abundant. For

labor opposition that resulted in disruptive parliamentary actions as well as frequent strikes and work stoppages.

The chapter is organized as follows: First, an overview of the recent evolution of the main macroeconomic indicators for the Bolivian economy is presented. Second, the major stabilization programs are described and analyzed. Third, the main arguments of organized labor's opposition to the inflation stabilization measures are set forth. Finally, conclusions are presented.

---

instance, see Lance Taylor, Structural Macroeconomics (New York: Basic Books, 1983), pp. 109-208.

## **II. Overview of the Bolivian Economy: 1982-1985**

In the section the main indicators of the evolution of the crisis in the Bolivian economy are examined. It begins with an analysis of the real side of the economy, where gross domestic product (GDP), its composition and growth, employment, wages and foreign trade are studied. This is following by an analysis of the hyperinflation.

### Crisis in Production

Table II.1 exhibits the dramatic fall in the Bolivian Gross Domestic Product (GDP) between 1980 and 1985. As shown in Table II.1, in 1981 Bolivia experienced a slight but positive rate of growth of GDP. This was to be last year of positive growth. Beginning in 1982, the situation deteriorated very rapidly when the country experienced a decline in GDP of 2,8 percent. In the following year, it worsened to a negative 6.6 percent. In 1984, there was a slowdown in the rate of decline such that output fell only 0.9 percent but again, in 1985, the fall in GDP was substantial. When measured in per capita terms the decline in output after 1981 is considerably aggravated because of the relatively rapid population growth rate of 2.8 percent per year. By the end of 1985, real per capital GDP was only 77.3 percent of that of 1980, i.e., a loss of almost 23 percent in five years. Per capita income in 1985 are a low \$470, the second lowest in Latin America. Worse, as a consequence of the crisis, per capita income in 1985 was lower in real terms than the per capital income of 1965.

In important sectors like manufacturing and construction negative rates growth were observed for each year from 1981 to 1985. The decline in production in the minerals, manufacturing and construction sectors between 1981 and 1985 were severe, and, indeed, they bore the brunt of the crisis. Production in the petroleum sector also declined from 1983 to 1985, after a healthy growth in 1981-1982.

There were a number of reasons for the decline in output. With severe constraints of foreign exchange and a rapidly depreciating currency there were shortages of imported inputs

and spare parts of capital goods, and capital investments declined. Unfavorable export markets, especially for tin and other minerals, created disincentives for production. More important, as a result of government policies there were severe distortions in the price system that discouraged production. For instance, the lags in the official exchange rate and in public prices in regard to market clearing prices greatly harmed the state enterprises (as well as tax collections). Economic activity was also seriously and negatively impacted by the frequent and sometimes long-lasting strikes and work stoppages that resulted from organized labor's protesting of government economic measures. Finally, the uncertainties surrounding the supply of foreign exchange at the official rate and the continuity of the economic policies had grave supply-side effects.

The influence of the various factors cited above varied from sector to sector. For example, in the petroleum sector, strikes and lack of labor discipline accounted for most of the losses in production, whereas in the manufacturing sector the shortages of foreign exchange were the principal cause of the recorded low level of economic activity. In the case of the construction sector, non-residential building was curtailed by uncertainty and the first symptoms of the recessionary conditions in the economy.

It is noteworthy that the agricultural sector experienced strong growth in 1982. In 1983, weather disturbances caused by the changing currents in the Pacific Ocean caused severe draughts in western Bolivia and the floods in the Eastern lowlands both of which caused a substantial fall of 26.7 percent in production in the sector in that year. The resultant food shortage aggravated the economic crisis. The sector recovered itself in 1984 and 1985.

In addition to all these troubles, in 1983 and 1984 Bolivia suffered from long delays in receiving payments from natural gas exports to Argentina. Since these sales accounted for about one half of Bolivian exports, the delays contributed considerably to the foreign exchange bottlenecks that hampered production and created liquidity squeezes in the public finances.

The losses in production and income are also reflected in the employment and real wage situation. As shown in Table II.2, between 1980 and 1985, the open unemployment rate went from 5.8 to 19 percent of the labor force. Between the last quarter of 1984, real wages had declined in 27 percent (see Table II.2).

But from the last quarter of 1984 and the end of the hyperinflation real wages actually

increased above the levels of 1982, However, the situation was unstable and, moreover, shortages of food and other essentials hurted enormously the purchasing, power of salaries, but in ways that cannot be easily computed. Indeed, it is difficult to find the price equivalent of some quantitative restrictions. After the stabilization program of August 1985 was announced by the Paz Estenssoro government, real wages took a transitory deep dive.

It is worth looking more closely to the crisis on employment as shown in Table II.2. Between 1980 and 1985, total employment actually decreased in absolute values, while the labor force and population increased at a relative fast pace. The changes in employment in the several economic sectors is even more illustrative of the impact of the crisis. The manufacturing sector was particularly impacted. Between 1980 and 1985 the number of workers in the sector decreased, as did their share in total employment. Worker productivity also declined. The construction sector was also hit hard. Employment declined considerably as did this sectors relative share of the total labor force.

The number of wage earners in the mining and petroleum sectors increased during the period but in the case of mining, there was a notorious decline in labor productivity. It is widely believed that substantial featherbedding occurred in COMIBOL, the State Mining Company, when the Bolivian Communist Party (PCB) controlled the Ministry of Mining between October 1982 and November 1984. In addition, co-management between workers and government in COMIBOL created more employment than was actually needed.

The percentage of employment in the categories Agriculture and Services II, increased rather substantially. Given that workers in the agricultural sector and services are many of them self-employed, the increase may imply that otherwise unemployed, workers have found refuge in traditional agriculture and in underemployment.<sup>3</sup>

The global figures and the composition of employment indicate quite clearly the negative impact of the crisis in the urban centers. Fortunately, however, work opportunities and extended family systems in the agricultural sector provided a safely net that attenuated some of the urban unemployment effects. Had Bolivia been more urbanized, the consequences of the crisis would have been even more severe.

---

<sup>3</sup> Central government employment rose considerably during 1982-1985 going from 193, 118 to 230, 410 employees.

Table II.1

Gross Domestic Product by Sector or Origin in Constant Prices, 1980-1985

	1980	1981	1982 <sup>p</sup>	1983 <sup>p</sup>	1984 <sup>p</sup>	1985 <sup>p</sup>	1980-1985
Gross Domestic Product at Market Prices (millions of 1980 Bolivian Pesos)	122.946	123.375	119.905	112.050	111.054	109.113	
Rates of Growth by Sector (%)							
Agriculture		0.9	6.8	-26.7	18.7	3.1	-5.1
Hydrocarbons		6.4	7.6	-6.3	2.5	-2.0	2.5
Minerals		-4.3	-12.3	2.4	-21.3	-17.6	-44.3
Manufacturing		-7.3	-14.0	-6.6	-11.8	-9.2	-40.3
Construction		-11.0	-2.4	-4.5	-6.7	2.6	-20.6
Services I*		6.3	-3.9	-1.2	0.0	1.7	2.5
Services II*		1.5	0.3	0.8	0.1	-1.2	1.3
Gross Domestic Product		0.3	-2.8	-6.6	-0.9	-1.6	-11.1

Source: Basic data from Central Bank of Bolivia, Statistical Bulletin No. 257, March 1987

Notes: <sup>p</sup> Preliminary

\* Services I includes commerce, communications, electricity, gas and water, and banking and other financial services

\*\* Services II includes housing, central and local government services, and personal services

A world of caution is appropriate for the interpretation of the production and employment figures, since many activities in the underground economy are not reported. We should recall that the government's attempts to check inflation with price and foreign exchange controls gave rise to thriving contraband exports and internal black markets for many goods. Production for those markets was, of course, unrecorded. In fact there is ground for the presumption that more important than the losses in production, that indeed happened, was the fact of the economy going underground.

A mention should be made to coca and coca-related production and exports. The joint production of coca and coca-paste, a precursor of cocaine, as percent of GDP, averaged 14 percent between 1982 and 1985. Illegal cocaine exports approximated the value of recorded legal exports between 1982 and 1985 (Around \$400 million per year).<sup>4</sup>

Economic activities related to the cocaine trade helped economy, obviously in perverse ways, and cushioned somewhat the effects on households of the fall in production in the legal sector. The cost of the expansion of the coca-based economy were however high. First, the Bolivian international relations deeply suffered from the perception abroad, especially in the United States, that the Siles government was not doing enough to control the burgeoning

<sup>4</sup> These figures are derived from basic data collected by Samuel Doria Medina in *La Economía Informal en Bolivia*, (La Paz: Editorial Offset Boliviana, 1986). A more thorough treatment of the coca question appears in the article by Ray Haenkel in this volume.



cocaine production. The outcome of some of the crucial negotiation with the International Monetary Fund suffered interferences from this perception. Second, shocks in the cocaine trade produced in turn supply shocks in the black market of dollars. The interaction of an unstable supply with a smoothly growing demand for foreign exchange, determined by the public's expectations of the course of the macroeconomic policies, increased the black market premiums and ultimately was a factor of de-stabilization of the economy. The only way to control the effects of those supply shocks was to use a very tight monetary policy, as indeed happened after August 1985. The tight checks on the expansion of domestic credit have course their own costs.

Table II.2

Employment and Unemployment, 1980-1985 (Thousands)

Sectors	1980 (1)	1981 (2)	1982 (3)	1983 (4)	1984 (5)	1985 (6)	Change in Employment 1980-85 (7)=(6)-1	As % of Employment in 1980 (8)=(7) /(1)*100
Agriculture	799.61	780.70	792.57	795.98	799.16	816.60	16.99	2.1
Hydrocarbons	68.78	75.15	68.92	71.17	72.51	68.80	0.02	0.0
Minerals	6.88	6.44	7.24	7.89	8.48	8.30	1.42	20.7
Manufacturing	177.12	168.45	155.51	150.24	154.24	147.10	-30.02	-16.9
Construction	94.58	79.51	56.47	55.35	56.54	42.10	-52.48	-55.5
Services I*	240.75	240.57	244.65	242.73	246.30	241.50	0.75	0.3
Services II*	331.88	337.72	382.60	355.22	380.56	361.90	30.02	9.0
Total Employment	1.719.59	1.684.54	1.707.95	1.678.57	1.717.90	1.686.30	-33.29	-1.9
Total Labor Force	1.824.83	1.865.07	1.916.73	1.930.36	2.030.83	2.088.15		
Unemployment Rate (%)	5.8	9.7	10.9	13.0	15.4	19.2		
Memorandum Item: Population	5.599.59	5.755.07	5.915.84	6.081.72	6.252.72	6.429.23		

Source: Derived from basic data from UDAPE, Análisis Económico No. 2, La Paz, December 1986

Notes: \* Services I includes commerce, communications, electricity, gas and water, and banking and other financial services

\*\* Services II includes housing, central and local government services, and personal services

Table II.3

Real Wage Index, 1982-1985<sup>a</sup>  
(Base 1982 = 100)

	National Average	Mining	Hydrocar- bons	Manufac- turing	Construc- tion	Services I <sup>b</sup>	Services II <sup>c</sup>
1982 Q1	110.9	73.3	124.5	122.9	135.6	120.8	132.0
Q2	117.1	91.0	102.4	106.8	123.7	124.3	114.7
Q3	75.3	116.2	80.5	70.3	70.9	77.2	69.7
Q4	96.7	119.2	92.6	99.9	69.9	77.7	83.6
1983 Q1	107.8	96.1	94.2	102.7	85.0	74.9	98.5
Q2	91.9	79.1	71.7	95.6	73.6	72.3	93.3
Q3	84.4	62.9	89.5	98.8	76.7	64.6	70.5
Q4	99.7	56.5	60.4	139.6	64.1	61.3	75.4
1984 Q1	68.3	52.8	66.7	85.8	50.8	56.9	69.9
Q2	72.4	60.0	57.2	87.5	67.5	56.0	70.6
Q3	68.7	48.0	50.8	78.2	54.3	58.4	86.5
Q4	156.9	86.5	247.7	167.6	125.4	68.3	136.7
1985 Q1	127.2	70.1	168.1	150.4	90.1	73.0	77.3
Q2	104.7	65.6	109.2	127.9	65.6	61.9	102.4
Q3 <sup>d</sup>	35.5	17.5	35.4	41.2	38.7	29.2	47.7
Q4	70.7	63.8	49.3	69.5	58.5	70.5	48.5

Source: Derived from basic data from UDAPE, Análisis Económico No. 2, La Paz, December, 1986

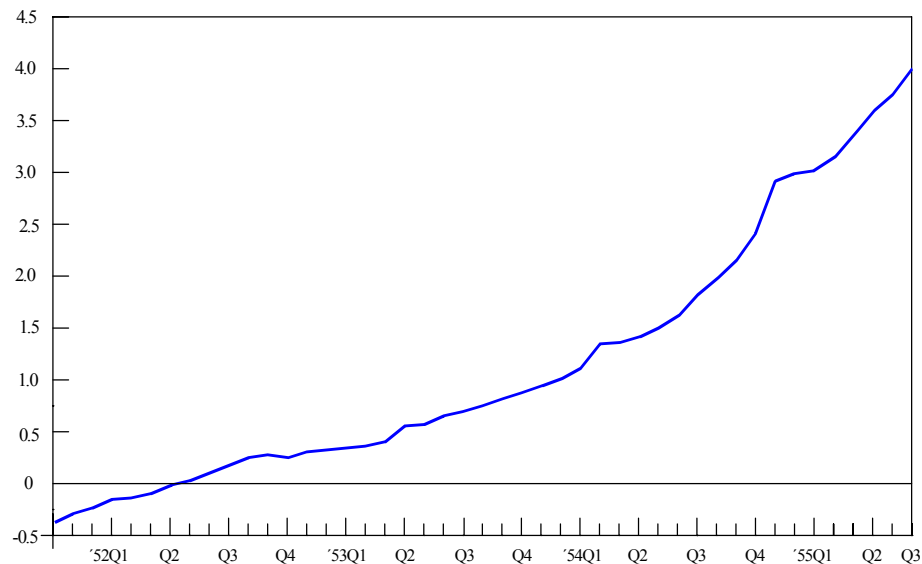
Notes: <sup>a</sup> End-of-quarter values

<sup>b</sup> Services I includes commerce, communications, electricity, gas and water, and banking and other financial services

<sup>c</sup> Services II includes housing, central and local government services, and personal services

<sup>d</sup> The current and successful stabilization program was unveiled by President Paz Estenssoro on August 29, 1985

**Figure 1**  
**Consumer Price Index (Logarithms)**



Note: Logarithms of Consumer Price Indices with base 1982 = 1

Table II.4

Investment and Savings Rates, 1982-1985<sup>a</sup> (%)

Year	Investment Rates	Gross Domestic Savings Rates
1982	11.6	10.6
1983	9.9	14.6
1984	7.8	9.4
1985	7.1	16.2

Source: Central Bank of Bolivia, Statistical Bulletin, Various Issues; and unpublished World Bank data

Note: <sup>a</sup> Gross Fixed Capital Formation and Gross Domestic Savings as percentages of GDP.

The rates are derived from basic data in real terms

Table II.4 presents preliminary estimates of investment and saving ratios as a percentage of Gross Domestic Product for 1982 through 1985. The investment ratios fell from 11.6 percent in 1982 to an all-time low of 7.1 percent in 1985. The ratios are significantly lower than the ones obtained from 1970 to 1982, when they were about 20 percent. Surprisingly, the savings ratios before payments on the external debt increased during the crisis. That savings ratios were higher than the investment ratios is of course consistent with the fact that amortizations on the foreign debt were above disbursements. Investment started to depend more on domestic savings than in the past when foreign lending was readily available.

### The Characteristics of the Bolivian High Inflation

The rate of inflation measured as a percentage change in the year-to-year Consumer Price Index (CIP), accelerated rapidly in 1982 to a level of 123.5 percent, compared to a rate of 32.4 percent in 1981. In the following year it rose to 275.6 percent. In 1984 and 1984 it skyrocketed to 1,281.3 percent and 11,649.6 percent respectively. At this time Bolivia was clearly in a period of hyperinflation. Up to the fourth quarter of 1985 the situation worsened, with estimates of the annualized inflation rate between January and August reading up to 30,000 percent. Figure 1 shows the domestic rise in inflation.

It is also useful to examine the monthly evolution of there key variables: the parallel (or "black") exchange rate, the high powered money stock H also called the money base, and the inflation rate (see Table II.6 and Figure 2). It is important to note the monthly changes in the parallel market rate, because in the Bolivian economy, as in other highly inflationary

economies, it anticipated inflation. In a highly import dependent economy, such as Bolivia, it is certain that if the exchange rate rises then the price level will also increase. Indeed, the general public monitors the exchange rate on almost a daily basis since it provides them with the best indicator of near-term price changes. Moreover, changes in the parallel market exchange rate are also good indicators of the need for new government policies, which are geared to decrease the gap between the official and black market rate.

High inflation is very clearly a monetary phenomenon. Indeed the numbers in Table II.6 and Figure 2 show the close association, in some cases with a short lag, of the rates of growth of money, prices and black market exchange rates. The monetary nature of the Bolivian inflation is rather obvious, but then two questions arise. First, which are the relations between fiscal deficits and money expansion and why the government chose to finance its deficits with money creation. Second, why the money creation proceeded at such a fast rate.

Table II.5  
Average Monthly Rates of Growth of Prices Exchange Rates, and Money,  
1982-Q1 - 1985-Q3<sup>a</sup> (%)

	Consumer Prices	Black Market Exchange Rates	Money Base
1982 Q2	9.0	26.3	9.9
Q3	14.9	29.6	13.1
Q4 <sup>b</sup>	16.0	7.5	16.2
1983 Q1	7.4	19.4	9.4
Q2	8.9	-1.4	8.5
Q3	12.8	18.5	9.4
Q4	18.8	18.7	10.8
1984 Q1	18.8	25.3	12.7
Q2	37.7	16.8	17.1
Q3	14.5	32.6	30.5
Q4	44.0	33.8	35.3
1985 Q1 <sup>c</sup>	81.0	80.5	49.8
Q2	38.4	39.1	46.6
Q3 <sup>d</sup>	62.6	50.7	54.6

Source: Elaborated with basic data from the Central Bank of Bolivia, Statistical Bulletin, Various Issues

Notes: <sup>a</sup> Geometric average of quarter-to-quarter relative changes in the variables

<sup>b</sup> Siles Zuazo took power in November 1982

<sup>c</sup> In February 1985, the monthly inflation rate reached 182 percent, the highest rate in Bolivian history

<sup>d</sup> Siles Zuazo ended his presidency on August 1985

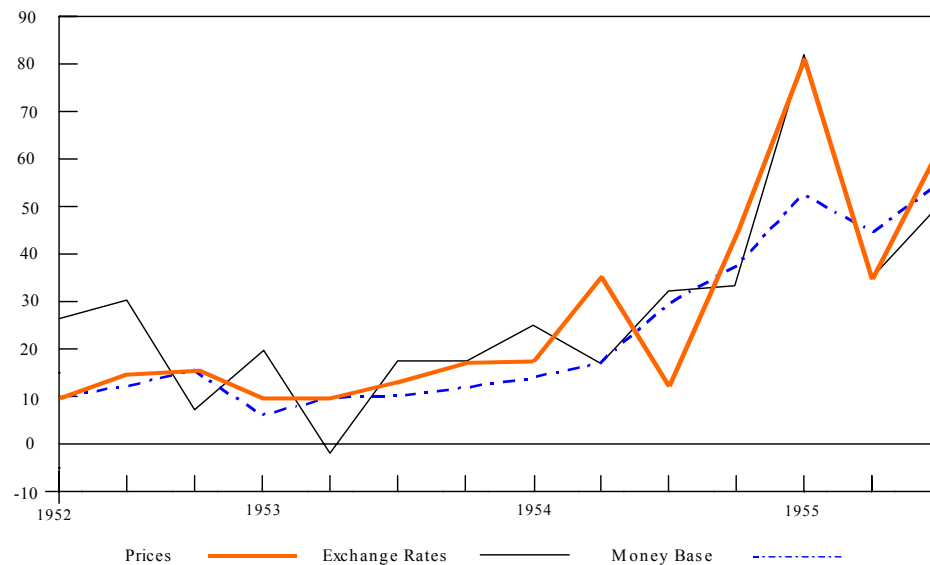
Table II.6

Premiums in the Black Market for Foreign Exchange, 1982-1985 (Percentages, Quarterly Averages)

1982	1983	1984	1985
Q1 57.0	Q1 116.3	Q1 327.4	Q1 330.9
Q2 3.5	Q2 105.1	Q2 69.8	Q2 321.0
Q3 4.8	Q3 241.8	Q3 309.7	Q3 798.1
Q4 22.0	Q4 225.4	Q4 302.7	

Source: Extracted from Jeffery Sachs, "The Bolivian Hyperinflation and Stabilization", NBER Discussion Paper Series No. 2073, November 1986

**Figure 2**  
**Price Exchange Rates, and Money Growth**



### Inflation and the Fiscal Crisis

There are several possible explanations in regard to the sources and persistence of Bolivian inflation. The most commonly accepted explanation on the origins of the high Inflation concerns the unanticipated change in net foreign resources flows that happened in early 1982. It should be mentioned as a background that foreign borrowing had allowed the government and the state enterprises to run substantial deficits between 1976 and 1981, without affecting the domestic monetary variables and the domestic inflation rate. When foreign loans dried up

in 1982, domestic credit, mainly under the form of monetary emission, was used to substitute them in the financing of the public sector deficits. A big jump in the real value of the change in the money base, or seignorage, occurred indeed in 1982. In addition, the service of the foreign debt and the concomitant capital outflows forced a rapid depreciation of the peso and the use of quantitative restrictions to limit imports. These phenomena gave a strong impulse to inflation.

As a side comment, it should be mentioned that some sub-sectors of the private sector shared in the seignorage collections of the government. The amount of Central Bank peso loans to some private beneficiaries was substantial. With highly negative real interest rates, those loans were outright subsidies. But many of the credit subsidies served the purpose to compensate producers with controlled prices that were well below market-clearing prices, and therefore constituted indirect government expenditure to subsidize consumers. In our interpretation, many of the Central Bank loans to the private sector were in fact quasi-fiscal deficits for the reasons heretofore mentioned.

The collapse of the unified fixed exchange rate regime in March 1982 caused by the foreign debt service problems marked the beginning of high inflation. The economic measures taken from November 1982 on to control inflation backfired and aggravated the condition. The unintended but not wholly unanticipable effects to suppress the symptoms of the initial jump in inflation in 1982, and inflation itself through strong Olivera-Tanzi effects to which we refer below, contributed to a cumulative deterioration of the fiscal sector. Indeed it appears that most cogent explanation for persistent inflation -that lasted more than three years- is given by a fiscal crisis of enormous proportions. Table II.6 shows that the central government expenditures represent an extremely high percentage of GDP in 1982, that then declined in 1983, to rise again quite steeply in 1984. The data of 1985 combines the effects of the stabilization program of the last quarter, therefore the expenditure values are lower than in the previous years.<sup>5</sup>

The high expenditure on 1982 is explained by a sharp increase in the burden of the debt with creditors. In 1983 and 1984, expenditures related to the service of the foreign debt fell somewhat as commitments were not honored very rigorously, especially in the last year.

Central government revenues declined very steeply beginning in 1982. In 1983 and 1984 the central government's revenue from tax payments (2.8 percent of GDP) was a little less

---

<sup>5</sup> All fiscal accounts are given on a cash-flow basis. With accrual accounting, the deficit figures may be larger.

than a third of what it obtained in 1981 (8.9 Percent of GDP). Compared to the decline in GDP these losses in revenue were proportionately more substantial which implies a big decline in tax effort. There are several explanations. First, state enterprises are the most important taxpayers, and they were systematically in arrears between 1982 and the third quarter on 1985, which is a reflection of their own difficulties. Overvalued official exchange rates and low prices for the public sector production explain in turn those predicaments. Second, in addition, with no indexation of taxes, both private taxpayers and public enterprises had a strong incentive to delay paying their taxes, with the condition of high inflation the real value of the taxes they paid some delay would be much lower than if they had paid in time.<sup>6</sup> This deterioration in the real value of tax collections produced by inflation is known in the literature as the Olivera-Tanzi effect.

Table II.7  
Summary of Central Government Operations, 1982-1985  
(As % of GDP)

	1982	1983	1984	1985
1. Current Revenue of which:	5.7	3.6	3.0	9.1
1.a Taxes	4.9	2.8	2.8	8.8
2. Current Expenditure of which:	19.4	17.6	22.0	13.7
2.a Wages and Salaries	6.0	5.7	8.8	6.8
2.b Interest Payments <sup>a</sup>	9.3	7.5	6.3	2.6
* External Debt	4.7	5.1	5.9	2.6
* Internal Debt	4.6	2.4	0.4	0.0
3. Current Account Surplus/Deficit before Interest (lines 1-2+2b)	-4.4	-6.5	-12.7	-1.9
4. Current Account Surplus/Deficit (Lines 1-2)	-13.7	-14.0	-19.0	-4.5
5. Capital Revenue and Grants	0.5	0.3	0.1	0.2
6. Capital Expenditure	1.9	3.7	1.4	2.0
7. Net Lending	0.0	0.0	0.0	0.0
8. Over-All Surplus/Deficit (Lines 4+5-6-7)	-15.2	-17.5	-20.3	-6.4
9. Financing (- Line 8)	15.2	17.5	20.3	6.4
9.a Abroad	0.8	0.1	0.1	0.2
9.b Internal	14.4	17.4	20.1	6.2
10. Amortization Abroad <sup>a</sup>	1.5	3.3	0.8	1.7
11. Domestic Amortization <sup>a</sup>	0.0	0.0	0.0	0.0

Source: Ministry of Finance and unpublished World Bank data.

Note: <sup>a</sup> Estimates

<sup>6</sup> Only in February 1985, a system of indexation of taxes to the CIP was implemented.

With relatively high government expenditures, at least as a proportion of GDP, and very small receipts, it is not surprising that the government deficits were very high throughout the period. It is important to note, however, that this is only part of the deficit problem. The above figures deal only with the central government. Treasury accounts, which do not give a complete picture of the fiscal woes. An analysis of the fiscal performance of state enterprises is also needed, as well as an examination of the consolidated public sector finances that would include then jointly with government. This is done in Table II.7.

Table II.8  
Summary of Operations of the Consolidated Public Sector, 1982-1985 (As % of GDP)

	1982	1983	1984	1985
<b>Current Account Balances of:</b>				
1. Central Administration	-13.7	14.0	-19.0	-4.5
2. Social Security	0.6	0.0	0.4	0.1
3. Decentralized Agencies	0.8	0.3	-1.3	-1.5
4. Central Government (Lines 1+2+3)	-12.4	-13.7	-19.8	-5.9
5. Local Government	1.7	0.6	-0.9	-1.9
6. General Government (Lines 4+5)	-10.7	-13.1	-20.7	-7.7
7. Non-Financial Public Enterprises <sup>a</sup>	3.0	1.3	-2.4	2.1
8. Current Account Balance of the Consolidated Public Sector (Lines 6+7)	-7.7	-11.9	-23.1	-5.6
<b>Capital Revenue and Grants of:</b>				
9. General Government	0.6	1.9	0.2	0.2
10. Non-Financial Public Enterprises <sup>b</sup>	0.0	0.1	0.2	0.1
11. Capital Revenue and Grants of the Consolidated Public Sector (Lines 9+10)	0.6	2.0	0.3	0.3
<b>Capital Expenditure of:</b>				
12. General Government <sup>c</sup>	2.9	4.6	2.2	2.2
13. Non-Financial Public Enterprises	4.6	4.6	2.2	1.6
14. Capital Expenditure of the Consolidated Public Sector (Lines 12+13)	7.5	9.2	4.4	3.8
15. Net-Lending	0.2	0.0	0.0	0.0
16. Overall Balance (Lines 8+ 11-14-15)	-14.7	-19.1	-27.2	-9.1
17. Financing (- Line 16)	14.7	19.1	27.2	9.1
18. External Financing (Net)	-1.9	-1.5	2.1	0.2
19. Internal Financing (Net)	16.6	20.7	25.1	8.7

Source: Ministry of Finance and unpublished World Bank data.

Note: <sup>a</sup> Net of Transfers to General Government

<sup>b</sup> Net of Transfers from General Government

<sup>c</sup> Net of Transfers to Public Enterprises



Most of the consolidated public sector deficit was internally financed as is seen in Table II.7. While we know that the internal financing was essentially constituted by money emission, unfortunately we cannot match the changes in the money base figures nor in the Central Bank net credit to the public sector, with the figures on the internal financing of the consolidated public sector deficit. For instance, the maximum value in the change of Central Bank net credit to the public sector as a percentage of GDP was 17 percent in 1984. That figure lies below the internal financing figure of 25.1 percent of GDP for that year. The fiscal deficit figures overstate the situation and include amounts that may have resulted solely from accounting conventions, without significance in the use of real resources.

Regardless of the actual values on the fiscal deficit, the fact remains that they were high and financed with money expansion. As inflation accelerated, the public started to fly away from Bolivian money. But then, the government to buy the same amount of real resources had to increase the rate of growth of money. More technically, with the decrease in the demand for Bolivian pesos, the base of the inflation-tax shrunk and therefore the government to obtain the same revenue (in real terms) had to increase the rate of the tax, i.e. the rate of growth of money and the rate of inflation.

### The Balance-of-Payments

The fiscal deficits and their financing by money creation should also have had strong repercussions on the Balance-of-Payments accounts. But the use of exchange rate controls and quantitative restrictions on imports had the effect to divorce the money expansion from its foreseeable effects on the reserves of foreign exchange. In fact, the Central Bank reduced its short-term foreign exchange liabilities in 1983, and in 1984 and to the third quarter of 1985 accumulated foreign exchange reserves as can be observed in Table II.10. The accumulation of reserves was facilitated by the decision to postpone debt service payments to the foreign commercial banks in May of that year. Notwithstanding the reserves stock was clearly insufficient and obtained by sharply intervening the foreign trade market.<sup>7</sup>

---

<sup>7</sup> The importance of foreign assets in stabilization is underscored by Thomas J. Sargent in "The Ends of Four Big Inflations", in Inflation: Causes and Effects, Robert E. Hall, editor. (Chicago: Chicago University Press, 1982), pp. 41-98.

It is important to underscore that the Balance-of-Payments equilibrate was obtained in 1983 and 1984 by a strong compression of imports and by the accumulation of arrearages on the external debt service, and not by an expansion of exports or, even less, by fresh foreign capital inflows. In regard to exports, legal exports greatly suffered from the long-lasting overvaluation of the official exchange rate and the black market premiums for foreign exchange (See Table II.9). The successive devaluations to correct the situation were only nominal; a real devaluation with domestic prices increasing less than the devaluation rate, over a prudent period of time, was always elusive of the Siles government. Concerning capital flows, the Siles administration, was able to contract new debt from official lenders-where the Interamerican Development Bank out stood-but actual disbursements on those new loans were very modest, because of the internal stabilization problems. The positive capital flows for 1983 and 1984 in Table II.8 are explained by the effects of the foreign debt rescheduling with Argentina, Brazil and the commercial bank lenders, as well as by the unilateral capitalization of interests. No significant fresh money came.

Table II.9

Investment and Savings Rates, 1982-1985<sup>a</sup> (%)

	1982	1983	1984	1985 <sup>p</sup>
1. Current Account of which:	-93.0	-149.8	-178.0	-281.9
1a. Merchandise exports FOB	827.7	755.1	724.4	623.4
1b. Merchandise imports FOB	-428.7	-473.1	-412.5	-463.1
1c. Other goods, services and income (Net)	-537.0	-538.0	-578.4	-522.2
2. Capital Account, excluding Reserves	14.3	355.4	364.8	130.8
3. Net Errors and Omissions	-50.6	80.4	-6.8	180.5
4. Over-All Balance (Lines 1+2+3)	-129.3	286.0	180.0	29.4

Source: International Monetary Fund, International Financial Statistics Yearbook, 1986 Edition, and Central Bank of Bolivia

Note: <sup>p</sup> Preliminary estimates of the Central Bank of Bolivia

The trade and capital flows recorded in the Balance-of-Payments of the high inflation years of 1982-1985 are likely to be only a small fraction of actual flows. As mentioned above, contraband exports boomed during those years and the older practice of import smuggling continued. Even bulky products were exported illegally, for instance, tin ores. Neighboring Peru, that is not a tin producer, started to record exports of tin. In fact, those exports were of Bolivian tin going through Peru. Even bread became an exportable good through the Titicaca

Lake. Of course, the huge premiums on the black market exchange rate provided the incentive for those operations. In addition, the amounts of unrecorded capital flight are probably very substantial. A fraction of them is hidden in the exports and imports figures since exporters had incentives to under invoice their sales abroad and importers, on the contrary, had a strong incentive to over invoice their purchases.

Table II.10

Central Bank of Bolivia Balance Sheet, 1982-1985  
(End-of-Quarter, in millions of Bolivian Pesos)

	Gold	Foreign Currency and Other Int'l Reserves (Net)	Domestic Credit	Notes in Circulation	Deposits
1982 Q1	0.90	(11.40)	28.43	12.94	4.17
Q2	1.60	(11.50)	36.17	18.12	8.15
Q3	1.60	(4.48)	40.44	29.10	8.46
Q4	7.07	(70.60)	127.26	41.91	21.82
1983 Q1	7.07	6.01	61.45	49.01	25.50
Q2	7.12	3.79	85.84	61.23	35.47
Q3	7.21	2.69	113.12	74.20	48.81
Q4	18.50	(42.28)	218.62	133.01	61.83
1984 Q1	18.92	(5.53)	236.24	190.90	72.04
Q2	75.69	21.73	351.97	362.75	107.04
Q3	75.69	76.66	782.37	739.92	238.51
Q4	324.49	542.73	2,477.44	3,070.85	473.75
1985 Q1	1,704.02	2,749.38	4,630.95	8,371.94	712.40
Q2	2,538.47	827.58	25,191.71	26,467.92	2,089.84
Q3 <sup>a</sup>	40,729.24	95,621.98	(24,604.96)	95,732.46	16,013.78
Q4	63,902.40	167,691.07	(41,515.89)	183,390.09	6,487.49

Source: Central Bank of Bolivia, Statistical Bulletin, Various Issues

Note: <sup>a</sup> The current and successful stabilization plan began in the final days of August 1985

## Inflation and Interest Rates

Information on interest rates is provided in Table II.11. Although occasionally the rates were increased, during most of the period real interest rates were highly negative. Clearly, these rates discouraged Bolivians from saving in pesos. Had a policy of higher real interest rates been employed, speculative movements against the peso would have been indeed reduced.

Highly negative real interest rates did not induce more investment either. The

uncertainty surrounding the hyperinflation and the economic policy possibly account for that. In addition, the relevant opportunity cost of real investment was given by the capital gains that could be made in financial speculation, particularly in the black market for foreign exchange. For instance, enterprises benefiting from heavily subsidized loans frequently used them to buy foreign exchange in the black market. With this operation, if depreciation of the peso in the black market proceeded faster than increases in domestic prices, as happened until the final months of the hyperinflation, they could make huge short term real profits.

Table II.11

Nominal and Real Interest Rates, 1982-Q4 - 1984-Q3 (%)

	Nominal Interest Rates <sup>a</sup>		Nominal Interest Rates <sup>b</sup>	
	Lending	Borrowing	Lending	Borrowing
1982 Q4	43.0	32.0	-39.2	-43.9
1983 Q1	43.0	32.0	-48.3	-52.3
Q2	43.0	32.0	-66.3	-68.9
Q3	67.0	45.0	-78.8	-81.6
Q4	67.0	45.0	-78.9	-81.7
1984 Q1	67.0	45.0	-96.4	-96.9
Q2	155.0	140.0	-49.7	-52.6
Q3	155.0	140.0	-96.8	-97.0
Q4	155.0	140.0	-99.8	-99.8
1985 Q1	540.0	336.0	-87.0	-91.2
Q2	540.0	336.0	-98.1	-98.7
Q3	540.0	336.0	5.2	-28.4

Source: Basic data from Central Bank of Bolivia, Statistical Bulletin, Various Issues

Note: <sup>a</sup> Annualized interest rates at end of quarter

<sup>b</sup> Real ex-post annualized interest rates. They have been computed according to the formula:  

$$\left\{ \left[ (1+i) * (P(t)/P(t+1))^{**4} \right] - 1 \right\} * 100$$
where i is the relevant nominal interest rate and P(t) is the Consumer Price Index in quarter t

### The Burden of the Foreign Debt

A final element for judging Bolivia's crisis is the burden imposed by the foreign debt. As shown in Table II.10, the large foreign debt to GDP ratio shows that Bolivia is one of the most indebted countries in the world. The debt has been increasing since 1982 at a fast rate, although this is not due to new disbursements, but rather to the refinancing of old debts and the capitalization of interest in arrears. Total External Debt as a percentage of exports has also

been on the rise both because of the increase in the absolute amount of the debt stock and of the fall in exports.

The debt service-exports ratio was high over 1982-1985 but not as high as might be expected nor as large as in other Latin American countries during that period. This is partly explained by the fact that Bolivia ceased payments on her foreign commitments to the commercial banks in May 1984. During most of 1983, Bolivia was current in her payments, even at the cost of great sacrifices; for instance, net resource transfers abroad constituted a huge 5.1 percent of GDP. The May 1984 decision was imposed to Siles by the COB, and was accompanied by vociferous statements of both spokesmen of the left-wing parties of Siles UDP coalition and the COB. The aggressive statements created more malaise inside and outside Bolivia than what the moratorium decision deserved.

Table II.12  
Bolivia's External Debt, 1982-1985  
(Millions of US\$ Dollars)

Year	1982	1983	1984	1985
<b>Total External Debt</b>	3,169.0	3,804.4	3,913.1	3,971.8
Long-Term Debt	2,897.9	3,481.1	3,543.5	3,573.5
Public and Publicity Guaranteed	2,769.1	3,105.2	3,203.5	3,259.3
Private Non-guaranteed	128.8	376.0	340.0	314.2
Use of IMF Credit	86.1	89.3	63.7	51.3
Short Term Debt	158.0	234.0	306.0	347.0
<b>Total External Debt</b> (% of GDP)	81.5	101.5	102.7	105.0
<b>Total External Debt</b> (% of Exports) <sup>a</sup>	345.1	423.2	461.5	538.5
<b>Memorandum Item:</b>				
Gross Domestic Product (GDP) in Current Dollars	3,890.7	3,748.0	3,810.2	3,781.5

Source: Debt figures from World Bank, World Debt Tables, 1986-1987 Tables. GDP values are derived from GDP values in current Bolivian Pesos divided by a PPP exchange rate.

Note: <sup>a</sup> Exports of Goods and Services.

The overhang of the external debt has been a significant problem since 1982 and has hampered Bolivia's development. There is no doubt that a fundamental solution needed to be

found. The solution asked for imaginative debt relief; piecemeal rescheduling provided only transitory alleviations. In retrospect, the May 1984 had the merit to force the strangled Bolivia government and the creditors to look for long-run solutions under the form of partial cancellations of the debts. It should be mentioned that the Paz Estenssoro government has continued the Siles Zuazo policy after May 1984, of not paying the debts to the foreign commercial banks. But, unlike Siles Zuazo, Paz Estenssoro has sought to normalize the Bolivian relations with the official multilateral lending agencies like the World Bank and the International Development Bank, and with creditor governments.

Table II.13

Bolivia's External Debt Service, 1982-1985

	1982	1983	1984	1985
Interest Payments (US\$ Millions)	181.0	172.8	201.3	71.5
Principal Repayments (US\$ Millions)	106.1	110.9	119.4	142.9
Total Debt Service (US\$ Millions)	287.1	283.7	320.7	214.4
Total Debt Service (As % of Exports) <sup>a</sup>	31.3	31.6	37.8	29.1
Total Debt Service (As % of GDP) <sup>b</sup>	7.4	7.6	8.4	5.7
<b>Memorandum Items:</b>				
Net Resources Transfers (US\$ Millions)	-92.7	-192.4	-88.6	-99.1
Net Resources Transfers (As % of GDP) <sup>b</sup>	-2.4	-5.1	-2.3	-2.6

Source: Debt figures from World Bank Debt Tables, 1986-1987 Tables

Note: <sup>a</sup> Exports of Goods and Services

<sup>b</sup> GDP values come from Table 12

### **III. The Stabilization Programs Since 1982**

During 1982-1985 the government of Siles Zuazo made mix major attempts to correct the economy by introducing six stabilization packages: in November 1982, November 1983, April 1984, August 1984, November 1984, and February 1985. All of these attempts ended in failure, at least in terms of reducing inflation. This section examines the main features of the packages. The discussion will be preceded by the economic measures taken by President Gral. Celso Torrelio in February and March 1982, since their overhang determined the course of subsequent policies.

#### The Experiment with Floating Exchange Rates

In February 1982, it became apparent that the exchange rate of 25 pesos per dollar was no longer consistent with equilibrium in the foreign exchange market. At this time, reserves of foreign exchange were almost nil, in a large part because of the requirements for servicing of the large foreign debt. The military government of Gral. Torrelio decided to devalue the peso by rising the exchange rate to 44 pesos per dollar. This, however, proved to be insufficient both to decrease the demand or to increase the supply of dollars and in the following month, a two-tired exchange rate system was establish, with a controlled official rate and a floating rate determined in a parallel free marker.

Under this system, exporters were obliged to surrender 40 percent of their foreign exchange earnings to the Central Bank at the official rate; the remaining 60 percent could be sold in the parallel market. Entities using foreign exchange could obtain in at the official rate only for purposes of servicing the government's foreign debt and for wheat imports. All other transactions had to be made at the floating rate. As a complement to the foreign exchange measures, all ceilings on interest rate were abolished and some inconsequently tax measures were enacted.

The system was intended to be temporary; in the long run, through a system of mini-devaluations, the official rate was supposed to converge to the floating rate. Moreover, the parallel market was to function under a managed of "dirty floating", arrangement, where there

would be interventions by the Central Bank in order to avoid de-stabilizing movements. The innovation in the exchange rate regime broke the long tradition of unified exchange rates and resulted in a major upheaval in the parallel market, which until that time had not been very active. Indeed, this policy was to chart the course for successive policy measures and for the creation of an active parallel market.

A preliminary evaluation of this experiment would suggest several things. First, the fixed exchange rate had traditionally acted as repressor of inflation in the Bolivian economy. But as shown in Figure 1, once it was liberalized prices shot up, increasing 200 percent in seven months. In a related manner, the floating rate itself increases five times between February and October 1982.

Second, there is no question that the peso was grossly overvalued during 1980 and 1981, and, consequently, the higher and more realistic exchange rates should have provided the needed incentives for production, especially in the export sector. However, because the Bolivian economy was (and still is) widely "dollarized" -in the sense that many contracts are indexed to the dollar- increases in the price of foreign exchange sharply augmented the burden of the foreign debt held by the government and many enterprises. Those businesses involved in the production of goods that were not tradeable were the most severely affected since their prices increased at a slower rate than their dollar or dollar denominated-debt commitments.

Third, the initial instability in the floating exchange rate contributed to the further depreciation of the currency. The public at large, expecting further depreciation of the peso, hedged by buying dollars, thus increasing the demand for dollars and bidding up their price.

An additional point needs to be stated and concerns the behavior of exporters who felt that they were obliged to pay an implicit and variable tax by having to surrender to the Central Bank 40 percent of their foreign exchange. Frustrated, because they could not sell all of their dollars in the more favorable parallel market, many exporters stockpiled their production or withheld their foreign exchange earnings. This had negative consequence both on the Central Bank's foreign exchange position and on fiscal revenues.

#### The "De-Dollarization" and Stabilization in 1982-1983



The two-tiered exchange rate system of March 1982 met strong political opposition. When the Siles Zuazo government was installed, and the new president stated that one of the first economic acts would be to do away with it.

This occurred with the new government's first stabilization package of November 1982, which fixed a single exchange rate system and set a new rate of 196 pesos per dollar. Because of the low stock of foreign reserves in the Central Bank, foreign exchange controls were established. They were administered by a Commission on Foreign Exchange Policy. An extended list of import prohibitions was also included.

As complementary measures to the exchange rate policy the package provided for sharp increases in administered prices for basic goods, such as gasoline; raised interest rates on savings deposits; "de-dollarized" contracts; granted substantial wage increases and announced that a system of wage indexation was to be implemented in early 1983. The de-dollarization became a point of heated debate and the last two measures were to set a precedent for wage increases that turned out to be a bane of this and succeeding economic packages put forth by president Siles.

The "de-dollarization" measure converted all contracts in dollars held by Bolivian residents to contracts in pesos, i.e., the contracts were de-linked from the dollar. The measure aimed to:

1. Deflate the demand for dollars caused by debtors with dollar or dollar-denominated loans.
2. Restore flexibility to exchange rate management and open the possibility of levying an effective inflation tax. With dollarized contracts and deposits, devaluations had to be followed by significant increases in the money supply; thus ultimately defeating the intended effects of the measure.
3. Alleviate the situation of debtors in the productive sector who were financially strangled because of their need to buy dollars at increasingly high prices to service their debts.

With the ensuing high inflation rate, de-dollarization greatly favored debtors and severely penalized creditors. It is also possible that it propagated inflation since it produced a decline in voluntary savings. De-dollarization also caused capital flight; the extent is difficult

to determine, but, undoubtedly, it was considerable. Last, de-dollarization created a lost of uncertainty for foreign official lenders, and, because of this, it was a contributor to the curtailment of foreign lending.

In all fairness, it is true that de-dollarization created a negative financial environment and caused a whole set of new problems for the embittered economy, but it did not create inflation, was naively suggest some critics in the Bolivian press and among UDP's political opposants. High inflation had its origins in the cumulated fiscal deficits since 1976 and in the sudden cessation of foreign loans in 1982. The de-dollarization measure may have acted as a factor of propagation but it was not an essential cause.<sup>8</sup>

The other much criticized measure of the first Siles economic package, was the enactment of wage indexation. During the seventies, in spite of positive rates of growth of production and productivity, wages had not kept with inflation and this was strongly resented by the workers. With a strong labor clientele, Siles Zuazo tried from the outset of his administration to satisfy organized labor's demands with a wage indexation policy. The measure was that minimum wages were to be corrected fully for inflation every four months, or whenever the inflation rate increased by 40 percent or more since the last adjustment. As inflation accelerated the frequent wage increases had to be financed by money creation, which refueled the price-wage spiral process. Another feature of the policy was that wages above the minimum own were corrected for inflation in an lower proportion than the minimum wage. Therefore, as inflation accelerated, wage differentials decreased, which destroyed job hierarchies at plant level.

The wage indexation system was maintained until April 1984. In the meantime, however, it was the bane of the government's economic packages because it had embodied dynamics that aggravated inflation.

### The Implementation of Additional Economic Stabilization Measures

---

<sup>8</sup> Dollarized and indexed money deposits present interesting theoretical and practical problems. See the discussions of: W.A. Bomberger and G.E. Makinen, "Indexation, Inflationary Finance and Hyperinflation: The 1945-1946 Hungarian Experience", *Journal of Political Economy* 88 (1980): 550-1946, Hungarian Experience", *Journal of Political Economy* 91 (1983). 801-824: Stanley Fischer, "Seignorage and the Case for a National Money", *Journal of Political Economy* 90 (1982), 295-313: On the Bolivian Problem see Fernando Prado, "El Fantasma de la Desdolarización". Documento de

The situation between February and October 1983 clearly deteriorated. There was a big increase in the rate of inflation and in the premiums in the black market for foreign exchange (See Figures and Tables II.6 and II.7). In November 1983, the government decided to devalue the peso, raising the official rate of exchange to 500 pesos per dollar, and at same time, timid attempts were made to liberalize the exchange market by allowing transactions in the parallel market for tourism, and leaving aside the requirement that all imports should be authorized by the Commission of Foreign Exchange Policy as it was required previously since November 1982. Furthermore, higher administered prices were fixed for gasoline, services and food staples. Quite surprisingly, the measures met little opposition from labor unions. The fact that promises were made for substantial wage increases may have been a mitigating factor.

In spite of the measures taken in November 1983, or, perhaps because they were so insufficient and incomplete, the rate of inflation continued to rise from December 1983 until March 1984. A new stabilization plan was put forth in April 1984 that was the most comprehensive package of measures hitherto employed by Siles government. In a nutshell the measures were: a five -fold devaluation of the peso, steep increases of 300 to 500- percent in the administered prices of basic goods and services, a 156 percent increase in interest rates, and new efforts to renegotiate the foreign debt. The wage indexation mechanism was reformed by eliminating the "trigger" clause of 40 percent and fixing periods of four months for wage readjustments. The exchange market was partially liberalized, and dollar-denominated savings accounts were allowed again for labor union funds. To compensate workers for their loss in real income produced by the price hikes, the government raised the level of minimum wages. A component of institutional reform was added to this package, when two new monetary institutions were created outside to the Central Bank had as a first step to reform it: a Monetary Board and a Comptroller of Banking and Currency. The labor undisciplined and corruption prevailing during the Siles government in the Central Bank had impaired its normal functioning and made necessary those reforms.

Whereas organized labor's opposition to the previous stabilization packages had been muted, the April 1984 package was received with furor. Indeed, the package contained very

bitter medicine and, moreover, the Confederation of Bolivian Workers (COB) felt cheated since the measures went beyond what they expected. To compound the problems, the newly created monetary institutions to by-pass the Central Bank were very strongly resisted by the Bank Worker's Union.

A first, the stabilization package was successful. As is shown in Figure 1 and Table II.5, after an initial spurt in prices induced by the devaluation and the adjustment in administered prices, the rate of inflation fell to low levels in June and July. The parallel market exchange rate stabilized for almost four months. Unfortunately, the calm did not last. The government was unable to hold down its expenditures as it had to grant, pressured by the labor unions, wage increases above those that were programmed in the package. As important as the above cause of failure, expected treasury receipts from devaluations and other price measures failed to materialize in time. In addition, the much sought agreement with the IMF and other international lenders to obtain foreign exchange liquidity and debt relief did not come forth.

The failure of the April 1984 stabilization plan resulted in an extraordinary expansion of the money supply shortly after. Four months after the measures, little real devaluation remained and the economy found itself back at square one, with the aggravating addition of higher prices. In retrospect, there were two main factors that contributed to this outcome. First, the original real wage cuts in the package were too large, which led to the strong reaction by COB. The government had underestimated that reaction, and once it happened, it panicked and granted whatever increases was asked by COB. The initial real wage reductions were mistakenly not accompanied by a clear proposal of wage management and of increases distributed over a defined period.

Second, the state enterprises had structural problems that led to repeated losses in income for most entities. With the devaluation and higher prices for their products, these problems could be masked over temporarily. For year, state enterprises operated frequently without a budget constraint, being able to finance their deficits by appealing to government or government guaranteed loans; hence, their activities were, to a large extent, independent of prices. The stabilization package raised indeed the prices of their products, but, with the ensuing wage increases and cost hikes induced by the devaluation, their expenditures increased almost immediately in the same proportion. This precluded any long-lasting solution, and,

indeed, demonstrated that devaluations and price adjustments cannot be substitutes for more fundamental reorganization steps.

In August 1984, the need to devalue arose again. A de facto devaluation was accomplished with the implementation of a complicated system of multiple exchange rates. Different rates were applied to essential imports and debt repayments, non-essential imports, exports, and dollar-denominated government bonds. Within a short period of time inconsistencies in the package appeared and it was abandoned. For example, some exports could obtain a very high exchange rate in regard to the exchange rate that applied to non-essential imports and, a fortiori, to essential imports, causing therefore a substantial peso loss to the Central Bank.

In November of that year, another stabilization attempt was made and another economic package was put forth. To make the package more palatable to workers, it includes a proposal to extend co-management to all public enterprises (hitherto only COMIBOL, the State Mining Company had it) and additional controls on financial institutions. The last measures met strong opposition in the private sector and were never enforced. It is noteworthy that the package was preceded by a series of negotiations with COB in order to make it acceptable to the leaders. Since the package was intended for negotiations, it contained sizeable wage concessions. However, after the initial overtures, the COB backed down, rejected the package and called a general strike. To end the strike, the government offered new and huge wage hikes that ultimately increased inflation.

The year 1985 started with a situation bordering on economic chaos. The black market rate increased in 180 percent in January 1985. At that point of time, inflation was the immediate cause of severe social and political unrest that threatened the general elections called for June of that year. Aware of the gravity of the situation, Siles Zuazo made a final attempt at stabilization in February 1985. The stabilization program was in many ways similar to the one of April 1984, but in addition it contained provisions for the indexation of taxes and of the controlled interest rates to inflation. The program had also a clause that de facto allowed a higher effective exchange rate for exports than the official rate. The lame-duck government was completely unable to enforce the austerity measures required in the implementation of the program and awoke a violent opposition in the labor unions. A march of 10,000 miners in La

Paz in March 1985 killed this final attempt. In May 1985, the peso was once again devalued to close the gap with the black market exchange rate. However, by the end of August the black market premium had increased to close to 1,500 percent.

On August 29, 1985, the new government of Dr. Víctor Paz Estenssoro, who succeeded Siles Zuazo unveiled another stabilization program. This program, after some corrections in January 1986, has stopped inflation. It is interesting to note that the economic measures included there have many points in common with the two orthodox programs of Siles Zuazo, the ones of April 1984 and February 1985. The technical differences in regard to stabilization are more of degree than of substance. The main difference between them resides in their political implementation. While Siles Zuazo was unable to stick to the measures, Paz Estenssoro has shown an incredible stubbornness, that has paid handsomely in terms on controlling inflation.

As a final comment, it seems to us that Siles Zuazo himself was a major contributor to the severity of the crisis and the failure of the stabilization programs. Siles's image was that of a hesitant leader, unable to make decisions and take appropriate action on time. As the crisis worsened, he became more reclusive and increased his dependence on a small group of close advisors. It must be said in Siles behalf that he had to face an inordinate opposition from powerful groups and political personalities: labor and business leaders, parties of the far-left and the right, and in Congress.

#### **IV. The Labor Unions's Position on Stabilization**

The Confederation of Bolivian Workers (COB) was indeed a major actor in the hyperinflation drama. The other main actors, besides the government, were Congress and the Bolivian Confederation of Private Enterprises (CEPB). Their political stance is examined by S. Romero in this book. However, neither the opposition parties nor the CEPB were at that time able to offer a very distinctive set of policy to those being tried by the government. COB, on the other hand, had definite positions on economic policy.

From November 1982 to November 1983, organized labor, while expressing disagreement with the government's stabilization policies, only offered mild opposition. Indeed, in this period there were many sectoral strikes to demand wage increases, but the government policies were not seriously threatened. After November 1983, COB showed more militancy and direct and confrontational opposition to the general provisions in many of the government policies. This began with COB's Emergency Plan set forth in the final months of 1983, partly in response to criticisms that the COB was "norminalist", in the sense that she short-sightedly cared only for money wage increases without considering their real repercussions. Subsequently, this plan was modified, and, by mid-1985, it was difficult to delineate with precision what was included in it.<sup>9</sup> COB's policy demands played an important part in the government's failure to stabilize the economy. It is worth identifying in some detail what COB was seeking to obtain.

The major short-term policy points in the original COB package were:

1. Increases in wages to recoup past losses in purchasing power.

---

<sup>9</sup> This discussion is based in "Plan Económico-Social de la Emergencia de la Central Obrera Boliviana para el Co-Gobierno",

2. Respect by the government for the principle of wage indexation to cost-of-living increases.
3. Policies of price controls, quantitative restrictions and administrative measures to impede contraband exports and black markets. This was COB's alternative to what it called "monetarist measures", that place an almost exclusive reliance on price and exchange rate adjustments, and repression of wages, especially in the public sector, to control the money supply.
4. Establishment of commissaries run by the government to ensure the supply of basic goods and staples at the established administered prices.
5. Equitable future wage adjustments, if needed; COB believed that the workers were bearing an inordinate share of the burden of stabilization.
6. Postponement of foreign debt servicing by the government to private commercial banks until conditions in the economy allowed resumption. According to the proposed package, no payment on the debt should be made if it implied sacrifices in the current consumption of wage earners.
7. Measures of fight tax evasion by foreign and large enterprises in the private sector.
8. More investment capital for state enterprises.
9. More state control of private domestic banks, but not nationalization.

It is clear that the COB package contained a formidable list of demands to government, which reacted swiftly by rejecting most of them. The government's reaction was not only based on the fact that some of the demands were definitely unrealistic and unwise but also because the COB package meant an intrusion in government's domain (see the remarks of S. Romero on "dual power" in this book), and furthermore ran directly against the government's philosophy of obtaining stabilization by relying primarily on the price system. Controls and quantitative restrictions on consumption were deemed by government to be ineffectual, and unsatisfactory to the IMF and other international institutions that were being ardently courted. Labor's package was labeled "unrealistic and utopian" and was not given further official consideration. Nevertheless, the COB package made an impact, by introducing a lot of "noise" in the government's policy decisions which would add uncertainty in later times. It is debatable how



much COB intended to obtain in putting forth its package. What is important, however, is that COB was able to concoct an alternative stabilization plan that had some internal consistency, however exaggerated some of the proposals. The package served COB as a flag that could be used in the political arena as well as at the bargaining table confront to government.

The August 1983 package underwent several modifications in its later reincarnations. If anything, these changes went in the direction of more radical measures. Eventually, the public became frustrated and disillusioned with the COB demands. Therefore, as radicalism increased, the government was able to gain the advantage in the battle for public support. By the end of the hyperinflation, COB was completely discredited.

## **V. Conclusions**

There are two sets of conclusions in this paper. The first relates to the real effects that accompanied the hyperinflation, based on a discussion of the general context in which the economic crisis developed and the main macroeconomic manifestations of the crisis. Unlike the Central European experiences with hyperinflation in the 1920s, the Bolivian price upsurge went together with very negative real effects on the economy: losses in production and employment, and an undesirable expansion of the underground economy as many economic agents tried to escape from the government controls on foreign exchange and prices, that were imposed in the ineffectual attempt to check inflation. Furthermore, the uncertainty brought about by inflation greatly penalized production both in the public and private sectors. A recall, should also be made of the negative effects of the strong reduction in the capacity to import.

The second set of conclusions is derived from evaluation of the stabilization efforts undertaken since 1982, and from the analysis of the causes of why they failed. It can be concluded that there was a big misperception in the government on the causes and persistence of the crisis as well as on its own political strength. The attention paid to the domestic problems brought about by the foreign debt came to late. The foreign debt issue itself was mishandled, first by not seeking, forcefully enough, debt relief and therefore making unwarranted repayments, and, afterwards, by imprudently antagonizing the international financial community with vociferous statements, instead of trying to buy time with subdued tones and openings to negotiation, as many of the neighboring countries did at that time and the

current government is doing.

In regard to the stabilization programs themselves the following points are worth summarizing. The heterodox plan of November 1982, the first one of the Siles administration, overemphasized the income policies at the expense of the needed additional fiscal austerity. On the other hand, the more orthodox plans of April 1984 and February 1985 produced politically unsustainable initial real wage cuts and liquidity crunches. After a few weeks of grace they failed. The Siles government was already too weakened to impose on the population the required austerity at the same time that the population had not fully made a balance of the benefits and costs of stabilization. It is interesting to note that the April 1984 and February 1985 economic measures parallel the successful program of August 1985. Siles Zuazo politically mishandled stabilization programs that had some technical merits.

The incorrect handling of the devaluations, untimely, and in some cases absurdly delayed, and without accompanying them with the necessary fiscal and monetary measures was the main technical explanatory factor in the failure of the stabilization programs. Furthermore, there was a problem of overshooting in the depreciation rates in the November 1982 and April 1984 programs. It should also be mentioned that the stabilization programs never gained credibility with the international Monetary Fund nor with the international financial community. With the repeated failure of the programs, the domestic confidence on the Siles Zuazo administration to overcome the crisis was also lost and therefore each new program was harmed by the failure of the proceeding one.

The Siles Zuazo packages contained no significant tax measures, and nothing was offered to reorganize the public enterprises to be more fiscally responsible. It is true that tax and administrative reforms would have taken time before any noticeable effects were seen, but it is also true that firm commitments to redress structural deficits could have been valued by the public effecting expectations on inflation. It was not only the current deficit that mattered but also the prospective tax receipts and profits of the public enterprises.

A final important conclusion is that the inflation problem contained a large doses of political elements and that no solution was possible until the concerned parties -government, private enterprises and labor- reached, explicitly or implicitly, a new social contract. In a democratic society, viable solutions to severe problems need a cooperative effort and, without

contradiction, a strong leadership. But, both the government's stabilization package and COB's economic package systematically failed to take account of the claims of all the major contending partners. In addition, Siles Zuazo proved to be a weak leader and the COB, because of its adamant opposition to all stabilization attempts, lost its representativity as a voice of the public at large. As a result, conflicts deepened, which in turn had repercussions on the affectivity of the stabilization programs.

In contrast with the failed stabilization programs of the Siles administration, the success of the August 1985 package can be partially explained by two twin political factors. First, by mid-1985 a significant change in the public's attitude towards inflation and the leadership provided by the COB and the left wing parties of the UDP was observed. At that time, the social demand for stability was so strong that it overcame all considerations on the presumed costs of stabilization on employment and short-term real wages. A social consensus emerged on the need to fight inflation as a first priority. Moreover, the COB and the Siles government were lumped together as ineffectual in dealing with the crisis. Second, a change in government was felt to be an almost necessary condition to reach price stability. Only a new government could enjoy a honeymoon period of public acceptance of a drastic stabilization program. Siles Zuazo, in a rather undemocratic move, was sacrificed in the altar of inflation stabilization.