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SECTORAL DEMAND FOR CREDIT  
AND CREDIT POLICY (CHILE)

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## INTRODUCTION

In Chile, ten per cent of the Gross Domestic Product (GDP) corresponds to the agricultural sector, a figure amounting, on average between 1975 and 1977, to some twelve billion dollars<sup>1/</sup>.

During the last fifteen years, an important percentage of institutional credit has gone to the agricultural sector -over 30 per cent in the period 1965-74<sup>2/</sup> but falling since 1975, until in 1978 it stood at less than 20 per cent of total commercial bank lending<sup>3/</sup>.

In recent years and particularly since 1974, there have been drastic changes in Chilean economic policy and, consequently, in monetary and credit policies. As regards agricultural credit, this has meant sharp changes in the interest rate, different types of loan and variations in the proportion of loans to this sector corresponding to different institutions.

The importance of agricultural credit in the process of modernization of agriculture and its contribution to sectorial development justify a careful analysis of the effects of credit policies upon resource allocation at the level of the farm.

<sup>1/</sup> Source: Banco Central.

<sup>2/</sup> PPEA (1976); Agricultural Sector Overview: 1964-74. Universidad Católica de Chile.

<sup>3/</sup> Source: Superintendencia de Bancos e Instituciones Financieras.

This paper has the following objectives:

- to describe the behaviour of agricultural credit during the last twelve years but with particular emphasis on the changes in credit policies which have taken place since 1974.
- to compare the credit needs of the sector with the available funds and the forms in which these funds are supplied.
- to examine the causes and implications of the gap existing between needs and supply and particularly its effects upon product structure.

In section 2 the behaviour of agricultural credit in the period 1965-1977 is described. Section 3 examines credit policy and the limitations which it represents as regards the financing of sectorial activity and the development of the sector's apparent comparative advantages. Finally, in the fourth section, some conclusions are drawn.

## 2. THE BEHAVIOUR OF AGRICULTURAL CREDIT

Most of credit to agriculture in Chile is of an institutional origin, coming principally from the Banco del Estado. Non-institutional credit fell from around 30% of the total in 1966<sup>1/</sup> to less than 15% after 1969<sup>2/</sup> whilst data from the period 1974-75 gives the figure of 13-15% for non-institutional credit to traditional smaller farmers and 2% for those who received land under the Agrarian Reform<sup>3/</sup>. A more recent study showed only 3% of agricultural producers receiving non-institutional credit and this falling to less than 1% in the case of those holding land as a result of the Agrarian Reform<sup>4/</sup>.

The evolution of institutional credit between 1965 and 1977 is considered under three headings: firstly, the amounts of credit given<sup>n</sup> and their distribution between loans to cover operational costs and loans for investment; secondly, the behaviour of real interest rates and, thirdly, the specificity of the loans in terms of what they are used to finance.

<sup>1/</sup> Nisbet, Charles (1966). El Mercado de Crédito No-Institucional en Chile rural, Cuadernos de Economía, N°10, Universidad Católica de Chile.

<sup>2/</sup> World Bank (1974), Agricultural Credit, Rural Development Series.

<sup>3/</sup> ATAC (1976), Survey, Small Farmers of the Central Irrigated Agricultural Region of Chile. Agric. year 1974-5.

<sup>4/</sup> Departamento de Economía Agraria (1979), Análisis de las Empresas Agropecuarias de la VII Región, Universidad Católica de Chile.

Table 1 shows lending behaviour between 1965 and 1977. The total volume of credit is seen to be relatively stable between 1966 and 1968 and then to experience sustained growth between 1969 and 1972, reaching its maximum before falling sharply in 1973. Until 1975, it continued to fall, reaching levels lower than those of 1966 but in the last two years shown, there was a marked improvement and total volume of credit again approaches the levels of 1969-72.

The sharp contraction of credit observed between 1973 and 1975 was the result of a complete reformulation of existing economic policy and in particular of the severe monetary cut-back aimed at reducing inflation. This meant that there was less credit available and that it was more expensive in all sectors of the economy whilst for the agricultural sector, it meant, as has already been seen, a reduction in the share of total credit which it had historically received.

Credit to cover operational costs has on average been around 80% of the total and has been proportionally less affected by credit restrictions. Only in 1972 and 1977 were loans for investment a significant percentage of the total (a little over 25%) and they experienced a marked drop when credit was restricted.

Historically, it is the Banco del Estado and the commercial banks which have been the most important institutions in lending to the agricultural sector, representing together 70% of the total

TABLE 1  
CREDIT BEHAVIOUR 1965-1977  
(thousand dollars)

Year	Investment Loans	%	Operational Loans	%	Total Lending
1965	9,758.3	9,5	93,426.4	90,5	103,184.7
1966	32,181.1	19,5	133,242.4	80,5	165,423.5
1967	32,689.9	19,1	138,574.0	80,9	171,263.9
1968	29,647.3	17,4	140,799.9	82,6	170,447.2
1969	35,448.6	20,1	140,751.3	79,9	176,199.9
1970	27,272.0	14,4	162,384.0	85,6	189,656.0
1971	52,095.2	17,9	238,177.9	82,1	290,272.1
1972	90,193.9	25,3	266,541.1	74,7	356,735.0
1973	26,986.8	11,6	204,824.9	38,4	231,811.7
1974	23,233.9	9,9	211,911.5	90,1	235,135.3
1975	22,636.7	14,1	137,313.0	85,9	159,949.7
1976	49,472.7	20,1	196,809.3	79,9	246,282.0
1977	90,912.8	27,3	241,958.5	72,7	332,871.3

SOURCE: Agricultural Sector Overview; 1964-1974 P.P.E.A., Universidad Católica de Chile.  
Credit Institutions.  
Banco Central  
Superintendencia de Bancos e Instituciones Financieras  
ODEPA.

amount of loans for operational costs and investment and with the Banco del Estado being the single most important institution (65% of total lending).

In the period being studied, the cost of credit to the users varied considerably. Between 1965 and 1973, real interest rates on credit for operational costs and for certain investment lines were low (4 to 5% p.a. in 1966 and 1967) or negative (-3 to -5% p.a. in 1968-70) and in 1972 and 1973 reached highly subsidized levels of the order of -150% p.a.<sup>1/</sup>. Owing to high inflation, the real cost of credit continued to be negative and is estimated to have been -9% p.a. in 1975<sup>2/</sup>.

In 1976, however, the forms and costs of credit underwent substantial changes. Operational credit was linked to the consumer Price Index and the real interest rate of loans to finance inputs (seeds, fertilizers, pesticides and veterinary products) and social security payments was 16% p.a. Other items such as <sup>wages and</sup> salaries had to be financed out of the farmer's own resources or using ordinary bank credit which bore considerably higher real interest rates. Table 2 shows real borrowing and lending rates for 1976 and 1978.

<sup>1/</sup> Source: PPEA (1976), op.cit.

<sup>2/</sup> Source: Superintendencia de Bancos e Instituciones Financieras.

TABLE 2  
INTEREST RATES IN REAL TERMS  
1976-1978

Year	Loans	Savings
1976	64.2	8.6
1977	57.1	18.7
1978	42.3	25.0

SOURCE: Banco Central.

Credit for investment purposes had normally been linked to the Consumer Price Index and real interest rates were between 4 and 7% until 1974, rising in 1975 and 1976 to 8 to 12%. At present, rates fluctuate between 10 and 16% depending on the nature of the project to be financed<sup>1/</sup>. Investment loans are, however, very limited as regards quantity. The institutions of the banking system which are responsible for these loans demand heavy collateral guarantees, a condition which means that a large number of farmers, particularly those who received land under the Agrarian Reform and whose property is generally of small size, do not have access to these loans.

<sup>1/</sup> Source: Banco Central and Oficina de Planificación Agrícola.

### 3. THE DEMAND FOR CREDIT AND CREDIT POLICY

As regards the recent evolution of credit policy, there are three aspects which it would seem most relevant to examine - firstly, the possibilities of the sector as regards using its own resources to finance sectorial production and capitalization; secondly, the relation between the cost of credit and the profitability of agricultural production with the implications of this as regards the demand for credit and thirdly, the possibilities of developing profitable alternatives.

Estimates made by the Agrarian Economy Department of the Catholic University, using capital stock series for the agricultural sector, have indicated negative net investment rates for the period 1972-1976, except for the year 1973 in which the figure obtained was just positive. From 1972 to 1976, Gross Domestic Agricultural Investment averaged some 68 million dollars, representing less than 7% of the gross sectorial product and comparing with an average of 91 million dollars (more than 11% of the sectorial product) in the period before 1972<sup>1/</sup>. It may be noted that National Development Plan of the National Planning Office indicates as a "desirable" level of investment

<sup>1/</sup> C. Cuevas and H. Hurtado, Crédito Agropecuario en Chile, Programa de Postgrado en Economía Agraria, Universidad Católica de Chile, 1977. The Series used are taken from R. Casás, Factores que Afectan el Comportamiento de la Participación Relativa del Trabajo: Sector Agropecuario Chileno: 1950-1970, PPEA, Universidad Católica de Chile, 1976. The same methodology was used to extend the series until 1976.

for this sector a figure of the order of 120 million dollars for the period 1976-81<sup>1/</sup>.

It seems that the existence of negative real interest rates served simply as a partial compensation for the severe lack of protection from which the sector suffered as a result of unfavourable terms of trade. Although the rate of effective protection enjoyed by the sector has improved since 1974 in relation to other sectors<sup>2/</sup>, recent studies have confirmed that the profitability of the traditional agricultural activities continues to be low<sup>3/</sup>.

It may, thus be concluded that, although the need to raise the investment level in the agricultural sector is evident, the possibilities of financing part of this using the sector's own resources are very limited and the importance of the role of credit in solving its production and growth problems is clear.

Whether credit is available in the necessary amounts depends, among other factors, on its real cost and upon general monetary policy.

1/ Oficina Nacional de Planificación (1976), Plan Nacional Indicativo de Desarrollo, 1976-81.

2/ H. Hurtado, S. Banfi and G. Edwards, Situación Arancelaria en la Agricultura Chilena, PPEA, Universidad Católica de Chile, 1978.

3/ Departamento de Economía Agraria: Alternativas de Producción Agropecuaria en la VII Región, 1979 and Análisis de Rentabilidad de Empresas Agropecuarias, 1978.

The cost of credit or, in other words, the real interest rate, as a limiting factor depends upon the rate of return on agricultural activities. The available evidence indicates that the so-called traditional crops, which account for 80% of cultivated agricultural land are of low profitability<sup>1/</sup> whilst fruit and cattle-farming represent profitable alternatives<sup>2/</sup>.

At the farm level, profitability has been estimated to be of the order of 12% (gross margin/capital) although varying widely with farm size (2% in the minifundio, 10% amongst Agrarian Reform farms and 18% in the case of larger holdings).

In the conditions described above, it would be natural for resources to be reallocated to non-traditional activities with a higher rates of return, something also encouraged by the policy of opening to foreign trade. The area devoted to traditional crops has, however, remained constant, since 1974, at above 1.2 million hectares<sup>3/</sup>. This is explained basically by the fact that to change to more profitable activities (fruit-and cattle-farming) implies an investment beyond the resources of most farmers and for which they cannot given the collateral guarantees required by financial institutions, obtain investment loans.

<sup>1/</sup> Cereals, pulses, potatoes and industrial crops (rape, sunflowers and sugarbeet).

<sup>2/</sup> Depto. Economía Agraria, *op.cit.*, 1979.

<sup>3/</sup> Source: Departamento de Economía Agraria.

Faced with opening to foreign trade combined with the existing credit policies, the answer of agricultural producers seems to have been to keep to crops less intensive in credit and to cut back on their use of inputs, despite the fact that credit is available for these latter. This is illustrated in Table 3 which shows a reduction in the use of fertilizers in 1974-77, although their real price fell during this period.

TABLE 3  
CONSUMPTION AND PRICES OF FERTILIZERS. 1974-1977

Year	Consumption(thousand tons.)		Prices (US\$/Unit)	
	Nitrogen units	Phosphorus units	Nitrogen	Phosphorus
1974	52.96	103.48	1.21	0.39
1975	37.47	57.54	0.91	0.48
1976	49.93	64.30	0.66	0.18
1977	37.87	32.14	0.55	0.14

SOURCE: Departamento de Economía Agraria.

The absence of lines of credit with which to finance the payment of wages could have deterred agricultural producers from undertaking more profitable but more labour-intensive activities and, thus, created a bias in favour of alternatives meaning lower employment.

For the agricultural year 1976-7, that operational credit requirements were 40% higher than actual borrowing<sup>1/</sup>. This estimate was based on the operational costs which would be associated with the observed product structure and on the assumption that producers would only seek credit once they had exhausted the possibility of meeting costs out of their own resources. The arguments put forward above would explain this gap between credit needs and actual borrowing.

To summarize, it would appear that problems of profitability along with the cost of credit have resulted, on the one hand, in a drop in the effective demand for operational credit and, on the other a potential demand for investment credit which cannot be satisfied because of restrictions on the supply of this type of funds.

<sup>1/</sup> Cuevas, C. y Hurtado, H. (1977) op.cit.

#### 4. CONCLUSIONS

General economic policy should have brought about an important change in the allocation of resources within the agricultural sector but this reallocation has been hindered by the problems described above in the credit sector and it will continue to be a slow process, unless there is a substantial increase in the availability of funds to finance investment projects.

Recently, a series of measures tending to remove restrictions on foreign credit have been introduced and these measures could help to solve the problem of the limited quantity of funds for investment and to reduce domestic interest rates to more moderate levels.

Another important problem is that of access to credit for the large proportion of agricultural producers, particularly those holding land as a result of the Agrarian Reform, who are handicapped by the limited size of their patrimony. A possible solution which appears at the moment to be under official consideration, is that of the State acting as guarantee for such producers, that enabling them to obtain investment credit from financial institutions.