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Stabilization Policies in Chile: Inflation, Unemployment and Depression 1975 - 1982

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STABILIZATION POLICIES IN CHILE:
INFLATION, UNEMPLOYMENT AND DEPRESSION 1975-1982*

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STABILIZATION POLICIES AND EXTERNAL SHOCKS

CHILE: 1974 - 1982

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1. Introduction

Stabilization policy in Chile in the 1975-1982 period is both a wide and a narrow topic. It is narrow because it was only part of a comprehensive program of trying to convert the Chilean economy into a full fledged market economy by eliminating distortions to the operation of free markets; and because this program started under the least auspicious conditions which led to the military coup in 1973. It is a wide topic because stabilization policy took place within the context of an opening economy, and full treatment requires consideration of external conditions, and an analysis of the capital and the current account. Moreover, unemployment presented a puzzle by itself: the rate of unemployment remained at twice the rate of unemployment of the 1960's in the period of very high real growth comprised between 1978 and 1981. Finally, an understanding of the current depression is not possible without an inquiry into the high level of real interest rates throughout the period and its high external spread, and its effects on the health of the banking system, and without a recognition of the inconsistencies of bank regulation.

In order to provide a clear picture of stabilization policy within the limits of a paper, I have organized this paper omitting most details on institutional changes, and referring to

the capital and current accounts of the balance of payments only where the context of stabilization policy required it, as other sessions at this conference will deal with them.

The structure of the paper is the following. The next section provides a brief account of the external and internal factors which led to the depression of 1975-1977, and the early role that was given to exchange rate policy by the economic team. Section 3 discusses the unemployment puzzle, a yet unsolved issue in Chile. The following section presents the use of exchange rate policy as the main instrument in the battle against inflation, essentially as an expectation-changing variable, but aided by the gradual opening of the economy through the implementation of the liberalizing commercial policy, to keep nontraded goods prices on live with traded goods. Section 5 presents the real interest rate puzzle, the fact that the (external) spread between peso interest rates and dollar interest rate was high and relatively stable on the average (at 20 per cent per year) in the 1979-1981 period when the exchange rate was fixed in nominal terms to the dollar. This led peso interest rates in real terms to be above 30 per cent per year for most of the period after 1975, with the exception of 1979 and 1980. These two years were the only ones, in which the construction sector took off, as expected by the low level of interest rates.

Section 6 is an analysis of the current depression. The specific causes of the Chilean depression lie in the steep appreciation of the US dollar in late 1980 and early 1981, which turned the terms of trade against Chile, by sharply reducing Chile's export prices in dollars; by inducing a fall in Chile's import prices, which transmitted into a reduction in the inflation rate to 9 per cent in the Chilean CPI and a deflation of 4 per cent in the WPI in 1981. The stability of the spread with a reduced inflation meant a six-fold increase in real interest rates in 1981 (from 5 per cent to 30 per cent), hammering the construction sector, and creating a recession in the economy. This was exacerbated in the second semester by a wage increase of 14 per cent, an outcome of the automatic escalator clause for past inflation which was retained by the labor plan. Business firms were strangled with their own prices mostly constant or falling whereas both wages and interest rates increased dramatically.

The final blow was represented by the abrupt decline in the capital inflow at the end of 1981; from an incredible average flow of 900 million dollars per quarter in the second and third quarters of 1981, it fell to 500, 300 and 100 in the fourth quarter of 1981 and first and second quarters of 1982 respectively.

Although by 1981, stabilization policy was a success, it carried three time bombs. The feeble condition of the financial system; the high level of interest rates in real terms, which was never considered a legitimate object of policy; and the inconsistency between the automatic escalator clause for past inflation for wages and the fixed exchange rate policy.

The paper concludes with some comments on the more general reasons under the inconsistencies and time bombs we have just mentioned.

2. The depression of 1975 - 1977

The deteriorated situation of the Chilean economy in 1974 was shadowed by an abnormally high price of copper which had the effect of delaying the measures necessary to straighten the situation. The fiscal deficit was 10 percent of GDP, the inflation rate was almost 400 percent, and except by the major price liberalization of October 1973, no other significant policy measure was enacted in 1974. For this reason, the drop in the copper price to a third in late 1974 and 1975, required severe measures, which were taken in succession in the exchange policy and fiscal-monetary areas.

The exchange rate policy led the adjustment. Between December, 1974, and April, 1975, the exchange rate rose by 163 percent, as opposed to only 84 percent in the previous five months. The sharp increase in the rate of inflation in early 1975 appears to have its explanation in this exchange rate increase. In effect, the consumer price index rose by 136 percent between January and June 1975, whereas it had increased by only 78.5 percent during the last five months of 1974. That is, a doubling of the rate of devaluation led to a 70 percent increase in the rate of inflation with a very short lag. (see Figure 1)

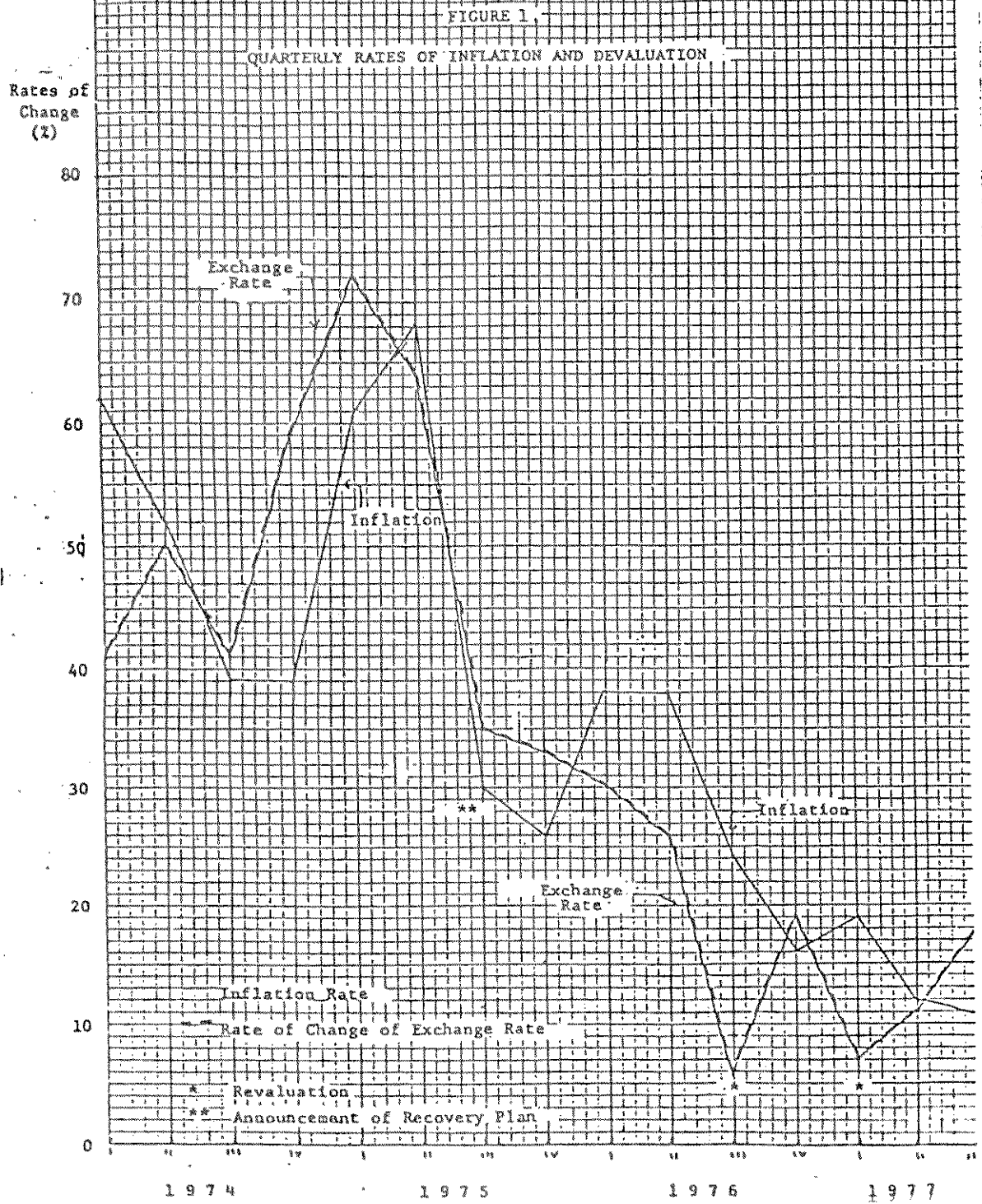


Table 1 shows the quarterly rates of change in prices and the exchange rate. Beginning with average quarterly devaluations of 44 percent during the first three quarters of 1974, the rate rose to 59 percent during the fourth quarter of 1974, and to 72 and 64 percent, respectively, during the first and second quarters of 1975. Taking a one quarter lag, the rate of inflation (CPI) rose from 39 percent per quarter during the last half of 1974 to 61 and 68 percent during the first and second quarters of 1975. The adjustment in the domestic assets of the banking system came later, its rate of expansion dropping from a quarterly average of 71 percent from July, 1974, to March 1975, to 56 percent during the second quarter of 1975, 27 percent in the third, and to 34 percent in the fourth.

Already in the third quarter of 1975, the acceleration of the rate of devaluation (and of the rate of inflation) had already dissappeared. Money on the other hand did not show appreciable change, comparable to the change in domestic assets (see table 1 for figures on quarterly rates of change of M_2 and domestic assets of the banking sector).

TABLE 1

Quarterly Rates of Change of the Exchange Rate, the Consumer Price Index and Domestic Assets of the Banking System and Money (M₂).

	<u>Exchange Rate</u>	<u>Prices (CPI)</u>	<u>Domestic Assets</u>	<u>Money</u>
1974 I	41	62	16	25
II	50	52	83	48
III	41	39	38	34
IV	59	39	74	60
1975 I	72	61	87	33
II	64	68	56	48
III	35	30**	27	46
IV	33	26	34	45
1976 I	30	38	29	35
II	26	38	33	32
III	6*	24	25	40
IV	19	16	23	34
1977 I	7*	19	21	27
II	11	12	23	19
III	18	11	33	13
IV	16	10	30	10

* Discrete revaluation

** Announcement of the stabilization Plan

SOURCE: Central Bank of Chile. Bulletin, various issues

On the fiscal side, an across- the-board reduction in public sector spending of 15 percent in domestic currency and 25 percent in foreign currency, as well as a 10 percent increase in Income Tax and other Tax reforms, reduced the fiscal deficit from 10.3 percent of GDP in 1974 to 3.1 percent in 1975 (and real GDP free 12.9 percent in 1975); and the local currency deficit of 5.5 percent of GDP in 1974 turned into a 1.2 surplus in 1975. Public sector unemployment increased substantially in 1975 as a result of these measures.

Although concentrated in a few quarters the duration of these measures, the combination of accelerated devaluation and credit and fiscal tightening led to a situation of severe real expenditure-reducing of a significant size, creating a massive reduction in output and an unprecedented increase in unemployment (see Table 2). On the other hand, its effect on the balance of payments was also dramatic, the deficit for 1975 estimated at 2.000 million dollars at the beginning of the year by the monetary authorities was only over 200 million in that year. As a rough estimate of the extent and duration of this disequilibrium, a cumulative excess (flow) demand for money was calculated, by subtracting the flow supply of money (M_2) from the maintenance component of the flow demand^{1/}. Figure 2 indicates that the disequilibrium

^{1/} Procedure and data for this estimation appear in L.K. Sjaastad and H. Cortés Douglas (1978).

initiated in early 1975, did not disappear until the end of 1977 (or early 1978, if any stock disequilibrium is allowed for); a comparison between the level of the flow supply of money with the cumulative disequilibrium is a dramatic indicator of the size of the induced tightening.

The slowness of the monetary adjustment process appears to have been mainly influenced by the existence of exchange controls on the capital account. The current account bore the burden as the only mean of reestablishing monetary equilibrium, which it accomplished in three years. Two discrete revaluations of the Chilean peso, undertaken for stabilization purposes, one during the third quarter of 1976 and a second during the first quarter of 1977 did not help the current account in its task of restraining equilibrium as they signified a reduction of 25 per cent in the relative price of traded goods from January 1976 to October of the same year.

- 7 -
FIGURE 2.

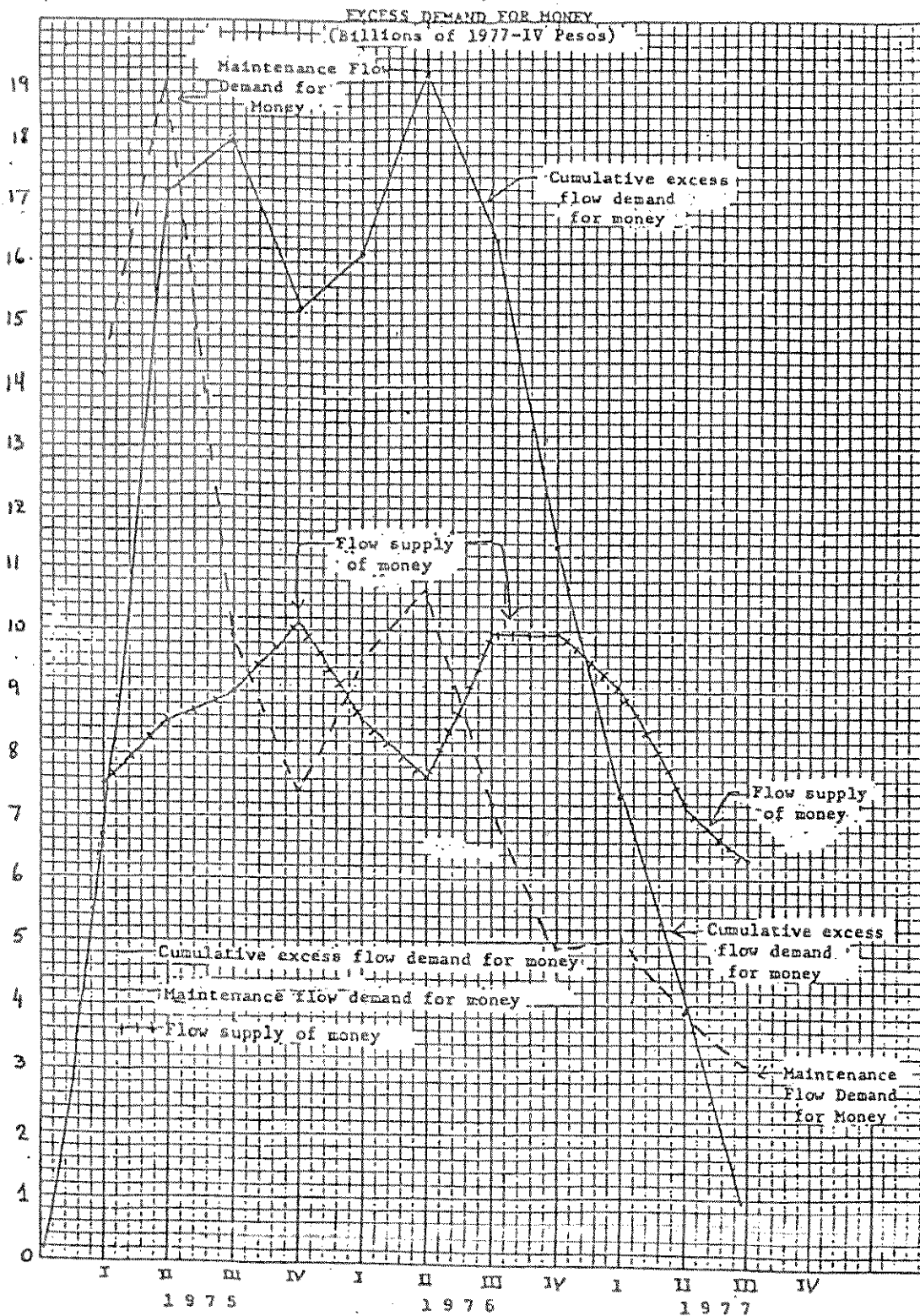


TABLE 2
GROWTH RATE AND UNEMPLOYMENT RATE.

	Growth Rate of Real GDP	Unemployment Rate National ¹	Unemployment Rate Greater Santiago ²	"Corrected" Unemploy- ment Rate Greater Santiago ³
1961	4.8	8.0	6.6.	-
1962	4.7	7.9	5.3	-
1963	6.3	7.5	5.1.	-
1964	2.2.	7.0	5.2	-
1965	0.8	6.4	5.4	18.4
1966	11.2	6.1	5.3	18.9
1967	3.2	4.7	6.1	19.9
1968	3.6	4.9	6.0	20.7
1969	3.7	5.5	6.2	20.9
1970	2.1	5.7	7.1	23.5
1971	9.0	3.8	5.5.	20.6
1972	-1.2	3.1	3.7	18.8
1973	-5.6	4.8	4.6	21.7
1974	1.0	9.2	9.7	23.5
1975	-12.9	14.5	16.2	26.9
1976	3.5	14.4	16.8	26.9
1977	9.9	12.7	13.7	21.3
1978	8.2	13.6	14.0	24.1
1979	8.3	13.8	13.6	24.4
1980	7.5	12.0	11.5	24.5
1981	5.3	10.8	11.1	22.4
1982	-16.0*			28.1*
	* estimate			* marzo

1. National Rate. (June of each year). National Institute of Statistics

2. Greater Santiago (Yearly averages). University of Chile.

3. Greater Santiago (Yearly averages). University of Chile. G. Wagner's definitions.

As we see from Table 2, the sharp fall of GDP in 1975 was followed by a recuperation of 3.5. percent in 1976 and 9.9 percent in 1977; by 1978 the real level of GDP was higher than the 1974 level, a result compatible with the dissapearence of the monetary disequilibrium by that date. Other production data are also consistent with monetary equilibrium being restored by 1978. The growth rates jump up in the 1978-1981 period to an average in excess of 7 percent. Unemployment, however, peaked in 1976, reaching almost 20 percent of the labor force, and declined steadily thereafter until 1981, but never returned to the levels of the 1960's (see columns 2 and 3 of Table 2), but stayed at twice the rate of the 60's. This is the unemployment puzzle.

3. The Unemployment Puzzle

Unemployment was never a policy target in the 1973-1981 period. No training programs geared to the unemployed, nor labor subsidies, or other policies consistent with a market philosophy were enacted. The bulk of the expressed concern on this matter was placed on the reform of the social security system, which would accomplished, among their aims, a substantial reduction of the cost of labor to the employer^{1/}.

It is still essential to explain why, although not a policy target, the unemployment rate in the four years of the boom period 1978-1981 averaged 12.6 percent, twice the size of the unemployment rate of the 1960's. It is important to bring to attention that the average growth rate of GDP was 7.3 percent for 1978-1981.

A definitive study of the unemployment puzzle still has to be written. A number of data problems associated with the unemployment surveys make the task more difficult. The longer; more complete, series are the University of Chile unemployment surveys for greater Santiago, but they are full of problems. Meller, Cortázar and Marshall have convincingly argued that the greater Santiago estimates for levels are quite unreliable because of

^{1/} The Minimun Employment Program or PEM (its spanish acronym) has been a sort of minimun payment for unemployed persons in exchange for part time work, which leaves time to search for a regular job.

inaccurate figures for population and migration which render a faulty extrapolation from samples. Despite substantial revisions, serious doubts remain with respect to the "population" estimates.

But even the sample information, which reflects the rates of unemployment rather than the number of unemployed, create puzzles^{1/}. For example, there are wide variations over time in ratios that one would expect to be highly stable, such as the ratio of persons 14 years of age and over, to the total population. Further, an examination of the results of the sample for the "government and financial sector employees" against actual data from the Budget Office on number of public employees reveals wide discrepancies that indicate the extent of error in the unemployment survey. According to the Budget Office, government employment increased from 200.000 people in 1970 to 300.000 in the three Allende years, after which a decline began, that accelerated in 1980. This reduction is of course one of the major factors accounting for the enormous increase in unemployment in 1975 and 1976^{2/}. However, the unemployment survey shows a drop of 100,000 employees during 1974 in that sector, figure which is

1/ See H. Cortés Douglas (1982), L.A. Sjaastad and H. Cortés (1981 b)

2/ The exact figures are 196.353 in 1970; 295.553 in 1973; 204.655 in 1976; and 159.592 in 1980. This figure includes all fiscal employees except armed forces and national police as well as public school teachers.

completely out of the question even after making allowance for the fact that the survey data does not separate the government from the financial sector. The survey indicates that the number of public employees begins to increase after 1974, which is also unbelievable since the fiscal contraction and the contraction of public sector employment was especially acute in 1975 and 1976 (and growth in the financial sector prior to 1978 was totally in sufficient to offset the decline in government employment).

From a descriptive point of view, there are several ways to classify the ingredients of the unemployment problem, particularly the different responses of employment and the labor force to output growth. In order to avoid the empirical problems with the level of the variables, a simple model with rates of variables was estimated for the period 1967-1979^{1/}.

In order to have an idea of the effects of the unemployment rate on the labor force, keeping changes in output constant, the following equation was estimated, where F is the labor force, V is real GDP and d, the unemployment rate:^{2/}

$$\ln (F_t/V_t) = 2.1 + 0.15 d_t \quad r^2 = 0.83$$

(7.23)

1/ The model is developed in Sjaastad and Cortés (1981 b)

2/ This equation comes from making the labor force (F) a function of real GDP (V) and the rate of unemployment and assuming $\ln F, V = 1$ ($\beta = 1$)

$$F_t = K (V_t)^\beta (d_t)^\gamma$$

The positive value of the elasticity of (F/V) with respect to d ($\gamma = 0.15$) indicates that increases in unemployment may force the secondary labor force to search for jobs to help maintain the family income, which increases the labor force.

In addition, and to separately estimate the effects of cyclical changes in output on the rate of unemployment, keeping the labor force constant, the following equation was estimated for the same period, using Cochrane Orcutt^{1/}.

$$\ln d_t = 12.5 - 2.51 (\ln V_t) + 0.16 (t) \quad R^2 = 0.80$$

$$b = 0.063$$

where t = time

The elasticity of the rate of unemployment with respect to output, keeping the labor force constant, is -2.51; that is the impact of cyclical fluctuations in output on the rate of unemployment indicates that in order to reduce the unemployment rate from 20 percent to 15 percent (i.e. a 25 percent fall in the rate),

^{1/} Unemployment (D) is defined with a permanent component which rate is d; and a cyclical component:

$$D_t = d F_t e^{-\alpha v_t}$$

where v_t depends on the discrepancy between actual and expected GDP; $v_t = f(V_t/V_t^*)$; $f(1)=0$; $f'>0$.

If $V_t^* = a e^{bt}$; and defining $v_t \equiv \ln V_t - \ln V_t^*$, then:

$$\ln d_t = \text{constant} - \alpha \ln V_t + bat$$

GDP has to grow 10 percent. (The average rate of growth, b , for the period 1967-1979 was 6.3 percent per year).

Another way to put the previous results is in terms of the effects of output fluctuations on the labor force and unemployment. Using the definition $E_t \equiv F_t - d_t F_t$, where E is employment, the following elasticities are readily obtained:

$$\eta_{F,V} = 1 - \eta_{F,d} \quad \eta_{d,V} = 1 - \alpha \gamma$$

the elasticity of the labor force with respect to GDP; and

$$\eta_{E,V} = 1 - \alpha \left[\gamma - d_t / (1 - d_t) \right]$$

the elasticity of employment with respect to GDP.

Using the average value for the sample period for d_t , the results are $\eta_{F,V} = 0.62$, and $\eta_{E,V} = 0.89$.

A reduction in GDP has therefore two effects. First, it increases the unemployment rate, which in turn induces a rise in the labor force. Second, the decline in GDP reduces the labor force directly and this latter effect dominates the first one.

There is thus, for the sample period, a strong procyclical behavior of the labor force; which renders the rate of employment only weakly procyclical:

$$\eta(E/F, V) = \alpha \left[d_t / (1 - d_t) \right] = 0.27$$

The output elasticity of the rate of employment is only 0.27 as an average for the sample period. In other words, in order to reduce the rate of unemployment from, say, 18 percent to 8 percent, the employment rate needs to go up from 0.82 to 0.92. The value of the initial $n(E/F_1V)$ is $(2.51)(0.18)(0.82) = 0.55$ whereas the final value is $(2.51)(0.08)(0.92) = 0.22$. If we take the average of these extreme values we obtain 0.385; which means that GDP must increase 38.5 percent above normal levels in order to lower the rate of unemployment in ten percentage points.

From this description it is clear that the weak procyclical behavior of the rate of employment renders any sizeable reduction in the rate of unemployment which is left to the economy's growth only, a long term phenomena. In this descriptive sense, this is consistent with the long time it took for the rate of unemployment of 1975-1976, in the vicinity of 20 percent, to fall in spite of the high rates of growth of the 1978-1981 period. It would, of course, be interesting to go beyond this descriptive point to know why is this so, but data limitations have impeded this analysis. The level of aggregation at which the survey data is ellaborated has not allowed further analysis of this and other hypothesis.

In my opinion, the most suggestive evidence is this

respect is the one presented by Gert Wagner, which indicates some shift in preferences which is not accounted by the traditional de fini tion of the rate of unemployment^{1/}. He redefined the rate of unemployment to include the group inactive persons who "desire to work", both in the numerator and the denominator of the traditional definition. Wagner's presumption is that these inactive people desiring to work are no different from the members of the labor force and his hypothesis is that the depression of 1975-1977 created a reduction in wealth, which lowered the opportunity cost of active search, and that the high and fluctuating rates of inflation, readily destroyed knowledge about job opportunities, lowering the productivity of passive search. This hypothesis is consistent with a decline in the number of inactive who desire to work (passive searchers), and a corresponding increase in unemployed (active searchers), with no extraordinary changes in total (re de fini tion) unemployment.

The table shows a summary of the differences between the traditional definition (d) and the redefined one (d*), for a relevant aggregation of subperiods.

	Average d	Average d*
1965-1969	5.5	19.8
1975-1977	15.6	25.0
1978-1981	12.6	23.9

^{1/} Gert Wagner, "Employment and Unemployment: an Interpretation", unpublished, Catholic University of Chile, December 1980.

We take 1965-1969 as a "normal" period, representing what normal unemployment was in the decade of the sixties. The period 1975-1977 is, of course, the depression years commented in the previous section. And 1978-1981 are the four growth years of the after-depression (which average growth rate was 7.3 percent).

For the traditional definition of the rate of unemployment, the rate corresponding to 1978-81 was 2.3 times the rate of 1965-1969. This is the original unemployment puzzle. Why a 130 percent increase in unemployment when the growth rate exceeds 7 percent per year. For the redefined rate of unemployment, however, the ratio is only 1.2. That is, the redefined unemployment rate was only 20 percent higher in 1978-81 than in 1965-69. If the hypothesis is true and the presumptions are correct, most of the recorded increase in unemployment, as well as the elasticities in the description of the unemployment process above, are explained by large numbers of people shifting from being passive job searchers to active job searchers, and only a 20 percent of the redefined unemployment in 1978-81 exceeded the "normal" unemployment of the 1960's.

Further work along these lines has also been hampered by the level of aggregation of the data; but it is nevertheless highly suggestive and worth pursuing.

Among the several other hypothesis that have been advanced to explain the unemployment puzzle, the commercial policy reform has received wide attention. In a recent study, Sjaastad and the author (1981 a) found no evidence that the commercial policy reform, that led to a final uniform tariff of 10 percent, was a major determinate of unemployment. An examination of the manufacturing sector indicates a mild adverse effect on employment in import-competing firms but with no strong significance in the statistical tests. As unfortunately the sample had a fixed number of firms it was not possible to find the effects of the reform on the employment in new non traditional exporters. In any case, the sharp increases in the rate of unemployment occurred in 1975 and 1976, that is, before the effects of the trade reform could be felt^{1/}.

In the same study, a careful gathering of public sector employment showed a reduction of 130 thousand public servants from 1973 to 1980. As this reduction proceeded along the 1973-1980 period it must have contributed to prolong considerably the unemployment observed. The absence of training programs to help the unemployed in the public sector to acquire different skills did not help in this respect.

^{1/} See Cortés Douglas (1982)

Much remains to be known about the unemployment puzzle, and, in view of the levels reached by the rate of unemployment in 1982, which exceed the worst ones in the depression of 1975-1977, it is not only an academic exercise^{1/}.

^{1/} For additional analysis see Meller, Cortázar and Marshall (1979), and S. Edwards (1980). Furthermore, the fact that financial services, commerce and fishery were the only fast expanding sectors, with construction only from 1979 to early 1981, must not be overlooked in this analysis.

4. The Battle Against Inflation

The Chilean economic policy team of 1975-1982 pioneered the use of the exchange rate for stabilization purposes, just as the Chilean economic policy team of 1965-1970 pioneered the system of minidevaluations in Chile.

The theory is that an administered change in the price of traded goods will cause economic agents to revise their expectations concerning the equilibrium price of home goods, and thus influence the trajectory of inflation without needing disequilibrium (excess supply) to be created in the home goods market to achieve a reduction in the rate of increase of their prices. That expectations were the enemy, it is clear from the words of Sergio de Castro, Minister of Finance, in a public address delivered on April 1979. This excerpt provides a good summary of the underlying theory:

"The second element is the important role of the exchange rate and tariff policies in the orientation of expectations. The tariff policy which set as a goal a uniform tariff of 10 percent by June of 1979 has put a brake on expectations with respect to rises in prices. Even if in theory, tariff policy only affects the allocation of resources, in the

context of cuts in custom duties, it has this secondary effect".

"The effect of the exchange rate policy appears to have had much more importance once the Balance of Payments crisis was overcome. In June of 1976, principally because of a reduction in demand to levels compatible with available resources, conditions were adequate for revaluing the peso. As a result of this, inflation which had stabilized at around 11 percent per month, was reduced to 6 per cent per month, because of changes in expectations^{*}. In March of 1977, the phenomenon was repeated, with inflation stabilized at 6 percent, which then dropped to 3 or 4 percent per month".

"In February of 1978, a daily exchange rate schedule was established through December 31, 1978. In December, 1978, a similar schedule was set for 1979".

"What these programmed revaluations and devaluations had in common was that they gave a signal to the country since certain objective facts (the substantial drop in the fiscal deficit and the surplus in the balance of payments) had not been assimilated rapidly enough by the public".

"If we assume that a balanced public sector budget implies the elimination of the basic cause of inflation in Chile,

^{*} (My underlining).

then part of the inflation we observe can be attributed to expectations. Therefore, exchange rate policy has provided a reasonable orientation of inflationary expectations on the part of the public, because it was solidly supported by the absence of the need for money creation for the public sector"^{1/}.

The announcement of the path of the exchange rate for a period ahead would affect inflationary expectations exogenously, obtaining a reduction in inflation without necessitating to trade it off with a rise in unemployment.

After the acceleration of the rate of devaluation in 1974-1975 to counter the Balance of Payments crisis, the rate of devaluation decreased steadily, taking into account the two discrete revaluations already mentioned. The introduction of the tabular exchange system at the end of 1977 meant a substantial reduction in the rate of devaluation; whereas the average quarterly rate of devaluation in 1977 was 13 percent; that of 1978 was 5.2 percent. The new table for 1979 contemplated a devaluation of 3.3 percent per quarter (See Table 3).

^{1/} Sergio de Castro, "Inflation and Financial Discipline in Chile", in J.C. Mendez (1979), pp. 275-287.

TABLE 3

	Rate of Quarterly	Devaluation Annual	Rate of Quarterly	Inflation (WPI) Annual
1975				
I	72	477	60	497
II	64	532	77	553
III	36	506	40	484
IV	33	410	30	411
1976				
I	30	286	39	344
II	26	196	40	254
III	6*	132	21	206
IV	19	106	7	152
1976				
I	8*	71	26	128
II	10	49	13	83
III	18	66	5	65
IV	16	62	7	65
1978				
I	8	63	11	45
II	7	57	10	41
III	4	38	9	42
IV	2	23	4	39
1979				
I	4	18	10	38
II	4	16	14	43
III	6	18	24	61
IV	0	15	3	58
1980				
I	0	11	8	55
II	0	6	7	45
III	0	0	8	27
IV	0	0	3	28
1982				
I	0	0	0	19
II	0	0	-1	10
III	0	0	0	2
IV	0	0	-3	-3
1982				
I	0	0		

Source: Central Bank of Chile. Bolletín

In June of 1979 the table was broken, advancing the level of the exchange to the one that would have reached in December of that year, and fixing the peso in nominal terms to the dollar. It was announced that there would not be any further devaluations.

The response of inflation to the June 1979 devaluation was fast, and both the CPI and the WPI showed increases in their rates of change in the thirdquarter of 1979, which rapidly absorbed the devaluation. But although this effect was clearly anticipated, what was not anticipated was that inflation during 1980, exceeded an average of 6 per cent per quarter both in CPI and WPI, in spite of the fixed exchange rate.

For a believer in strict purchasing power parity, this was a sort of "inflation puzzle", especially since it was difficult to conceive an "external rate of inflation" in the order of 30 per cent per year. For non believers, this was a case of a disequilibrium, a distortion of relative prices.

By the end of 1981, two studies supported the belief in PPP, while no comparable study had been produced by nonbelievers^{1/}. The empirical explanations by both Rosende and

^{1/} See Rosende (1981 a) and Sjaastad (1981). Harberger (1982) reports similar results for 1979. See however Corbo (1982) for a recent counter evidence.

Sjaastad was that price stability in Chile was prevented by the rapidly rising prices of chilean tradeables. Sjaastad's summary table is reproduced as Table 4. The penultimate column in the table is an index of internal prices of chilean tradeables, and the final column is a measure of percentage deviations from purchasing parity theory in terms of the relative prices of nontraded goods. This column shows that by mid-1981 nontraded goods prices rose only slightly more than predicted by the trajectory of traded goods prices. His conclusion, with a caveat with respect to the quality of the indices^{1/}, is that by mid-1981 although "there have

^{1/} It is important to note that the internal import price index behaves suspiciously well correlated with the external import unit value index "and demonstrates no decline relative to P_h during the post-1974 trade liberalization. A problem with the index is that its coverage of current imports is very restricted as it was developed prior to the trade liberalization..."

"A second source of concern arises from the fact that the stability of P_h relative to P_t during the second half of 1980 and the first semester of 1981 comes about because of a sharp increase in the export price index. As that index includes very few of the rapidly growing nontraditional exports (and no price index for the latter is available), it is not clear that the index accurately reflects the recent behavior of export prices in both cases, an improvement in the basic price indices is required before definitive findings can be claimed". (Sjaastad, 1981, p.20).

been substantial variations in non-traded prices relative to traded, there is neither a trend nor any apparent association between the implementation of the exchange rate program and those fluctuations. Indeed, the price of home goods relative to traded goods was abnormally high during the period immediately prior to the introduction of the exchange rate table, and fell after the fixing of the exchange rate in 1979".

At the end of the second quarter of 1981, the point difference between relative prices and equilibrium relative prices, as estimated by Sjaastad, was only one per cent.

There is no doubt however, that the wage increase of 14 per cent in August, 1981, when prices were essentially stable, did produce a distortion in relative prices. (See the last column figures for 1981 III and IV in Table 4). This increase was the last of the wage policy of linking nominal wages to the CPI with a lag.

TABLE 4

SELECTED PRICE INDICES AND RELATIVE PRICE VARIABILITY
CHILE 1975-81^a

Date	P _m	P _x	P _h	P _t ^b	(P _h -P _t)/P _h (%)
1975 I	100.0	100.0	100.0	100.0	0
II	162.4	174.1	175.4	167.6	5
III	225.2	267.8	245.3	243.5	1
IV	288.2	329.7	311.6	306.2	2
1976 I	435.1	445.6	413.4	439.8	-6
II	576.8	582.4	575.4	579.3	-1
III	627.5	684.5	709.4	652.5	9
IV	700.3	830.2	862.0	756.0	14
1977 I	937.8	967.3	1,029	950.5	8
II	1,156	1,021	1,192	1,093	9
III	1,246	1,136	1,344	1,195	13
IV	1,336	1,282	1,505	1,311	15
1978 I	1,442	1,473	1,654	1,456	14
II	1,573	1,594	1,781	1,583	13
III	1,638	1,744	1,914	1,685	14
IV	1,652	1,845	2,054	1,737	18
1979 I	1,785	2,203	2,197	1,962	12
II	1,940	2,564	2,378	2,199	8
III	2,454	3,140	2,628	2,742	-4
IV	2,755	3,417	2,814	3,035	-7
1980 I	2,999	3,711	3,029	3,301	-8
II	3,004	4,442	3,293	3,582	-8
III	3,126	4,532	3,455	3,695	-8
IV	3,175	4,751	3,693		-7
1981 I	3,293	5,064	3,883	3,997	-3
II	3,230	5,409	4,103	4,073	1
III	3,164	5,459	4,276	4,040	6
IV	3,159	5,389	4,435	4,020	9

a. Quarterly averages. P_m is index of internal price of importables from wholesale price index, P_x is mining products component of the wholesale price index, and P_h is the consumer price index excluding the food component.
Source: Boletín Mensual, op cit., various issues.

b. Defined as $(P_m)^{0.55}(P_x)^{0.45}$.

Source: Sjaastad (1982).

But this issue will be commented further in Section 6 below . In this section we are interested in the battle against inflation which proceeded until the end of the first semester of 1982.

Even if allowance is made for the "inflation puzzle" of 1979 and 1980, it is clear that by 1981, the battle had been won. (Writing at the end of 1982 , one can add: "but not the war"). Throughout the second semester of 1981, the average rate of increase of the CPI was 0.6 per month whereas the WPI showed a decrease of -0.5 per month.

When one recalls that the starting point was over 1,000 per cent per year, as measured by the WPI, in calendar year 1973, or at least 500 per cent according to the other indices, it is clear that the stabilization policy was succesful. Throughout the stabilization period, both the rate of inflation and the rate of unemployment were reduced substantially. The rate of inflation, measured by the WPI, fell from 250 per cent per year (12 month) an mid 1976 (before the first revaluation) to -4 per cent per year for calendar year 1981.

The unemployment rate fell from its peak of 19.8 per cent in March, 1973 to 11.3 per cent in March 1981 (and further to 9.0 per cent in June 1981).

In conclusion, the utilization of the exchange rate as an instrument for stabilization was highly successful. Clearly throughout the period of this stabilization policy, the devaluation policy influenced the inflation path, and brought down the rate of inflation, with the exception of the 1979-1980 period in which the rate of rise of the dollar prices of chilean tradeables was higher than the U.S. inflation rate.

The influence of the exchange rate policy on expectations, as expected by the chilean authorities, was aided by the commercial policy reform which made price arbitrage operative as more chilean goods became tradeable. Although the market for international goods was already quite open late in 1977 the international financial assets market was quite closed until mid 1979 so that no discernible effect on chilean interest rates was provoked by the establishment of the tabular exchange rate system.

Chilean interest rates however present our next puzzle.

5. The interest rate puzzle^{1/}

Since interest rates were decontrolled in 1975, their real levels have been staggering. In the first few years after its freeing, the insulation of the domestic capital market from the international capital market and the uncertainty about the exchange rates, made the interest rate a domestic phenomenon in Chile^{2/}.

However, after the exchange rate was fixed in 1979 and a gradual opening of the capital account took place, interest rates in pesos were more than twice the level of dollar interest rates throughout the three years of the fixed exchange rate regime. Curiously enough, the spread between peso deposit rates and LIBOR has been quite stable on the average; indeed, its annual averages have been between 1.0 and 1.6 per month in the 1979-1982 period. (Although it has fluctuated between a low of 0.89 to a high of 2.67 per month).

^{1/} This section owes much to conversations with, and research done by Larry Sjaastad at the Center for Policy Studies.

^{2/} See L.A. Sjaastad and H. Cortés Douglas (1978). As a curiosity, the computed external spread was -3.2 per cent per month in 1975 and 2.6 per month in 1976. (Interest rates were controlled during the first half of 1975).

When we add to the gradual opening of the capital account^{1/}, the massive expansion of both peso credit (at more than 50 per cent per year in real terms), and dollar credit (at more than 25 per cent per year in real terms) which took place in 1979, 1980 and 1981, it is indeed puzzling to observe the maintenance of an external spread of 1.5 per cent per month or 20 per cent per year.

The very high and persistent level of interest rates in pesos in Chile is one of the main short comings of the economic performance in the period under analysis as we shall analyze later in this section. Short term bank deposit rates in real terms averaged 20 per cent per year in 1977, 26 per cent in 1978, dropped to 5 per cent in 1979 and 1980; resumed their previous high levels to 29 per cent per year in 1981 and exceeded 30 per cent per year in the first semester of 1982.

In other words, real interest rates in pesos always exceeded 20 per cent per year, except for 1979 and 1980, when they were only 5 per cent per year. Before 1979 exchange controls were tight and kept the capital account flows under the control of the Central Bank. The fixing of the exchange rate in mid -1979 and

^{1/} See Rosende (1981 b) and Gutiérrez (1982).

the lifting of many of the controls of the capital account which started three months later, both reduced uncertainty about the exchange rate and started the opening up of the capital account.

The nominal level of peso deposit rates in 1979 and 1980 was equivalent to the international interest rates plus the relatively stable and high spread and it averaged 35 per cent per year, which together with domestic inflation of 30 per cent per year, produced real rates of only 5 per cent per year.

The final stage began with the revaluation of the dollar against other major currencies in late 1980. This revaluation caused the dollar prices of many Chilean imports to fall, reversing the previous situation in which Chilean tradeables were increasing in price at a higher rate than the U.S. price index, and bringing domestic inflation down in 1981 to -4 per cent according to the WPI and 9 per cent according to the CPI.

This abrupt decline in the rate of inflation increased real interest rates in Chile from 5 per cent in 1980 to almost 30 per cent in 1981, being the first symptom and cause of the current depression, which is the subject of the next section.

If peso deposit rates have been high, peso loan rates have exceeded them by a very large spread. This internal spread has been 0.9 per cent per month in 1979; 0.6 per cent in 1980

and 1981; and almost 1.0 per cent month in the first semester of 1982, adding on average 10 percentage points per year to the reported deposit rates. The large amount of irrecoverable loans, which became evident in late 1981 and 1982, is however witness to the fact that these loan rates were ex-ante rates.

There is no decisive evidence to explain the high and persistent external spread. However, its presence in spite of the extraordinary increase in capital outflows and in spite of the massive increases in peso credit and dollar credit in the monetary system, led Larry Sjaastad to postulate an explanation of the external spread based in the existence of arbitrage costs due to the restrictions on direct exchange arbitrage by the banks which remained until the third quarter of 1982. Banks were not permitted to take positions in foreign currency. "A series of transactions is required: chilean banks borrow abroad, and must lend the proceeds (after meeting reserve requirements) in dollars in Chile. Some chilean non-bank entity will then convert the dollars into pesos, and lend the pesos. The last step, of course, will in practice entail depositing the pesos in a chilean bank or financiera, which will then make the loan to another chilean entity. As each of these transactions involves costs and risks of default, the arbitrage process is inefficient compared

with a situation in which the banks are permitted to arbitrage directly". (Sjaastad (1981), p. 19).

"... The implication of the foregoing is simple. If international arbitrage currently involves very high costs due to the large number of transactions involved, a chilean banker might very well be indifferent between paying up to 3.0 per cent per month domestically to obtain funds on the one hand and paying 1.5 percent per month for dollars abroad, on the other, if his additional costs in connection with the latter transaction amount to the equivalent of another 1.5 per cent per month. This conclusion appears quite plausible in view of an additional constraint on international arbitrage: banks can borrow "financial" dollars abroad only for a term of two years or more, which means that they must take a long exposure in dollars relative to the short term lending in pesos to which the above -described spread refer" (Sjaastad (1981), p.21).

If this hypothesis is not only theoretically correct but empirically correct, it is only another case, though crucial for Chile, of the importance of policy consistency when a market approach to economic policy is undertaken.

Obviously, a system of free interest rates does not lend itself to regard them as policy targets, but it is dubious that the extraordinarily high levels of real interest rates

observed in Chile cannot be considered a legitimate object of policy, particularly when its persistence, its effects on the productive agents and its coupling with the failure (or inconsistency) in regulating banks are, in my opinion, the primary domestic responsables for the current collapse of the economy and the extent of the depression.

The issue of free banking or bank regulation is an old one. Free banking with a caveat to depositors is a system where the benefits but also the costs are placed on the banks and the bank's customers. Bank regulation, on the other hand, places the costs on the monetary authority, which in turn has thus the right to regulate. The Chilean system, after 1975, had the wrong mixture. Philosophically, the idea was to eliminate all controls on banks, to tend to the free banking ideal; but everytime a bank was in trouble the costs were paid by the monetary authority. It happened early in the game with the case of Banco Osorno, in late 1981 with Banco Español and several others, and in all probability will be the case in 1983 with most remaining banks. It was rationally expected then that the government would pay the bill; and thus the business conglomerates engaged in a financial bubble or bicycle which left the banking system with absolutely unsound assets.

The figures are eloquent. Table 5 shows the rates of change of nominal and real credit of the monetary system in pesos and in dollars.

Table 5
Credit in Monetary System
(rates of change)

	Credit in Pesos		Credit in Dollars	
	Nominal	Real	Nominal	Real
Dic 78 - Dic 79	109.4	50.7	62.0	16.7
Dic 79 - Dic 80	102.9	54.5	73.3	32.1
Dic 80 - Dic 81	63.2	49.0	36.6	24.7

Source: L.A. Sjaastad (1982), Table 23.

There is considerable evidence that attempts by the Central Bank to increase credit (or money) in real terms by 50 per cent would lead to a similar drain in international reserves. Instead, given the exchange rate system both money and credit in the final analysis were demand determined. There was some kind of strange increase in the demand for credit which led to the increase of 50 per cent per year. In Sjaastad words: "the most likely hypothesis is that this monetization (of existing assets) involved shares of companies being acquired by the "groups"

(i.e. the business conglomerates). The modus operandi of the process is the following . If one of the groups wishes to acquire a firm, it pledges shares obtained in previous acquisitions to its (captive) bank as collateral for a loan, and uses the proceeds of that loan to create a time deposit for the seller of the company. This would appear to be the only plausible explanation for why the demand for credit could expand so much during 1981 in the face of extremely high real interest rates, and why the growth in that demand fell off so sharply with the change in the banking law in August 1981, a change which, among other things, outlawed the practice of the (captive) banks lending to their own firms.... If the above hypothesis is correct, and only further research can determine whether it is correct, the assets of the Chilean banking system are less sound than they might appear....." (Sjaastad (1982), p.27-28).

Though the exact procedure described by Sjaastad is still an hypothesis, there is no doubt now that the assets of the Chilean banking system are less sound than they appeared. Currently (December 1982), the unpaid loans of the banking system are estimated at three times the capital of the banks, and they are increasing. Authorities reacted to this threat only after CRAV'S bankruptcy early in 1981 (a sugar company caught in

sugar speculation), when several banks had severe losses by lending to CRAV without collateral. The result was the banking law of August 1981, which put limits on the lending by (captive) banks to their own enterprises. This law coincided with critiques to the economic policy by the media, particularly focused on the maintenance of the pegged exchange rate, which was identified with the then Minister of Finance. Uncertainty about the permanence of the exchange rate at its fixed level began then and did not subside until the devaluation in June 1982.

In November, 1981, the government intervened Banco Español and seven other banks and finance companies, which were "technically" bankrupt. The financing of this operation meant an increase in domestic credit of about 700 million dollars, with an equivalent loss in international reserves. For knowledgeable observers, particularly in the private sector, this was an indication that the strength of the fixed exchange rate had been undermined.

With a feeble banking system, and a relative price disequilibrium deepened by the wage adjustment of August 1981, the international recession was transmitted with untold severity to the Chilean economy, producing a deflation during the first semester of 1982 with no parallel since the 1930's.

6. The current depression

The important appreciation of the US dollar against other major currencies which started with President Reagan's election in late 1980 led to a decline in dollar prices of Chilean traded goods. On the one hand, as it was mentioned before, Chile's imported goods experienced a sharp reduction in dollars, which led to a rapid decline of the rate of inflation in 1981. Together with the increase in international interest rates (in dollars), this reduction in inflation brought domestic interest rates (in Chilean pesos) in the neighborhood of 30 per cent in real terms. This increase sent the construction sector, which had boomed in 1979 and 1980 (23.9 and 25.7 per cent real growth respectively) due to the low interest rates, to a complete halt, and caused a severe depression in the economy.

In addition, important export prices fell due to the dollar appreciation, particularly copper and agricultural and forestry products, which represent a large proportion of the total value of exports.

The resurgence of extraordinarily high real interest rates, coupled with the terms of trade deterioration, had a rapid and profound depressionary impact, especially because of the feeble banking system and the situation of high indebtedness of most business firms, both in pesos and dollars.

To this scenario, we must add the automatic wage escalator clauses for past inflation, which was kept as it was by the new Labor Plan, and meant that in August, 1981, with practically zero inflation, a wage increase of 14 per cent was enacted.

Thus, business enterprises were caught by a 500 per cent increase in real interest rates in 1981, an increase in real wages of about 20 per cent (from July, 1979, when the exchange rate was fixed to December, 1980), whereas their prices were mostly falling (the WPI index showed a drop of -4 per cent in 1981), and export prices were falling even more due to the dollar appreciation.

And all this, before world recession started. The effect of world recession was felt in Chile through the abrupt reduction of the capital inflow at the end of the third quarter of 1981. Just as the enormous capital inflow in 1980 and 1981, in excess of 500 million dollars per quarter, with a peak of 830 and 1000 million dollars in the second and third quarters of 1981, financed the transmission of the price rise in Chilean tradeables in 1980 and the increase in expenditure relative to income, the reduction in the capital inflow at the end of 1981 needed a corresponding reduction in relative nontraded goods prices and a reduction in expenditure. But the economy was already squeezed by the dollar appreciation which started almost one year earlier.

In addition, the wage-escalation policy, coupled with the rise in real interest rates, made a suave adjustment of nontraded goods prices an extremely long and painful process (deflation was needed first to reverse the trend of wages).

Late in 1981, two adjustments were called for: a thorough intervention of the financial system,

, to speed up the dismantling of the bubble which was inflating artificially the demand for credit and a correction of the cause of the external spread; and second, an increase in tariffs and export subsidies to speed up the disequilibrium in the relative prices of nontraded goods, for the duration of the recession, say four years.

Instead, no measure was taken nor in the financial system or with respect to relative prices until in June, 1982, an 18 per cent devaluation was produced, supposedly to correct the distortion in relative prices. As was to be expected, a devaluation in the context of an open capital account, and where both the Ministers and the President had repeatedly (since August, 1981) declared that devaluation would not be a solution, but an evil, produced total lack of confidence in the President and the Ministers, and a run from the peso. Tables 6 and 7 show the effect of this run on high powered money and international reserves.

Starting in February of 1981, the net purchase of foreign exchange became negative for the first time, and after some changes of sign, in October of 1981 became nonstop negative, reducing high powered money from 93.7 billion pesos in December, 1980 to 62,8 billion pesos in October, 1982, in spite of a cumulative flow increase in domestic credit in excess of 130 billion during 1982.

Table 7 shows the net purchase of foreign exchange by the Central Bank in millions of dollars during 1982. The cumulated negative purchase for the first eleven months of 1982 is 2.66 billions dollars, which compares with a level of international reserves of 3.64 billion dollars at the beginning of 1982.

A succession of measures were taken, leading to a floating exchange rate in August, 6, 1982. A few days later the exchange rate had jumped from \$ 46 to \$ 70, and a dirty floating began, with the concurrent loss in reserves. This led the new economic team to support an exchange rate band, starting at 66 pesos to the dollar, and with an automatic escalator clause of the rate of rise of the consumer price index minus 10 per cent per year. (The band allowed \pm 2 per cent fluctuations around that trend which was established for 180 days). At the time of the introduction of this system, undocumented purchases of dollars by the general public were limited to 1.000 per person per month

instead of the previous 10.000). The run on the peso continued, requiring more people to go to the bank to buy dollars than before, so access to dollars without documentation was finally closed on December 4, 1982.

The current situation is that of a depressed economy, with international reserves driven down, peso monetary aggregates falling in nominal terms, as they are not demanded but are being replaced by a demand for dollars, with huge debt payments in the coming year, a bankrupt financial system, and unemployment overpassing 25 per cent of the labor force.

Table 6

SOURCES OF VARIATIONS IN HIGH POWERED MONEY
(in millions pesos)

	Exchange Operations		Domestic Credit		High Powered Money	
	Net Purchase foreign Currency	Other	To Financial Sector	Rest	Change	Level
<u>1980</u>						
Dec.	1.288	-305	5.007	1.747	7.737	93.731
<u>1981</u>						
Jan.	4.940	-266	-3.319	974	2.329	96.060
Feb.	-2.062	-278	1.678	4.003	3.341	99.401
March	-26.040	- 30	851	13.277	-11.942	87.459
April	- 564	44	-9.065	5.304	-4.281	83.178
May	2.073	- 93	-1.515	848	1.313	84.941
June	-1.098	-225	- 329	49	-1.603	82.888
July	-4.881	- 60	618	195	-4.128	78.760
Aug.	4.528	-112	-1.529	756	3.643	82.403
Sept.	1.535	- 66	- 547	412	1.334	83.737
Oct.	-5.951	- 57	6.343	440	775	84.512
Nov.	-11.669	64	13.435	411	2.241	86.753
Dec.	-8.286	282	8.155	386	537	87.290
<u>1982</u>						
Jan.	-3.250	-246	1.032	796	-3.732	83.558
Feb.	-1.954	- 70	-1.060	17	-3.067	80.491
March	-1.508	- 64	- 365	510	-1.427	79.064
April	-6.202	-264	4.084	523	-1.859	77.205
May	-7.718	-1.293	2.188	5.021	-1.802	75.403
June	-4.501	-27.034	-44.551	74.198	-1.888	73.515
July	-10.058	347	1.937	10.867	3.093	76.608
Aug.	-16.099	- 16	-3.628	15.894	-3.849	72.759
Sep.	-22.871	-330	8.906	6.932	-7.363	65.396
Oct.	-42.514	-336	21.456	18.830	-2.564	62.832

Source: Central Bank of Chile, Monetary Synthesis, October, 1982.

TABLE 7

Net Purchase of Foreign Exchange by the Central Bank

<u>1982</u>	<u>Total</u>
Jan.	-25.2
Feb.	-60.2
Mar.	-71.9
April	-232.5
May.	-119.3
June	-170.9
July	-226.7
Aug.	-278.1
Sep.	-567.8
Oct.	-487.2
Nov.	-418.1

7. Concluding comments

The chilean experience suggests that use of exchange rate policy as a stabilization tool in a small, open economy is warranted and leads to a success in the battle against inflation, everything else constant.

This everything else constant is, however, the real cause of concern for those of us who are interested in drawing the lessons from past economic policy in Chile. As discussed, the three time bombs that the chilean experiment carried, and which were activated in 1981, first by the appreciation of the US dollar and ultimately, by world recession and the abrupt reduction of the capital inflow, could be viewed as errors, shortcomings or inconsistencies of policy or as myopia or straight blindness by policy makers. I believe, however, that it is a deeper issue.

It is more useful to view them, rather, as a basic incompatibility between the full implementation of an economic doctrine of liberalism and the chilean cultural tradition, particularly on the bearing of costs and benefits, the legitimate objects of policy, and the redistributive and overall role of the State. This incompatibility was clouded by the fact that this liberal economic policy took place under a military regime, but it was nevertheless

determinant under the label "politically impossible" in the setting of two of the time bombs (it was politically impossible to let a bank go bankrupt, and to eliminate wage escalator clauses). The third time bomb is explained by both the difficulty of knowing the cause of the high external spread, and the doctrinal argument that "if they are market rates, then they must be right".

A full fledged free market program as the one aimed at by the economic team of 1975-1982 requires total consistency in policies. In the Chilean context, cultural factors impeded this even under a military regime (furthermore, very few understood the program, most only accepted it late in 1980, because it seemed to work; to repudiate it in 1982), and laid the ground for its collapse in 1982.

Perhaps the lesson is that cultural elements must not be ignored but recognized and taken into account as they in the end are the framers of success or failure in policy.

REFERENCES

1. Corbo, V., (1982), "Recent Developments of the Chilean Economy", unpublished, Catholic University of Chile, September, 1982.
2. Cortés Douglas, H., (1982), "The Chilean Experience in Trade Reform: A Progress Report on the Consequences and Implication", in L.A. Sjaastad (ed.), The Free Trade Movement in Latin América, (Mac Millan, London, forthcoming).
3. De Castro, S., (1979), "Inflation and Financial Discipline", in J.C. Méndez, (1979).
4. Edwards, S., (1980), "El Problema del Empleo en Chile: 1975-1979: Un Análisis Preliminar, Documento N° 146, BHC, Mayo.
5. Gutiérrez, M., (1982), "Thoughts on Financial Opening: The Chilean Case", Banco Central de Chile, Working Paper N° 14.
6. Harberger, A.C., (1982), "The Chilean Economy in the 1970's: Crisis, Stabilization, Liberalization, Reform", unpublished.
7. Meller, P., Cortázar, R., and Marshall, J., (1979), "La Evolución del Empleo en Chile: 1974-1978), Co-lección Estudios CIEPLAN, N° 2.
8. Méndez, J.C., (1979), Chilean Economic Policy, Budget Office, Chile.
9. Rosende, F., (1981), "External Inflation Relevant for Chile", Banco Central de Chile, Working Paper.