A PRIMER ON THE CHILEAN ECONOMY, 1973-1983

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This paper sketches some key facts concerning the Chilean economy in the past decade. Emphasis has been placed on matters related to economic fluctuations, unemployment, monetary and exchange-rate policy, etc. It provides a necessary background to understand and interpret the roots of Chile's current (1982-83) serious economic crisis. Specifically, the paper reviews the Chilean stabilization process of the seventies and discusses some of its important features, such as the monetary policies, foreign exchange rate policies, and labor laws, some aspects of the banking system and the disposition of public enterprises.

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This paper has the purpose of sketching, for interested parties, some key facts concerning the Chilean economy in the past decade. Emphasis has been placed on matters related to economic fluctuations, unemployment, monetary and exchange-rate policy, etc. The discussion tries to give the reader the necessary background to understand and interpret the roots of Chile's current (1982-83) serious economic crisis.

1. The Chilean stabilization process that started in 1973-74 did not involve a major monetary shock. The major monetary magnitudes were still expanding at over 200 percent per year in 1975 (two years after the military coup), at over 100 percent per year in 1977, and at over 50 percent per year in 1980. In 1981 the average excess of month-end money supply above that of the previous year was 25 percent for $M_1$ and 93 percent for $M_2$. And though $M_1$ dropped slightly in nominal terms in 1982 as against 1981, $M_2$ continued to grow at a 15 percent annual rate. Moreover, the rate of price increase did not fall significantly below 30 percent until 1981. In fact, rates similar to those of the "world inflation" really were achieved only from about June of 1980 to June of 1982 for wholesale prices and from about January 1981 to June of 1982 for consumer prices.

2. There was great variation in real money balances. The ratio of $M_2$ to GDP averaged about 10 percent in the 1960's. During the (mostly) repressed inflation of the Allende years it averaged about 12.5 percent.
CHILEAN INFLATION RATES

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<tr>
<th></th>
<th>Annual Average Rates</th>
<th>December to December</th>
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<tbody>
<tr>
<td></td>
<td>CPI</td>
<td>WPI</td>
</tr>
<tr>
<td>1980</td>
<td>35.1%</td>
<td>39.6%</td>
</tr>
<tr>
<td>1981</td>
<td>19.7</td>
<td>9.1</td>
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<tr>
<td>1982</td>
<td>9.9</td>
<td>7.2</td>
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When the repressed inflation became an open one (1974-76) real cash balances ($M_2$) plummeted to around 5.5 percent of GDP. From then on they made a dramatic recovery, moving up to over 25 percent of GDP in 1982. The major part of this increase in the ($M_2$/GDP) relationship took place under the fixed exchange rate of 39 pesos to the dollar, initiated in July of 1979 and abandoned in June of 1982 (Source: *ibid.*, p. 218).

3. International reserves grew dramatically under Chile's fixed exchange rate. Chile had $273 million of international reserves at the end of 1977, and $1,058 million at the end of 1978. By December 1979 these reserves had risen to $2,313 million, and by December 1980 to $4,074 million. Reserves were not much affected as the crisis began brewing in 1981 -- falling only by some $300 million during that year. By the first devaluation (June, 1982) they had dropped to $3,319 million, and by the second devaluation (August, 1982) they were down to $2,947 -- still amply above their 1978 or 1979 levels. The important message here is that, if Chile had pursued a floating rate policy starting sometime in 1978 or 1979, with other things remaining more or less the same, her exchange rate would probably have appreciated in nominal as well as real terms.
4. Chile's real exchange rate appreciated dramatically under the fixed rate of 39 pesos = $1. Calculating Chile's real exchange rate with the dollar as the nominal peso price of the dollar times the U.S. GNP deflator divided by the Chilean GDP deflator, and setting the 1960-69 average real rate = 100, we find remarkable stability of the annual (average) real rates from 1960 through 1970. Only once did the average real rate exceed an index of 105 (it was 109 in 1963), and not until 1971 did it fall below an index of 94. But then, in the Allende period, it deteriorated rapidly, reaching an index level of 82 in 1972.

Negative international reserves plus great difficulties in obtaining foreign credits forced the new military government into a policy of explicitly stimulating exports. This brought the real exchange rate to an index of 158 in 1975, followed by 126 in 1976. From there on a steady deterioration occurred, with the index reaching 109 in 1978, 97 in 1979, 85 in 1980 and 83 in 1981. (Source: Arnold C. Harberger, "The Real Exchange Rate of Chile, A Preliminary Survey" (mimeo, 1981); updated using sources cited in original paper.)

The degree of appreciation is understated by the above figures in the sense that they deal with the relationship between the peso and the U.S. dollar. Since from 1980 onwards the dollar appreciated dramatically against the other major currencies, the Chilean peso did so also, on top of its appreciation vis-a-vis the dollar that we have calculated above.

5. The great appreciation of the peso was not so bad. Non-mineral exports grew from around $100 million in 1972 to $477 million in 1975 (when the real exchange rate peaked). They continued to grow as the real exchange rate declined, reaching nearly $1 billion in 1978, $1.5 billion in 1979, and $1.9 billion in 1980 before tailing off to $1.65 billion in 1981 and $1.55 billion in 1982.
Industrial production fell dramatically in 1975, but rose steadily thereafter, reaching its recent peaks in March (119.6) and July (121.2) of 1981.

Unemployment at the national level declined from 14.1 percent in October-December 1978 to 10.4 percent in October-December 1980. In greater Santiago, the unemployment rate fell from 14.8 percent in the first quarter of 1979 (i.e., before the exchange rate was fixed) to an almost constant 8.3 percent during the first three quarters of 1981.

The key reason why things were so good in Chile in 1981 was an inflow of capital, equal (over the whole year) to about 15 percent of GDP. In short, spending exceeded production by about 15 percent. This extra force of demand helped support a good level of economic activity and a low level of unemployment, despite a highly appreciated exchange rate. Had this voluntary capital inflow continued at its 1981 pace, the Chilean economy would probably have stayed in pretty good shape during 1982 and 1983. (Source: Banco Central de Chile, op. cit., pp. 244, 75, 177, 201.)

6. The proximate cause of Chile's current trouble was the sharp reduction in the rate of net capital inflow, from about 15 percent of GDP in 1981 to about 5 percent of GDP in 1982 (see Central Bank of Chile, op. cit., p. 237). This dramatic shift created an imperative need for the real exchange rate to rise, especially in the light of the fact that the foreign credits received by Chile in recent years had been mainly used to purchase nontradable goods (especially to finance, directly or indirectly, a construction boom). In short, an exchange rate which appeared to be reasonably viable (in the presence of a very large capital inflow mainly directed towards domestic goods and services) was no longer viable when the external financing flow virtually dried up.
7. Chile's labor law made the necessary adjustment of the real exchange rate impossible. The real exchange rate has many guises—among them a) the nominal exchange rate multiplied by a foreign price index and divided by a domestic one; b) the internal (i.e., within the country) price level of tradable goods deflated by the internal price level of non-tradables; and c) the ratio of the nominal exchange rate to an index of wages. b) can be seen to revert to a) if the foreign price index is the foreign price level of goods traded (with Chile) and the domestic price level is the price level of nontradables. c) can be seen to approximate b) given that the nominal exchange rate is the predominant local variable in determining the internal prices of world-marketed goods, and the wage level is the principal input into services, which in turn make up the bulk of nontradables.

The adjustment that was called for by the shutting down of the capital inflow can thus be seen to entail either i) a reduction in wages (assuming the nominal exchange rate remained fixed), or ii) a rise in the nominal exchange rate (assuming wages remained fixed).

Neither of the above two alternatives ensued (up to June of 1982). The result was that the pressure to raise the real exchange rate made itself felt in a dramatic increase in the rate of unemployment. The unemployment rate in greater Santiago marched ineluctably upward, from 3.1 percent in the third quarter of 1981 to 11 percent in the fourth; then from 15 percent in the first quarter of 1982 to 19.1 percent in the second. (Banco Central de Chile, op. cit., p. 182.)

It was, to my mind, the unconscionable rise in the unemployment rate, rather than anything connected with the loss of foreign reserves,
that triggered the devaluation of June, 1982. But the devaluation was impossible until the labor law was changed. This law, written when the Chilean economy was at the height of its late-1970's boom, mandated essentially that every new labor contract must provide at a minimum a full cost-of-living adjustment from the date of the previous contract. For practical purposes, it made reductions in real wages illegal in any covered activity.

Nothing could be accomplished to bring about the required adjustment while this labor law was in effect. Yet something obviously had to be done. According to reliable reports, the preferred alternative of the economic team was a decreed reduction of 15-20 percent in all wages and salaries (perhaps with some exceptions at the lowest levels), so as to be able to maintain the exchange rate at 39. The reports go on to say that this proposal was taken seriously, and discussed at the highest levels of government. The final decision, however, was instead to devalue the peso. Yet even for the devaluation to work, a modification of the labor law was necessary. This modification was finally made—it provided that the real wages pacted in new labor contracts could fall below their previous level, but not below a floor equal to their level at the moment the labor law had taken effect. This left an ample margin for downward real wage adjustment, and indeed, Chile's experience since the June, 1982 devaluation attests that a serious modification (devaluation) of the real exchange rate was indeed made possible.

8. The monetary effects of the Chilean devaluations tended to frustrate their purpose, at least for some time. A devaluation was declared in June of 1982, from 39 to 46 pesos to the dollar. This devaluation was "calibrated" to approximate what would have happened if Chile,
rather than pegging to the dollar in July of 1979, had instead pegged the peso to a basket of major currencies (roughly on a trade-weighted basis). Although I believe (in retrospect) that the policy of pegging to a basket would have been better for Chile than that of pegging to the dollar, and that with such a policy Chile might have averted a major crisis, the failure of the attempt (ex post, in June of 1982) to replicate this scenario is quite clear. The new peg (which was to follow local inflation in a crawling peg fashion) did not last more than two months. It was replaced by a short period of a free float, in which the upward pressure on the exchange rate proved severe, and finally followed by the reinstitution of serious exchange controls, with a parallel market side by side with the official one.

From June 1982 to June 1983 the real exchange rate rose by some 50 percent, as the nominal official rate doubled (from 39 to 78) while consumer prices rose by about a third (with U.S. prices increasing only modestly). The "objective" of an increased real exchange rate (which in my view, given the circumstances of the capital market, was an absolute necessity) was thus achieved, but its intended purpose of reducing unemployment was substantially frustrated. In fact, post-devaluation unemployment exceeded the second quarter level of 19.1 percent, and reached 23.9 percent in the third and 21.9 percent in the fourth quarter of 1982 and 21.8 percent and 19.6 percent in the first and second quarters of 1983.

9. These monetary effects entailed a reduction in desired holdings of peso cash balances combined with a dramatic drain on dollar reserves. The fall in real $M_2$ signified a reduction in the banking system's capacity to grant credits to domestic borrowers; the loss of reserves worked in the
<table>
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<tr>
<th>Real Money Holdings (M₄) (in billions of pesos of 1978)</th>
<th>International Reserves (millions of U.S. dollars)</th>
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<tbody>
<tr>
<td>June 1982</td>
<td>150.1</td>
</tr>
<tr>
<td>August 1982</td>
<td>147.9</td>
</tr>
<tr>
<td>December 1982</td>
<td>132.0</td>
</tr>
<tr>
<td>March 1983</td>
<td>116.0</td>
</tr>
<tr>
<td>May 1983</td>
<td>107.1</td>
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other direction. The net result was that real domestic credit fell only slightly during the period between the June devaluation and May of 1983.

However there was a spate of bank failures, dated in January 1983, that was accompanied by a major bailout operation by the Central Bank. As a consequence the banking system had far less possibility to grant what I call "good" credits in May of 1983 than in June of 1982.

10. On "good" and "bad" credits—the Achilles' heel of the Chilean economic experiment. It is now becoming very clear that the condition of the Chilean banking system played a major role in determining the course of economic events in the period since 1974. Recall that at the time of the military coup in September, 1973, hundreds of Chilean corporations were in government hands, nearly all of them generating substantial losses. Those which had been simply "intervened" by the government (i.e., not expropriated) were returned to their owners, but those which had been officially expropriated were (with a few exceptions like the major copper mines) sold at auction to the highest bidder.
Regardless of the category to which they belonged, the firms were in a weak financial position at the time they passed back from government to private hands. The deep recession of 1974-75 can only have made things worse. While I know of no study which explicitly traces the economic fate of the enterprises in question, there can be little doubt that a significant fraction of them must have reached the borderline of technical bankruptcy at some point during the 1975 recession.

It is probable that starting at that relatively early point the Chilean banks began to accumulate a stock of bad loans. Rather than write off these loans as bad debts, the typical practice appears to have been to roll them over, accumulating interest along the way. The apparent reason for this practice was that, upon recognizing a bad loan as such a bank would have to reduce its capital and surplus so as to reflect the loss. This, in turn, would reduce all sorts of legal limits—on lending, on deposits, on borrowing from abroad, etc.—all of which were typically expressed as multiples of capital and surplus.

As time went on, it appears that the volume of bad loans held by the banking system grew. The consequence was that the supply of credit available for "genuine" loans was progressively squeezed. This superimposition of what in effect was a "false" demand for credit on top of a true or good demand is probably the main reason why Chilean interest rates remained so high throughout most of the 1975-82 period. The high interest rates—which hovered most of the time around 3 or 4 percent per month in real terms—were in turn partly responsible for putting in peril
the financial situation of yet other companies, which may have begun the period in relatively healthy condition but simply could not withstand the steady drain on their resources that the high interest rates entailed.

The beginning of the present banking crisis in Chile can probably be dated around May of 1981, with the failure of the major private-sector sugar company, CRAV. It was not the failure as such that caused the problem, but rather the laxity of banking practices which was revealed as the evidence unfolded. (Most banks had made their loans to CRAV essentially without collateral, "on the signature only" of its distinguished director, Don Jorge Ross.)

During July-September of 1981 it appeared that the financial system was surmounting the crisis. Interest rates, which had risen sharply in the wake of the CRAV failure, began to drift downward, and calm seemed to have been restored in the Chilean financial community. However, new rumblings appeared in October, and by November of 1981 eight financial institutions were "intervened" by the Central Bank. These eight included four banks (of which the largest was the Banco Español) and four financieras which together accounted for about half the assets of the entire financiera system.

The decision of the government was finally to "bail out" these institutions fully—in the sense of guaranteeing the payment of their obligations both to their depositors and to their other creditors. In doing so, the government followed a precedent set several years earlier when the Banco Osorno had failed in an isolated occurrence. Most qualified observers feel that it was a mistake to bail out failing institutions so fully—especially since there is essentially a complete continuum of
possibilities—bailout of principal but no interest, bailout of principal plus part of interest, bailout of 90 percent of principal but no interest, etc.

It was the precedent set by these earlier bailout operations which served as the ostensible motivation under which the international private banking community virtually insisted on a comparable bailout of practically the entire Chilean banking system when the crisis wave hit once again in January 1983. The end result of a lengthy process of negotiations was that the government effectively extended its own guarantee to all outstanding foreign debts of the Chilean banking system.

11. The consequence of the progressive bailouts of Chile's banks is a wad of bad or dubious paper in the portfolio of the Central Bank. This paper, as long as it is present, limits the capacity of the banking system to make loans to viable enterprises. To the extent that bank credit serves as a productive input (or lubricant) in the economic process, the constricted amount of resources available for credits to truly viable enterprises will limit the pace of Chile's recovery.

In effect, there is nothing plausible that the policy makers can do to make real $M_2$ go up—indeed, the weakening of confidence over the past year has made it fall significantly. International reserves, on the other hand, have already fallen to only a little more than a third of the earlier peak levels. The policy makers don't want to lose more, and have agreed not to do so, but what is more important is that even if they were "used," the existing reserves are not big enough to finance a very big dose of stimulatory credit expansion. Thus we can pretty much rule out any major expansion of credit in real terms.
12. A current view (August 1983). The story of the Chilean economy in 1981–82 is grim, and the outlook for the future is somber. It will almost surely take at least two years for the 1981 level of real output to be regained, and for the unemployment rate in the greater Santiago labor market to drop back to the 10–12 percent range within which it oscillated during the late 1970's. There seems to be no policy capable of eliciting a quicker recovery; rather, the scenario of recovering to 1981 levels within two years is itself optimistic.

Key danger signals would be a) further efforts on the part of the public to flee from the currency; and b) further substantial reductions in real money holdings. Such reductions would have as their counterpart a further squeezing of the amount of "good" credit (in real terms) available to the system.

Hopeful signs at the moment are:

a) The unemployment rate, though high, is significantly below its earlier peak of 23.9 percent.

b) Preliminary figures show quarterly GDP up by 4 percent in the second quarter of 1983 compared with the first. Industrial production is also up from its recent troughs.

c) Up to the moment at least, Chile has shown the policy restraint necessary to ensure that the nominal devaluation of the peso also entails a significant real devaluation. This has given a new stimulus to tradable goods production (particularly of non-mineral exports).

d) Quotations in the parallel market, which earlier had reached levels in excess of 130 pesos per dollar, have in recent months ranged between 85 and 95 (compared with an official rate of around 78).

e) In spite of a number of government retreats from the liberal, non-interventionist policy system that prevailed between, say, 1975 and 1982, the basic structure of economic policy in Chile is sounder than that in most other Latin American countries. Chile still has a basically uniform tariff (now at a 20 percent rate), a sound tax system, expenditure restraint on the part of government which has kept public sector deficits down to manageable (i.e., noninflationary) proportions, a reasonably "economic" pricing policy of public sector enterprises, etc.
These attributes of the policy structure should give Chile a certain edge over other countries in the struggle (universal these days among the Latin American countries) for economic recovery.