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Chile: effects of the adjustment policies on the agriculture and forestry sector

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In this article the author analyses the situation of Chile's agriculture and economy in two periods. In the first, from the end of 1973 to June 1981, the economy grew at a high rate, inflation fell, wages rose, fiscal surpluses were achieved and reserves built up. In contrast, unemployment grew sharply, investment and saving fell, income distribution deteriorated, and the private sector's debt reached very high levels. The balance-of-payments deficit, the worsening of the terms of trade, the higher interest rates and the very large foreign debt acted as detonators of a crisis which stamped its mark on the second period. This period, from 1981 on, is characterized by the introduction of various adjustment measures designed to correct the imbalances without altering the essential nature of the adopted model.

The first measures introduced in agriculture had the objective of suspending the agrarian reform, restoring 30% of the expropriated land to its former owners and allocating the rest as smallholdings, and opening up the land market. A number of specific measures were also introduced, including forestry subsidies in particular. Other more general initiatives such as derestriction of the labour and capital markets and trade liberalization shaped the framework within which agriculture operated. This period saw spectacular growth in exports production, especially fruits, and a sharp drop in traditional crops such as wheat, beet, rape and matigolds.

Having abandoned the idea of automatic adjustment to overcome the crisis, the authorities intervened and established reference prices, purchase powers, tariff surcharges, price bands, and special credits for producers of basic goods. Taking 1981 as the reference point, agriculture performed better than the economy as a whole, owing largely to the strength of traditional crops and the expansion of fruit-growing, which benefited very much from the devaluations and the falls in wages and financial costs.

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Introduction

This article on Chile analyses two periods. The first runs from the end of 1973 to mid-1981, when the new government initiated an economic strategy which made substantial changes in traditional policies, including policies for the agricultural sector; and in the second period, from June 1981 onwards, various policies designed to correct the existing imbalances were carried out against a background of economic crisis.

I

The general lines of economic strategy and agricultural policy

1. The global economic model

One of the main criteria which have guided the actions of the economic authorities is the belief that the State should not steer or control production activities and that it is for the private sector to allocate resources in accordance with its motivations and assessments. In other words, the State should take a neutral stance, i.e., it can neither stimulate nor discourage production activities.

Accordingly, development policies, both sectoral and regional and of a business organization nature, should be eliminated or considerably reduced.

In this context the role of activator is transferred from the discriminatory decisions of the State to the signals emitted by prices, which are transmitted through the operation of competitive and decentralized markets free of any kind of governmental interference. The conclusion of this argument is that there is no need to use sectoral development policies and that it is enough to issue general directives valid for all activities.

2. The subsidiary State

One of the main goals of the military government was to reduce the size of the State. The implementation of its policies led to the privatization of a number of medium-sized enterprises, mainly agro-industries, which were owned by the Production Development Corporation (CORFO) or other bodies such as the National Farm Trade Corporation (ECA). The private sector took over dairy and dehydration plants, poultry and pig farms, olive estates, fisheries, fruit stations, silos, refrigeration equipment, seed selection equipment, agro-industrial complexes, the VINEX wine corporation and the National Seeds Corporation.

Similarly, the role of the National Forestry Corporation (CONAF) was reduced to a minimum and its place was taken by a system of subsidies for the private sector, to which were transferred forested land (60 000 ha) with nurseries and sawmills. In addition, large cellulose plants and their forests were sold and many forestry properties owned by the State or by insurance funds were put up for auction, the process of agrarian reform was abruptly halted and a large part of the land was returned to its former owners, while the rest was allocated in individual smallholdings. The withdrawal of the public sector was much more serious with respect to its functions of promoting development and assisting the technologically most backward and poorest rural sectors.

The abandonment by the State of the first of these two functions meant the abolition of measures considered selective and discriminatory in favour of the farming sector. As a result, tariffs were made uniform, tax exemptions, selective loans and inputs subsidies were removed, interest rates standardized and prices deregulated. Attempts were also made to transfer to the private sector the functions of providing technical assistance through subsidies for small producers to enable them to contract services.

3. Trade liberalization

In the government's view, the Chilean economy enjoyed excessive self-sufficiency which must be sharply reduced, for it was one of the reasons for the slow rate of development. In other words, the excessive and discriminatory protectionism had caused inefficient allocation of resources. The government decided therefore to open up the economy to the exterior in order to facilitate the expansion of exports and an increased supply, this by import of goods for which the country has no comparative advantages.

With this in view, and in order to improve the standards of internal efficiency, the government established a single exchange rate, which was to reflect the social value of foreign exchange, and a very low and uniform customs tariff, and it sought to remove the obstacles to foreign trade; at the same time it eliminated the customs exemptions which favoured certain production activities and the consumption of certain products. These measures were put swiftly into effect: the single exchange rate was set at 39 pesos to the dollar in June 1979 and tariffs were reduced to a uniform 10%, with very few exceptions to this rule.

These measures entailed important changes for the agriculture sector, for the import of goods already produced in the country was practically prohibited and the ECA had a monopoly of purchases abroad when national output did not satisfy domestic consumption. It also acted as a compensation fund to smooth out the differences between the internal and external prices of the products which it imported, and so the most important had their prices fixed at levels below their external purchase cost. In accordance with the government's diagnosis, a consumption subsidy was introduced and a tax imposed on producers. A similar situation existed for inputs, for most inputs and capital goods for the sector were imported free of customs duties.

Once these measures had been put into effect, the sector and its producers were exposed to increasingly intense foreign competition.

As a transitional stage in its liberalization policy the government established between 1977 and 1978 price bands based on the external market prices in the previous period, the system envisaged the use of variable tariffs when the external prices fell below the band's minimum. This mechanism worked for wheat and oil crops, but it was suspended at the request of the farmers themselves for the 1978/1980 harvest, for they thought that they could obtain better prices without the bands.

4. Prices policy and market intervention

The military government planned to eliminate price controls, arguing that the market was the most efficient control mechanism. In accordance with this plan, prices were quickly deregulated, and at the same time governmental interference in the operation of the markets was reduced.

This new policy meant profound changes for the sector, for prices had traditionally been fixed by the Department of Industry and Trade; this procedure was backed up by the ECA through its participation in market operations. Despite its convictions, the government had to move in stages with the deregulation of prices. After the first widespread deregulation, only maize, wheat and rice were still controlled in 1975, but in 1976, owing to the dire effects of this shock treatment on the people's living standards, controls were re-established for a wider range of products. However, most prices were again deregulated in 1977, and the ECA used its purchase powers only for wheat, maize, rice, oils and wools. while at the same time it allowed private companies to import foodstuffs. The price bands machinery was established in the 1977/1978 season; the bands were set before the production cycle began, in order to reduce the risks to the producers.

The instability of international markets finally persuaded the government not to intervene in the operation of the markets, both for products and for inputs.

5. Loans and interest rates

In its economic policy the military government attached great importance to the capital market. Its diagnosis was that the biggest problems in this area were caused by excessive State interference. It therefore decided to withdraw the State and encourage the installation and operation of new enterprises, while still retaining freedom to fix interest rates, eliminate selective loans and encourage international capital flows.

Before the adoption of these measures the sector had traditionally operated with a high level of debt in relation to its value added, with heavy dependence on State sources of credit (the State Bank for short-term loans, CORFO for

investment finance, and the Agrarian Reform Corporation (CORA) and the National Institute for Agricultural Development (INDAP) to cater to small owners) in addition to the special lines of subsidized loans. However, the government believed that the trade liberalization would improve profits so that there would be no need for special loans financed by these institutions, whose place would be taken by the private banking and financial system.

Extremely high short-term interest rates prevailed between 1975 and 1978, seriously affecting agriculture. The causes of this were the abrupt deregulation of the capital market, especially of the interest rate, despite the serious economic instability caused by inflation; the low level of savings in the private sector and of working capital in business, a situation aggravated by the inflation and the 1975/1976 recession; the difficulty of obtaining external financing as a result of the weak international supply and the restrictions imposed by the Central Bank up to 1979; and the broad current spread, which was due both to the required levels of cash reserves and to the oligopolistic behaviour of the banking system.

6. The labour market

The government's policy in this area too meant great changes in the existing situation, the main measures adopted were the liberalization of the labour market by simplification of the legal rules governing recruitment and dismissal, and changes in the rules on relations between companies and trade unions by reducing the supposedly monopolistic powers of trade unions. This led in practice to the reduction of the political, financial and institutional power of the trade unions and the suppression of the right to strike. Cuts were also made in labour "taxes", i.e., social security contributions, which were proportional to earnings and reached a rate of 60% in 1983, so that they were considered a disincentive to work.

It must be added that unemployment remained high, contributing to the real fall in wages.

7. The land market

The idea rapidly gained ground in the military government that the land resource should be

treated as an additional capital good and that the restrictions on free trading in land should be removed. Among these restrictions the official diagnosis noted the uncertainty about rights of ownership caused by the agrarian reform and the appropriation of land, not to mention a whole series of restrictive legal regulations. The following were the most important measures adopted in this connection:

- As a first priority, about 30% of the physical area expropriated up to September 1973 was restored to its former owners (almost 10 million ha). Most of this was better-quality land.
- ii) Of the area actually expropriated (around 10 million ha), 35% was allocated to the peasants, 17% was transferred to other institutions or sold off cheaply, and 18% was left unallocated.
- iii) The land was allocated to the peasants in individual plots, except in a small area of the dry coastal strip. The restrictions on the sale of this allocated land were removed at the same time, and it is estimated that 25% to 40% of it was transferred to third parties.
- iv) After a series of modifications, the agrarian reform law was finally abrogated in 1978.
- v) Freedom was granted for subdivision of properties and sale of water rights.

8. Tax policy

The tendency here was to establish single taxes, as for example the value added tax (20%) and a tariff with similar features. At the same time a sharp reduction was made in tax exemptions, both regional and sectoral and for individual products.

The progression of the income tax was also reduced, together with its contribution to total taxes, with a view to encouraging private saving and cutting the size of the public sector in accordance with the government's thinking.

The tax policy produced no major changes in the agricultural sector. Most of the enterprises remained under the system of presumed income, calculated as a percentage of the official valuation, which is generally lower than the commercial value. The establishment of the value added tax (VAT) extended the system to products which had formerly been exempt from taxes, However, the tax burden borne by the sector was lower than the national average, owing mainly to the system of presumed income.

The forestry sector received special treatment which included a one-off subsidy equivalent to 75% of the cost of forestation, and it was also exempt from the lad tax, taxes on presumed income, the supplementary general tax, and taxes on legacies, transfers and gifts.

9. Research and the transfer of technology

Here the government's policy was designed to secure financing for basic research and pass the cost of applied research on to the direct beneficiaries.

Although the National Institute of Agricultural Research is the main research body, steps were taken to reduce its influence. Forestry research is the responsibility of the Forestry Institute, the universities and private business.

The policy of transfer of technology was given a serious setback by the provisions which ended the agrarian reform and the extension and training work of CORA and the Training and Research Institute for Agrarian Reform (ICIRA) and transferred their functions first to the SAG and then to INDAP, so that this body could concentrate the services on some 300 000 small-holder families. This work was usually carried out on an individual basis with the peasants, without strengthening their organizations.

A transfer of technology policy was not formulated until 1978 with the establishment of the Technical-Business Assistance Programme (ATE) for small producers. An attempt was made to promote the establishment of Technical-Business Assistance Centres (CATE) to provide services for producers who required them, with State finance provided through subsidies of between 56% and 70% of the value of the services. This programme had little success: in its best year (1980) it catered to 14 275 users but then declined sharply in the following years.

II

Trends and results

1. Output

When the sum of the gross domestic product (GDP) for 1974 to 1981 is compared with the total for 1964 to 1971, it can be seen that the product of the agriculture and forestry sector grew 17.1%, i.e., slower than the total GDP and the population growth rate; this means a decline of 1.2% in per capita terms.

These figures conceal very dissimilar performances within the sector. Traditional crops, which accounted for about 30% of the value of production, fell as a result of the decline in the area sown from 1 270 000 ha on average in the 1960s to 1 012 000 ha in 1980-1982. The main crops affected were wheat, beet, rape and marigolds, for after the trade liberalization it was cheaper to import them.

There is evidence that vegetable production may have increased during the period.

The rise in fruit production was spectacular. The reasons for this abundance are to be found in the fruit-growing plan carried out in the second half of the 1970s and in the export incentive entailed by the establishment of a high and stable exchange rate. These circumstances favoured investment and the incorporation of technology, and productivity showed a substantial improvement. The area planted increased from 63 900 ha in 1974 to 86 800 ha in 1981, while output rose from 545 900 to 885 400 tons.

Livestock increased at a slow but steady rate; the production of milk and poultry meat rose in this subsector but the production of sheep and eggs fell.

2. Foreign trade

Farm exports showed a remarkable increase from US\$73.5 million in 1971 to US\$807.3 million in 1981, with a consequent increase in their share in the total from 7.6 to 20.5% in the same period. Fresh fruit, timber and forestry derivatives contributed most to this increase. If these latter items are excluded by reason of their large industrial component, the figures fall to US\$41.5

and US\$548.3 million in 1971 and 1981 respectively, and the share in the total rises from 4.3 to 13.9%.

Imports also increased substantially from US\$186.9 to US\$410.1 million in the same period. However, their share in the total fell from 16 to 6.1%. The same trend is observed when food imports are included.

The result of this performance was that the sector's trade balance, which had been in deficit, moved into the black.

3. Investment and borrowing

Although there is no reliable information about investment, various estimates indicate that it declined by about 53% in the public sector (public agricultural expenditure on capital goods), while private investment rose between 1965-1969 and 1974-1979 from US\$17 million to US\$36.3 million as an annual average.

Within this development, it is estimated that investment in equipment and machinery fell sharply, while investment in livestock and fruit farms rose sharply. These figures are not reliable and critics cite other figures which indicate that in fact private investment in 1974-1979 was unchanged or lower than in 1965-1969.

The forestry sector has better figures which show that investment grew. Proof of this is provided by the expansion of the planted area, as an annual average, from 28 212 to 79 586 ha in this period. This performance was certainly influenced by the subsidies granted to this activity.

Lending to the sector increased rapidly in real terms, although at a slower rate than in other activities. It is important to stress that this lending was concentrated in short-term obligations and, moreover, that there was a deep cut in resources for the peasant sectors.

According to the available information, the ratio of the volume of credit to the sector's value added rose from 35 to 76% and then to 91% in 1965-1970, 1981 and 1982 respectively. The heaviest borrowers in this scenario were the

small and medium-sized farmers who, moreover, concentrated their obligations in the short term as they lacked liquidity and working capital.

4. Relative prices and profits

Leaving aside the question of the validity of the consumer price index (CPI), food prices rose less than the overall index between 1974 and 1981 (73 against 85 times) and the average annual rates were lower throughout the period, except in 1976 and 1981. However, a comparison of prices between 1970 and 1981 produces opposite results; it shows that the food item showed a relative improvement in 1970-1974, contrary to the expectation of official policy.

The wholesale price index (WPI) shows that food prices rose more than the overall index (117 against 112 times), that this increase was concentrated in the period 1975-1976, and that the ratio was reversed between 1977 and 1981.

Both indexes seem to show that the trade mark-ups between wholesalers and final consumers fell in comparison with other activities. This could be a result of the trade liberalization, although in view of the unreliability of the indexes it is difficult to assert this with any certainty. It can however be said that the terms of trade did not improve for the agricultural sector as a whole.

The prices of inputs which ceased to receive subsidies rose, as did those of fertilizers and seeds. Petroleum and electricity prices also rose.

Financial costs increased, as already pointed out, and it is estimated that the revaluation of properties may have resulted in higher direct taxation. The only cost element that certainly fell was wages.

It can thus be inferred that farm profits did not improve in the period 1974-1981, indeed the available data indicate that they deteriorated. This is in global terms, for certain activities such as fruit production performed very well while others clearly declined. This heterogeneity was also found at the regional level.

5. Employment, wages and income distribution

Employment showed a slight increase in absolute terms from 480 300 persons employed in 1973 to 511 400 in 1981. There was thus a break in the sector's tendency to shed manpower owing to increased productivity. It is estimated that employment in the sector fell 31% between 1960 and 1973. Any variations in this trend were due to the fact that drops in real wages and social-security costs and the improved negotiating power of the workers acted as a stimulus on labour-intensive activities; the higher unemployment and lower real wages in the towns discouraged migration from the countryside, and the increased subdivision of properties may have encouraged greater retention of labour, although with lower productivity.

Nevertheless, employment grew slower than the population, and unemployment thus rose from 2% in 1966-1970 to 5.7% in 1974-1981.

As to income distribution, there is very little information on which comparisons can be based. However, in view of the greater heterogeneity in the sector and according to the information which is available, it can be asserted that the worst poverty is concentrated in rural areas. This assertion is supported by the existence of a backward sector made up of smallholders (about 180 000 properties) who receive little or no attention from the government, a sector which was swollen by the plots allocated under the agrarian reform and by a large mass of farm workers without permanent jobs living in very precarious conditions.

It is important to stress that the available information shows good efficiency indices for the smallholders—evidence of an unused business capacity.

Ш

The crisis and the adjustment policies

1. The crisis

After the recession in 1975-1976 the gross domestic product grew rapidly in the next five years and exceeded the all-time highs in 1980 and 1981. Inflation fell to under 10% a year, real wages increased, the fiscal targets of the government itself were surpassed, with surpluses between 1979 and 1981, and the Central Bank steadily accumulated reserves.

It was in this context that the government promulgated the so-called "seven modernizations" which consisted, *inter alia*, in reform of the labour laws to make the jobs market more flexible, the social-security reform which privatized this activity, a new mining law to facilitate large foreign investments in this area, and the education reform. However, the economy had a number of very serious problems, including:

- i) The rise in unemployment to 11%, an exceptionally high level in historical terms. If the persons enrolled in the Minimum Employment Programme are included, the level rises to over 15%.
- ii) The low level of investment during the 1970s and the low rate of national savings, which fell from 16.4 to 13.6% between 1961-1970 and 1974-1981.
- iii) The worsening of income distribution. The 1969 and 1978 household surveys illustrate this development: while the poorest 20% saw their share fall from 7.6 to only 5.2%, the 20% of families with the highest incomes improved their position, with their share rising from 44.5 to 51% of the national income.
- iv) The heavy borowing by the private sector, which enabled it to acquire assets. This was intensified by the close relationship between the owners of the big companies and the banks; as a result the financial system became particularly vulnerable. Lending to the private sector increased from 6.9 to 23.8% of GDP between 1970 and 1981, while in foreign currency it exploded from US\$78 million in 1970 to US\$5 549 million in 1981, a level equivalent to 16.8% of GDP.

In addition to these problems, the crisis triggered a series of macroeconomic imbalances. They included an enormous deficit in the current account of the balance of payments, which rose from US\$1 088 and US\$1 189 million in 1978 and 1979 to US\$1 971 and US\$4 814 million in 1980 and 1981. These figures are equivalent respectively to 7.1, 5.7, 7.7 and 16.3% of GDP in those years. The causes of this phenomenon included; the fixing of the exchange rate at 39 pesos to the dollar in June 1979 and its maintenance in the following years despite continued inflation at levels higher than the international rates (the CPI rose 67% between June 1979 and June 1981, while the United States CPI rose only 25.2%); and the standardization of tariffs at 10% which helped to make imported goods cheaper.

These two measures produced changes in the relative prices of tradeable and non-tradeable goods. The result was that exports increased from US\$4 190 million in 1979 to US\$6 558 million in 1981, while exports, which had been rising rapidly, came virtually to a standstill, increasing from US\$3 835 million in 1979 to US\$3 960 million in 1981.

These imbalances were aggravated by the deterioration in the terms of trade caused by the 5% rise in import prices and the 10% fall in export prices, which pushed the trade balance deficit up by US\$780 million. The higher interest rates in the international market increased it a further US\$200 million. However, these US\$980 million account for only a quarter of the total deficit of US\$4 800 million in the current account in 1981.

The foreign debt grew enormously as a result of the financial liberalization, as external saving came to take the place of internal saving, which fell from 15.5% of GDP in 1980 to 8.5% in 1981, in which year external saving accounted for 66% of total saving.

In short, there was a serious imbalance in the economy between the product level and the expenditure level, an imbalance which was financed by external resources. Proof of this is that the long- and medium-term debt rose from

US\$7 507 million in 1979 to US\$12 553 million in 1981. The situation became unsupportable from 1981, when the prime rate rose to 20% a year.

The other economic distortion was in the domestic financial system. The rapid growth of bank lending, facilitated by the simplification of access to external resources and aggravated by the persistence of high interest rates over a long period, ended by causing excessive debt, with a wave of bank and business failures.

2. The automatic adjustment (June 1981 to April 1982)

The exchange-rate slippage caused serious problems, for the avalanche of imports displaced domestic production and discouraged exporters, this on top of the abrupt increase in the debt.

The government authorities maintained that the existing model possessed automatic mechanisms for resolving this situation, and so no new measures were needed, except partial ones. As they saw the problem, there was excess aggregate demand but devaluation was not the remedy, for it would not affect the balance of payments or change relative prices, and would only lead to more inflation.

The idea was that the Central Bank should maintain a neutral monetary policy and issue money only when foreign exchange came in. Otherwise, there would be a loss of international reserves, an equivalent cut in the money supply and a higher interest rate, which would lead to a decline in expenditure and imports to a level compatible with the inflow of external credit, and exports would therefore increase owing to the fall in domestic demand.

What actually happened was that as inflation fell and the nominal interest rate was maintained, the real interest rate rose considerably in early 1981. Furthermore, the amount of money in private hands declined in the second half of 1981 owing to the reduction of the Central Bank's reserves.

Two other factors will also have affected the increase in the interest rate: i) the favourable expectations about the future, which increased the demand for loans to a level above the available supply of external credit; in addition to business requirements, there was borrowing for

consumption encouraged by the low prices of imported goods; ii) increased demand owing to the capitalization of interest; furthermore, the banks avoided declaring these loans as uncollectable in order to prevent administrative intervention by the State as long as a "pardon" was expected; iii) a tax system which encouraged businesses to borrow and not to use their own resources.

The higher interest rates and the competition of imported goods had considerable recessive effects on construction and manufacturing which were passed on to trade and services. The over-indebtedness caused serious liquidity problems which made intervention and the liquidation of eight financial bodies unavoidable.

On the other hand, the downward reaction of prices was slow and insignificant. The CPI rose slowly up to January 1982 and stabilized in the first half of the year. Wholesale prices, measured by the wholesale price index (WPI), recorded falls, but smaller ones than needed for the restoration of the balances. This was due to the rigidities of the Chilean economy itself and the time-lag in the operation of policies; the habituation of businessmen to inflation but not to deflation, which was why they did not behave as the authorities expected; and the difficulty of lowering production costs owing to: i) the impossibility of lower prices for imported inputs with the dollar at 39 pesos; ii) the increase in financial costs resulting from the rise in interest rates; iii) taxation which, being basically indirect, was proportional to other costs; and iv) the legal regulations which required the automatic adjustment of wages in step with past inflation. In August 1981, with the automatic adjustment in full flow, there was a general upward adjustment of wages and salaries, which did not begin to fall until May 1982.

The failure of the policy of automatic adjustment caused a considerable recession. Businesses opted for production cutbacks, with consequent effects on employment.

3. The phase of anarchy (April 1982 to March 1983)

The new economic team made some changes which, although important, did not alter the essential nature of the model. They included the following: i) devaluation in June 1982 followed by adoption of the mechanism of minidevaluations; partial exchange controls in September 1982; ii) abolition of the automatic adjustment of wages in step with inflation, leaving matters open to voluntary negotiation; iii) tax measures to prevent any reduction in tax revenue; increases in certain taxes such as vehicle licenses, land taxes, advance payment of the general supplementary tax, and a labour tax surcharge; and iv) intervention in the main banks and financial corporations to keep them in business; this also had an indirect effect on the bigger related businesses.

The economic results of these changes were as follows:

Although the dollar reached 72.39 pesos in December 1982, an increase of 85%, the government did not immediately institute exchange controls; this triggered speculation and the Central Bank lost part of its international reserves, which fell from US\$3 775 million at the end of 1981 to US\$2 578 million a year later, and to US\$1 486 million in April 1983.

There was also a sharp drop in imports, a slight fall in exports and increased payment of interest on the foreign debt despite the lower international rates. The current account deficit which stood at US\$2 382 million in 1983, was covered by a new inflow of capital (US\$1 304 million) and by Central Bank resources.

The situation became unsupportable. The inflow of capital from abroad fell dramatically, and reserves were at critical levels; all this persuaded the government to seek rescheduling of the foreign debt while suspending repayments.

Other factors also contributed to this state of affairs. A profound economic recession: the gross domestic product fell 14.3%, with agriculture the least affected sector, declining only 3.3% despite everything. Industry fell by 21.6% and construction by 29%. On the demand side, private consumption declined 14.4% and investment 37.1%, producing an investment rate of 9.6% of gross domestic product.

Unemployment rose to 23.7% in September 1982, and to over 30% if the emergency programmes are included. Nominal wages

continued to rise till April 1982, then began their decline.

Inflation broke out again as a result of the devaluations; the consumer price index rose 21.1% between May and December 1982, and the wholesale price index rose by 45.7%, while the nominal amount of money in the private sector fell 1.4%.

These results exacerbated the problems of income distribution and extreme poverty.

Public finances were in deficit for the first time in three years. Real fiscal expenditure remained constant, but tax revenue fell by 13.8%. The fiscal imbalance was 8.1% of expenditure.

4. The programme agreed with the International Monetary Fund (IMF) (March 1983 to December 1986)

A standby arrangement required as a condition of renegotiation of the debt was signed for the period 1983-1984. The Chilean and IMF authorities reached remarkably rapid agreement both on the diagnosis and on the remedy. In this agreement the government did not exploit the fact that most of the debt was private nor did it refuse to accept the use of mechanisms which treated the State as the new debtor.

The agreed programme covered a cutback of the fiscal deficit by restriction of public spending, reduction of the sector's size, trade liberalization, use of neutral instruments in lending, tariffs and the exchange rate, decontrol of prices, and wage restrictions. In fact the policies in force up to the crisis were maintained but with a more structured macroeconomic programme.

This policy has continued up to the present. The foreign debt was again rescheduled in 1985 and another agreement was reached with the IMF, with a contribution from the World Bank in the form of a structural adjustment loan.

The main goal of the strategy was to secure balance in the external sector and lower inflation. The devaluations and the tax drawback (10% of their value) favoured exports, while imports were controlled by the high exchange rate and restrictions on the growth of the GDP and the national income designed to maintain them at levels compatible with the supply of foreign exchange.

Small changes were made in tariffs policy; customs tariffs rose uniformly to 35% in September 1984 and then fell to 30% in February 1985 and 20% in July that year. Some differential tariffs were introduced in verified cases of dumping and protection measures were established for some products, several of them of agricultural origin.

Partial exchange controls were introduced, regulating the acquisition of foreign currency for previously authorized foreign payments, and the level of reserves at the end of 1982 was maintained in an effort not to incur arrears in foreign payments.

The fiscal policy sought to balance public finances and reduce the sector's size and, in conjunction with a tight monetary policy, output and income were held down at levels compatible with the anti-inflation targets. An attempt was also made to cut interest rates by means of a "level" suggested periodically by the Central Bank.

Several steps were taken to solve the problem of excessive internal debt: creation of a preferential dollar for foreign-currency debtors and the option of converting the debts into national currency on advantageous terms; rescheduling of national-currency debts, transforming them into long-term loans at subsidized interest rates; and special rescheduling for mortgagees and shippers.

Furthermore, the banks also received assistance in the form of purchase by the Central Bank of their matured portfolios and doubtful debts in exchange for notes payable from future surpluses; direct subsidies by means of interest rate differentials in the purchase and sale of notes; and, lastly, loans to prevent cessation of payment owing to illiquidity. These measures were the main reason for the expansion of lending and new issues.

At the same time cuts were made in the remuneration of public employees and the pensions paid by the social security system.

In contrast to the greater participation of the State through these interventions, steps were also taken to reprivatize the banks and main conglomerates. These consisted of subsidies for new owners, preferential dividends, interest-free loans, tax rebates, and the use of foreign-debt notes, among others.

The aim of the employment policy was to keep labour costs low, and the government therefore met part of the cost of social security benefits and introduced new emergency programmes.

5. Economic results

After its large drop in 1983 the gross domestic product recovered slowly but did not return to its pre-crisis levels. In 1985 it was still 7.1% below the 1981 level in absolute terms and 13.1% in per capita terms, at levels similar to those of 1968.

Unemployment took a considerable turn for the worse during the crisis, with open unemployment increasing from 420 400 to 923 900 between March 1981 and September 1982. The unemployment rate rose from 11 to 23.7% in the same period and, if the special jobs programmes are taken into account, unemployment amounted to 35% of the labour force. The situation began to improve in mid-1983, and in September 1986 open unemployment stood at 13.9%, or 19% if the emergency programmes are included. The causes of this improvement were the recovery of output, the large increase in informal low-productivity jobs and the maintenance of wages at low levels.

Wages increased up to May 1982 but then fell to their lowest level in mid-1985, showing a drop of 21.8%. Since then there has been a slow recovery, but without a return to the pre-crisis levels.

The scant data available on income distribution indicate a deterioration in the situation. Inflation accelerated as a result of the devaluations to rates of 27.3% in 1983, 19.9% in 1984, and 30.7% in 1985, when it began to slow down.

The balance of payments was restored to balance in 1982 owing to the fall in imports. Imports fell again in the following years, while the value of exports stood still. In order to meet the current account deficits it was necessary to resort to new foreign borrowing and use of reserves; this led to a larger outflow of resources in service payments. These payments amounted to 51% of the value of exports in 1982-1985. The result was that the foreign debt grew swiftly from US\$11 207 million in 1980 to US\$15 591 million in 1981 and US\$20 842 million at the end of 1985.

IV

Agricultural policies during the crisis

1. Price bands

This was the most important change and it consisted of government intervention in certain products such as wheat, oil crops, beet and, to a lesser extent, milk and dairy products. In April 1982 it was decided that the Industria Azucarera Nacional S.A. (IANSA) (National Sugar Corporation) would begin to issue contracts for beet sowing for a period of four to five harvests with a view to absorbing labour. In April 1983 a minimum price was announced for wheat, guaranteed by specific tariffs if the import cost was below the stipulated price.

Price bands were set in the 1984/1985 season for wheat and oil crops; in March or April each year the price was announced for the period running from 1 November to 30 October of the next year.

A tariff surcharge was imposed on imported sugar in June 1984 but replaced by a price band in the 1985/1986 season.

Minimum reference prices were set for milk and dairy products and flour in September 1983, and customs surcharges were subsequently imposed on milk.

These measures had a great influence on the areas sown and the country's level of self-sufficiency. Between 1982/1983 and 1985/1986 the area of annual crops expanded from 872 647 to 1 138 770 ha (a 30.5% increase over 1981/1982). Wheat accounted for much of this expansion, with an increase of 58.5% in the area sown, together with oil crops and beet. The improved yields made large production increases possible.

These improvements were due to the devaluations, higher tariffs and price bands, which made exports more expensive and reduced the producers' risks.

Trade mark-ups showed a considerable drop, owing partly to the lower wages and the sector's reduced risks.

In the case of sugar, IANSA operated from 1982 to 1984 with no other protection than the devaluations and the general increase of tariffs.

Oil crops, however, operated with bands of between 41 and 44% with no need for surcharges, for international prices remained high. Milk and dairy products required a surcharge to offset the exports subsidies introduced by the countries of the European Economic Community.

Self-sufficiency was almost achieved in the 1986/1987 grain and beet harvests; this worried the authorities, for surpluses could not be sold in the external market owing to its low prices. The reason for this was that the estimates for the price bands did not take into account the long-term trends of the products in the international market.

2. Special credits for agriculture

Despite the criterion of neutrality in credit policy, steps were taken to finance production (through the State Bank and IANSA in the specific case of beet), with the harvests, and not assets, as the only surety requirement. Warrants were also introduced with the product as surety as a means of stabilizing prices between harvests.

In addition, in November 1984 70% of the outstanding obligations of former smallholders of the Agrarian Reform Corporation (CORA) were forgiven and the remaining 30% made payable with adjustment, but without interest. The debts of the small producers served by INDAP were rescheduled with State Bank financing.

3. The forestry policy

A special forestry development programme was introduced at the end of 1982, together with other programmes to provide seasonal employment. The best monthly average was 15 584 workers in 1985, with a subsequent low of only 5 916 in 1986. The most important measure was the increase from 75 to 90% in the subsidy of the cost of forestation carried out by the private sector.

4. Irrigation policy

An eight-year programme was introduced in January 1986 to cover 75% of the costs of irrigation and drainage works and the necessary equipment, provided they did not exceed 12 000 Promotion Units (*Unidades de Fomento - UF*) (about US\$192 000).

5. Transfer of technology

Mention must be made of the successful experiment with the Technology Transfer Groups Programme set up in 1982 by the Agricultural Research Institute (INIA).

V

Effects of the adjustment policies on the sector

1. Output

If 1981 is taken as the reference year, it can be seen that the sector has developed more favourably than the economy as a whole. While the overall gross domestic product fell 14.7% in 1983, the sectoral product fell only 5.7%. Its recovery was also faster, for in 1985 the sectoral GDP was 6.7% higher than in 1981, whereas the overall economy recorded a drop of 7.1%. Accordingly, the contribution of agriculture and forestry to the overall product rose from 7.5% in 1981 to 8.8% in 1986.

Crop performances had a decisive impact on this development. Their recovery was also due to the wide margin for substitution of food imports despite the low consumption resulting from the crisis. This is demonstrated clearly by the supply composition of the protected crops.

In contrast to this, the livestock items fell by 8.9% between 1981 and 1985, while vegetables made a slow recovery.

Fruit-farming is the activity to have benefitted most from the macroeconomic policies pursued since 1982. In this case the devaluations acted in concert with the fall in wage and financial costs. Since this activity reacts to economic stimulus with a time-lag, the figures must be adjusted; between 1974 and 1981 the growth rate of the area planted was 4.7%, rising to 6.8% between 1982 and 1985. The total area of fruit farms increased from 65 630 ha in 1973 to 116 650 ha in 1985.

Forestry activities also expanded rapidly up to 1980, and then fell sharply in 1981 and 1982 (26.6%), with a subsequent recovery to a 1985 level almost equal to that of 1980.

2. Public expenditure

Public expenditure has fallen sharply since before the restrictions imposed by the crisis, as can be seen from its real drop of 44% between 1970 and 1981. Public resources under this item fell even further in 1982; they began to recover in 1983, but by reason of the increase in service of the public debt made by INDAP. Leaving this factor out of account, the budget for the Ministry of Agriculture was 10% smaller in 1986 than in 1981.

3. Profits and relative prices

When the movement of the overall WPI is compared with the index of agricultural products, it can be seen that between 1979 and 1982 the WPI rose 63.3% and the agricultural index only 39.8%, indicating the deterioration in agriculture's terms of grade as a result of the trade liberalization and cheap imports. This trend was reversed in 1983 but things deteriorated again in 1984-1985, indicating that the better prices for wheat and oil crops did not extend to the rest of the sector. Similar conclusions can be drawn from analysis of CPI movements.

It can be concluded from this picture that drastic changes occurred in the structure of prices in favour of wheat, oil crops and beet.

With respect to export crops, the CPI rose 119.2% between 1981 and 1985 and the WPI 178%, while the official value of the dollar increased 312.5%, a situation which reflects the relative improvement in these activities.

4. The trade halance

Imports suffered a large decline. If all intermediate, consumer and farm goods and foodstuffs are taken into account, imports amounted to US\$1 024 million in 1980 and US\$250 million in 1985.

Exports are more sensitive to the impact of exogenous factors than to internal policy measures. Commodities showed an increase from US\$283 million in 1980 to 452 million in 1985. This increase was due almost exclusively to fresh fruit. The value of foreign sales of agroindustrial products remained unchanged or fell, while the value of forestry derivatives, which are hard to absorb in the sector, was around US\$224 million.

When total imports of farm and food items are compared with total exports of commodities, the balance shows a deficit of US\$741 and US\$515 million respectively in 1980 and 1981, but it later moved into the black, with a surplus of US\$202 million.

5. Employment and wages

During 1981 and up to March 1982 employment in the farming sector grew faster than the national rate. There were large drops in employment in September 1982 and March and September 1983, consistent with what was happening in other economic activities. The subsequent recovery was slower than in the other sectors: the growth rate of jobs in agriculture was 2.4% between 1981 and 1986, as against 11.2% in other activities.

Nevertheless, the number of unemployed increased at a slower rate (6.7%) than in the rest of the country (45.2%) in the same period. This is connected with the different growth rates of the labour force: the national rate was 14.1%, while in farming and forestry the rate was only 2.7%.

No suitable index is available for an analysis of movements of farm wages. On the assumption that they generally keep step with the minimum legal wage, they will have fallen by 34.7% between 1982 and 1985.

VI

Future prospects

After the profound transformations caused by the shifts in relative prices between 1982 and 1987, the agricultural sector has began to operate at a more stable rhythm.

If current macroeconomic policies are maintained in the future, the sector's strength will depend on its exports capacity and the development of domestic demand. The most modern activities —fruit-growing and forestry— ought to expand rapidly as a result of the sizeable investments already made. Production of

legumes and vegetables can be included in these activities.

On the other hand, the prospects for livestock and basic crops are not so rosy, for they depend on the development of internal consumption, and this will grow slowly owing to the poor income elasticity of its demand.

The main cause of the sector's instability is rooted in the peasant economy, where the possibilities of improvement depend on radical alteration of the policies used in the past decade.