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Interest Rates and Imperfect Competition in the Informal Credit Market of Rural Chile

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Interest Rates and Imperfect Competition in the Informal Credit Market of Rural Chile*

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It has been asserted that informal credit is usually very expensive in rural areas of underdeveloped countries and that [illegible]nt rates of interest are possible largely because of the rural lender's semimonopolistic position.[1] This article reports on empirical research designed to test the validity of this assertion for several types of informal credit arrangements in rural Chile.[2]

Specifically, I propose to show that (1) there exists an informal credit market in rural Chile whose nature and mode of operation distinguish it from the formal credit market; (2) informal lenders can be classified, according to their motives for lending, into two basic types: commercial (village stores, itinerant traders, and moneylenders) and noncommercial (friends, neighbors, relatives, and *patrones*[3]); (3) informal commercial lenders exhort usurous real interest rates, whereas noncommercial lenders often lend at negative real rates; (4) there is little or no competition among lenders; and (5) high interest rates on commercial loans are due in large part to imperfect competition.

The Informal Credit Market in Rural Chile[4]

The informal credit market in rural Chile consists of regionalized transactions of money, goods, and services among family friends, shopkeepers, itinerant traders, landlords, farm laborers, and moneylenders to facilitate consumption, production, and trade. This market is larger (in number of participants), more heterogeneous (on the supply side), and more imperfect than the formal credit market, and its nature and operation differ considerably from the latter. For example, compared to the formal credit market, loans in the informal credit market are usually smaller, granted on a more personal basis, unsecured beyond a verbal pledge, and much more expensive.

The number of rural people lending and borrowing on an informal basis cannot be precisely determined. Approximately 30 percent of the total rural population are clients of state financial institutions, reform agencies, and private commercial banks. The remaining 70 percent of the rural population do not have access to the formal credit market.

In the field survey, 45 percent of the 200 farmers interviewed operated within the formal credit market, 44 percent operated within the informal credit market, and 25 percent were outside both credit markets. The percentages do not add to 100, since some farmers operated in both markets.

The percentage for the formal credit market is high because the sample was taken in Central Chile, where farmers have greater access to financial institutions and have the most favorable transportation routes in the country and where agriculture is more highly commercialized. If the sample were equally weighted in the Southern and Northern regions, one would expect the percentage dealing with the formal market to fall and the informal to rise, since the above conditions would be reversed. These same factors make it more likely that farm operators could get along without financial assistance than their counterparts in the more remote areas.

In fact, the survey results—that 25 percent of farm operators were outside both credit markets—may not be descriptive of the entire country. Certainly, some farmers interviewed probably preferred not to say they borrowed or needed to seek funds. Probably some farmers applied for credit, and would therefore be included in that market, but were rejected and chose to tell us they did not use credit to avoid admitting failure.

Thus, within the total rural population I would estimate that of the 70 percent outside the formal credit market, 45 to 50 percent participate in the informal credit market at least once a year and 20 to 25 percent are outside both markets.

On the supply side the informal credit market is more heterogeneous than the formal credit market, primarily because of the variety of lender-types, the diverse items lent, and the regionality of credit transactions. To be classified as a lender operating in the informal credit market in this study, a lender must *not*: (1) have facilities for mobilizing liquid funds; (2) have formalized procedures for applying for credit; nor (3) be an urban-based institution.[5] Stated positively, the preceding criteria could be used for the formal credit market. Using these limitations, then, the informal credit market of rural Chile consists of the following suppliers of credit: friends, neighbors, relatives, *patrones*, village stores, itinerant traders, and moneylenders.

The only substantial homogeneity within the informal credit market exists on the demand side or among borrowers. Table 1 reveals some of their socioeconomic characteristics. The typical borrower is from the low-income sector. He might be typified a landless farm operator (i.e., a renter or sharecropper) with less than six years of education operating his farm with animal power and hand tools.

As can be seen in the table, 74 percent of informal credit borrowers are landless or own less than 12.5 acres. Nearly 70 percent of the farm operators, including those operating under all types of tenure, had worked farms of less than 25 acres. Eighty-two percent of the informal borrowers

Table 1.

Socioeconomic Characteristics of Borrowers in the Informal Credit Market of Rural Chile

(1) *Land tenure*	
Owners of 12.5 or more acres	26.4%
Landless or owners of less than 12.5 acres[a]	73.6
(2) *Farm size*	
Less than 12.5 acres	48.8%
12.5 to 24.6 acres	20.9
24.7 to 49.3 acres	16.3
49.4 to 123.4 acres	5.8
Over 123.5 acres	8.2
(3) *Education*[b]	
None	22.0%
Primary	60.5
Primary and secondary	15.2
Primary, secondary, and technical	2.3
(4) *Degree of farm mechanization*[c]	
None	20.9%
Light	54.6
Medium	15.2
Heavy	9.3

a This category includes sharecroppers, renters, commoners, administrators and owners of less than 12.5 acres (*minifundistas*).

b Primary represents more than two but less than six years; secondary more than six but less than 12 years; technical schooling means one to three years beyond secondary in some trade like agriculture, masonry, electronics, etc. The majority of those with no education are illiterate; some have a few years of primary education but can only write their name.

c None—only a few hand tools, no horses or oxen. Light—hand tools, including up to two horses and four oxen. Medium—complete set of hand tools, horses and/or oxen and some machinery, but not including tractors or trucks. Heavy—complete set of tools and machinery, including tractors and/or trucks.

had less than six years of primary education, and 75 percent were operating farms without the use of modern technology.

The 8 percent holding properties over 123 acres and whose farms were heavily mechanized were farmers who had access to and operated within the formal credit market. These farmers continued to borrow from informal sources, because credit from financial institutions was insufficient and/or because informal loans could be had more quickly and with less red tape.

Interest Rates and Type of Lender

Table 2 shows the distribution of reported interest rates according to type of lender and type of loan. These rates are from actual loans of currency and merchandise expressed in real terms. For example, there were five cases of friends lending currency at a negative 33 percent interest rate and five cases of lending merchandise at a zero interest rate.

The seven types of lenders who extend credit within this market can be divided into two groups: the informal noncommercial lenders (friends, neighbors, relatives, and *patrones*) and the informal commercial lenders (village stores, itinerant traders, and moneylenders). This distinction is based on the lenders' reported reasons for extending credit. Table 2 reflects the low real interest rates of noncommercial lenders and the high real rates of commercial lenders. This difference exists because the former group does not lend for the purpose of receiving a satisfactory return on loan capital, while the latter group lends primarily for this reason.

The variance in interest rates cannot be explained by differences in type of borrower or use of borrowed funds. Nor does the affluence of borrowers explain the different prices, except that the more affluent borrowers had access to the formal credit market, where the rate averaged 18 percent annually.[6] There was some relation between size of loan and interest rate, with smaller loans carrying a higher rate. The three highest rates of interest reported were paid by nonlandowners, but all other rates were distributed without distinction as to land tenure.

Loans in Kind *versus* Loans in Cash

In about 50 percent of the cases of cash loans, the lenders (with the exception of *patrones*) demand repayment in kind. The repayment pattern alters the type of loan; when the loan is made in cash, but repayment is made in kind, the loan is really one in kind and not in cash. In Chile, a country conditioned by nearly 80 years of continuous inflation,[7] this lending condition is understandable, because the people prefer to hold goods rather than money.

Table 2 adjusts for the above mentioned repayment pattern. It is clear from this table that lending within Chile's informal credit market usually occurs in kind and not in currency.[8] This emphasis might be explained by: (1) the lack of well organized markets, which leads to holding of stocks by informal lenders who, given better markets, would hold cash; (2) the reluctance on the part of informal lenders to hold cash as a result of their experience with Chile's inflation;[9] and (3) the unwillingness of noncommercial lenders to charge interest, which means they must lend in kind and/or demand repayment in kind if they are not actually to *lose* by a credit transaction.[10]

With inflation removed from interest rates on currency loans (as in Table 2), most commercial lenders emerge with positive rates ranging from 27 percent to 360 percent, with an annual mean rate of 82 percent. The

Table 2.

The Structure of Reported Rates of Interest with Money Interest Rates Deflated to Real Interest Rates and Rates on Loans in Kind Expressed in Real Terms[a]

Type of lender[b] and type of loan		Interest Rate Distribution (in annual percentage rates)																			Total cases
		−33	−22	−20	−13	−7	−3	0	18	27	30	33	40	46	60	75	90	128	165	360	
(1) *Friends:*	Cash	4	1			1															6
	Kind							6	1												7
(2) *Neighbors:*	Cash																				0
	Kind							4													4
(3) *Relatives:*	Cash	3	1																		4
	Kind							7													7
(4) *Patrones:*	Cash	16																			16
	Kind							3													3
(5) *Village stores:*	Cash	1	1	1	2	1	1							2					1		10
	Kind							9								1	1				11
(6) *Itinerant traders:*	Cash																				0
	Kind										1		1		1	1					4
(7) *Money-lender:*	Cash									1		1						1		1	4
	Kind							2					1	1	5	3	2				14
Total cases[c]		25	3	1	2	2	1	30	1	1	1	1	2	3	6	5	3	1	1	1	90

a All rates are on actual loans for the agricultural year May 1964 through May 1965, and money interest rates were deflated by using the consumer price index. The terms ranged from one month to over one year, so all rates were adjusted to annual figures.

b The same lender extends credit to different borrowers, in some cases. The rate of interest charged was at times the same to different borrowers, and at other instances different rates were charged by the same lender on similar loan arrangements.

c In seven cases, borrowers did not know the interest rate charged, and there were eight cases of *recargos* (charges in addition to the original sum of value lent).

only exceptions are seven cases of negative rates by village stores, and it is likely that these rates would be positive if we could take into account hidden charges commonly levied with or without the borrowers' knowledge. The effective rates charged by some moneylenders and *patrones* would also increase as a result of hidden charges. It is impossible to know exactly how extensive these practices are, since lenders, naturally, are unwilling to give such information, and many borrowers are unaware of the charges or do not take them into account within the financial arrangement. Some hidden practices encountered during this study are noted below.

(*1*) *Requiring that the borrower pay a premium for the privilege of receiving credit.* (I.e., a moneylender agrees to lend a farmer $100. Then he discounts $20 from the $100 as the premium and charges the farmer 5 percent monthly on the full amount requested, $100. This was mentioned by two borrowers.)

(*2*) *Lending in form of a check that must be passed on to a third party, to be cashed for an additional charge when borrower has no checking account.* (I.e., a village storeowner has a checking account in Santiago and gives his check as a loan to a farmer from his village area. Because the farmer does not have a checking account in a nearby bank nor in Santiago, he cannot deposit or cash it. If he travels to Santiago, the issuer's bank will not cash it, since the farmer is not known at the bank. Therefore, he must give the check to another person to be deposited in the third party's account. For this favor, the third party often charges up to 10 percent of the face value of the check. This practice is common and was mentioned by several borrowers and also by informants who were not part of the borrower sample.)

(*3*) *Demanding repayment in kind and undervaluing the commodity received.* (I.e., some moneylenders and owners of village stores make cash loans but demand repayment in wheat. At harvest time these lenders value the crop at 10 to 20 percent below the previous year's official price of wheat. A majority of borrowers from village stores reported this practice.)

(*4*) *Demanding labor services for the favor of giving a loan. This occurs primarily with* patrones. (I.e., they ask the sharecroppers to perform extra labor duties on the farm without payment. This way some *patrones* escape apparent negative interest rates on their loans—see Table 2.)

(*5*) *Giving no receipts so borrower can be required to pay more than the original amount.* (I.e., when farmers charge items at the village store, they receive no receipt for the goods taken on credit. The owner merely makes an entry in a book as to the amount. Most commonly, to escape the negative rates that appeared in Table 2, the owners either take the expected rate of inflation into consideration when they price their goods or charge the borrower the current [readjusted] price at the time of repayment or both.[11] One store owner [who claimed he never followed such practices] told us that many owners simply overcharge the borrower at the time of repayment by putting down any amount they wish. He said that since rural people are ignorant and many cannot read or write, owners can take advantage of this.)

Size, Terms, and Purposes of Loans

Table 3 shows that informal loans in rural Chile are quite small, as is thought to be the general case in other underdeveloped rural areas. Our field survey found that 78 percent of the informal credit market loans were for amounts of less than $200, and 97 percent were for loans of less than $1,000.[12] Table 3 indicates that borrowers prefer to solicit smaller sums

Table 3.
Size of Loans Granted

Type of Lender	Amount of the Loan (in dollars[a])			
	Less than $200	$200 to $999	More than $1,000	Total loans
Commercial	47	7	1	55
Noncommercial	34	13	2	49
Total loans	81	20	3	104

a An exchange rate of five *escudos* per dollar was used to convert the amount of the loans into dollar figures.

from commercial lenders and larger sums from noncommercial lenders whenever possible, to take advantage of the latter's more attractive conditions.

While the size of loans is usually smaller in the informal credit market, the term is typically longer.[13] Table 4 gives a breakdown of the terms

Table 4.
Terms on Loans Granted

Terms	Type of Lender		
	Commercial	Noncommercial	Total loans
No term	13	17	30
One month	11	3	14
One to three months	4	2	6
Three to six months	2	—	2
Until the harvest[a]	21	21	42
Six to twelve months	1	2	3
More than one year	---	1	1
Unknown	3	3	6
Total loans	55	49	104

a The period of harvest ranged from six to nine months.

granted by informal lenders involved in the study. The most typical term was "until the harvest" (from six to nine months), with 40 percent of the loans carrying this term.

Most borrowers cannot repay on a shorter term, since nearly all substantial earnings come from the annual harvest. Nearly 30 percent of the loans carried no expressed term. This means farmers repay whenever they are able, usually after the harvest. This condition is more prevalent with noncommercial lenders, who offer more favorable conditions. Still, indefinite-term loans from commercial lenders are not infrequent, since these lenders are often satisfied to continue earning interest on the loan and are not concerned with turning their capital over more often. The 11 cases of one-month terms came from village stores. These stores usually do not demand complete retirement of the debt, but only a monthly payment.

Table 5 displays the alleged purposes of the loans received from informal lenders. Half of all loans went for consumption purposes. This emphasis points up the need of these low-income families to sustain themselves over the production period. The majority of loans used for productive purposes were loans of seed, although there were some cases of loans of fertilizer. The mixed category of consumption and production includes all the cases of *patrones* lending to sharecroppers.

Table 5.
Use of Loans Granted

Use	Number of loans
Consumption	52
Production	27
Consumption and production	25
Total loans	104

Having established the fact that commercial lenders charge very high rates, let us look at the structure of the informal credit market in an attempt to identify factors responsible for these high rates. We will deal here only with the informal commercial lenders, since rates on noncommercial loans are very low or negative.

The Market Structure[14]

Factors of importance in analyzing structure of the informal credit market are: (1) number of lenders, (2) lenders' and borrowers' degree of knowledge of the market, (3) lenders' degree of market control, and (4) form of competition among lenders.

1. Number of Lenders

This study isolated three types of informal commercial lenders: itinerant traders, moneylenders, and village stores. Numerically the latter two types dominate, since only six cases of lending by itinerant traders were encountered. The itinerant traders were the most heterogeneous group and included wholesalers, peddlers, and renters of farm equipment. Because the majority of them operated on the basis of cash or immediate payment in kind, the remainder of the study considers only moneylenders and village stores.[15]

Moneylenders were found operating in 18 of the 34 *comunas*[16] surveyed. In all cases they lived and operated within their respective *comunas*, and their operations usually were found no more than 1 to 2 miles from a rural village or were confined to the rural neighborhood.[17] Their effective geographical zone of operation, or their "rural credit market area,"[18] then, is much smaller than the *comuna* unit. The number of moneylenders ranged from none to three, with a mean of one within a rural credit market area. In no case did a moneylender operate in an adjoining rural credit market area.

The other principal informal commercial lender, the village store, could be found in each of the 34 *comunas*, but in only 29 *comunas* were the owners actively engaged in credit operations. The village store's range of operation was less uniform than the moneylenders', because it was determined by the distance to neighboring villages and the density of the rural population. In some areas of Chile this means confinement to a 2 to 3 mile radius from the village, while in other areas it includes 15 or 20 miles. Usually, their effective geographical zone of operation or "rural credit market area," like the moneylenders', was smaller than the *comuna* unit. The number of village stores engaged in lending ranged from two to five, with a mean of three per rural credit market area.

In total, the number of informal commercial lenders (moneylenders and village stores) within a rural credit market area ranged from zero to seven, with a mean of two lenders. The areas with zero or one lender were the neighborhoods of dispersed settlements in the countryside, while the areas of five and six lenders were always nucleated population centers. The ratio of borrowers to commercial lenders ranged approximately from a low of 100 to 1 to a high of 1,000 to 1. Thus, empirical evidence gives the range of imperfect competition from monopoly to duopoly to oligopoly.[19]

2. *Lenders' and Borrowers' Degree of Market Knowledge*

The rural credit market areas are so small that the moneylender and village store owner have intimate personal knowledge of the borrower's circumstances. He knows the size of the borrower's farm, the number of animals he owns, the output of the farm last year, his outstanding debts, the degree of his entrepreneurial skills, etc. This information is common knowledge to most people within the area, since the residents are socially and economically interdependent; however, the informal commercial lenders make it their business to mentally catalog and keep current all such data, to minimize risks.

This degree of detailed knowledge is demonstrated by the rarity of formal contract between lender and borrower and by the absence of financial security in the loan arrangement. We found an exception in one moneylender who required his clients to sign a book with their names (or other identification mark) and indicate the amount loaned and the date of the loan. But the general rule was for monetary transactions to take place on a person-to-person basis, free of any written documents. Furthermore, 66 percent of the loans extended on this informal basis were economically unsecured; that is to say, loans were secured by the verbal promise of the borrower. Borrowers claimed that loan security was "honesty," "friendship," "being known as a good farmer," "being known as a person who honors his obligations," etc.

The farm operators interviewed displayed an appalling lack of knowledge of lenders and of the terms offered. Their ignorance of the lender can be attributed to the regionality of such lending, low levels of education, and economic immobility. Usually a farm operator did not realize the existence of another informal commercial lender in a nearby rural credit market area, let alone know the interest rate charged by this potential alternative source. This was especially true in the case of moneylenders. Since their operations are illegal under Chilean law, transactions are carried out with considerable secrecy. (Only 10 percent of those interviewed could identify another moneylender outside their rural credit market area.) Eighty-three percent of those farm operators dealing with informal commercial lenders had less than six years of primary education. In the 10-province survey, 35 percent of the rural male population could not read or write.[20] The majority of these people were born and raised in the same rural neighborhood where they presently farm,[21] they come from farming families, and their expectations do not call for a future change of occupation. Finally, they have few business or commercial contacts outside their rural credit market area; thus, they receive little information about alternative credit sources.

3. *Lender's Degree of Market Control*

The rural commercial lender appears to hold and exercise various oppressive controls over his borrowers. In one *comuna* farmers were afraid to discuss the activities of three moneylenders for fear of losing their only current credit source. Some lenders sell goods to the borrowers, thereby tying the farmers to a particular village store for consumption necessities and farm financing.[22] Some farmers prefer the convenience of selling directly to the "known" person who extends them credit, because they find it difficult and confusing to sell their output in nearby markets. For other farmers the local lender represents the only source for loans in cash and/or in kind. Any attempt to go outside for institutional or noninstitutional credit would endanger their borrowing chances for the next year. Besides, the only really available institutional source is new and unproven (in the case of Instituto de Desarrollo Agropecuario, INDAP),[23] while the informal commercial lender has been around for years. Also, some lenders hold important positions within the rural community which allow them to assert socioeconomic sanctions and moral suasion on individuals who do not cooperate.[24]

4. *Form of Competition among Lenders*

As previously mentioned, there are two groups of informal lenders within the informal credit market: noncommercial (friends, neighbors, relatives, and *patrones*) and commercial (itinerant traders, village stores, and moneylenders). These groups are essentially noncompetitive. Noncommercial lenders extend credit because of kinship, friendship, reciprocity, tenure traditions, and other reasons aimed at maintaining equilibrium within rural society. Their limited capacity and willingness to extend credit and the absence of full service financing encourages demand for credit to spill over into informal commercial lenders.

No active competition exists, then, between commercial and noncommercial lenders in the informal credit market. Let us now look for competition among moneylenders, among village stores, and, finally, at competition between moneylenders and village stores.

In none of the 200 interviews was there a case where a borrower switched to another moneylender because of price competition (interest rate). In fact, each moneylender's share of the rural credit market area is nearly stationary, with movement occurring only when a borrower defaults or is too far in debt to a lender. The slight fluctuations of interest rates over time are due to demand inelasticities of farmers who face a continuous scarcity of capital.[25]

There are three primary reasons why moneylenders operate on a small scale and do not compete with each other. First, the moneylenders do not have detailed knowledge of a broad market, so their type of business demands a small-scale operation which offers continuous excess demand. Second, because their activities are illegal, they minimize the probability of encounters with legal authorities by restricting their operations geographically in number of clients and volume of credit. The illegality aspect and the separate client market discourage them from competing with a nearby moneylender. Lastly, the moneylenders are principally farmers,[26] whose lending activities do not represent more than 50 percent of their annual gross income. Therefore, unlike the village stores, they lack the capital base to carry on large-scale lending.[27]

Since each rural village generally has two types of stores, their form of competition is different from the moneylenders, who are quite homogeneous. The numerous small-scale stores that carry a few consumption items (coffee, tea, flour, sugar, rice, beverages, etc.) generally operate on a cash basis. The large-scale stores carry a full line of consumption goods, hardware items, and combustibles, and in some cases they own warehouses where they buy and sell farm staples (corn, wheat, potatoes). Usually, stores in the first group are scattered throughout the village and the dispersed settlement areas of the countryside, while the large-scale stores are located around or near the central plaza. We are concerned with the latter group, since they handle the vast majority of credit.

Like the moneylender, the large-scale village store's share of the rural credit market area is stationary, mainly because the clients are tied to the operation through overdue debts or current credit commitments. To be sure, the number of clients and the volume of gross sales move sharply with the cycle of economic activity. For example, the three-month copper strike at the Braden Copper Company in 1966 caused a drastic drop in cash sales for village stores throughout the province of O'Higgins.[28] Here, as with moneylenders, some movement will occur between stores as a result of defaults and/or excessive debt.

With few exceptions, there was little evidence of strong price competition and considerable evidence of uniform pricing within any given village. In some regions, market-sharing arrangements have worked so well that the owners finance each other during the course of the agricultural cycle. For example, in one northern village, the owners of three village stores lend among themselves at 5 percent a month, while charging 10 percent a month to their farmer clients.

Let us look at the competition between the two most important informal commercial lenders, the moneylender and the village store. The moneylender operates illegally, while the village store allegedly works within the law. Because these two sources possess a separate legal status, operate within distinct market areas, and face a similar situation of excess demand for credit, they act as market-sharing duopolists, rather than as competitors. For example, if the moneylender and the village store buy crops before the harvest (*en verde*) as a form of credit extension, they each offer farmers the same price. The purchase price usually represents 50 percent of the crop value, with the loan made about two or three months before the harvest.

In summary, I have demonstrated that the real interest rates existing in the informal commercial credit market are excessive even when inflation is taken into account. I have offered considerable empirical evidence in microeconomic terms supporting the assertion that these usurous rates are due considerably to the high degree of imperfect competition.[29] According to this empirical test, the typical rural commercial lender is either an ologopolist, a duopolist, or an outright monopolist, and his market for loans is confined to the small geographical region in which he lives and operates. The demand curve facing the moneylender is interest-inelastic.[30] Demand is determined by the necessity of farm operators to keep their farms in operation and to support their families until the next harvest, rather than by the farmer's estimate of his marginal efficiency of investment. Lenders possess nearly perfect knowledge of their borrowers, borrowers have little or no knowledge of other lenders, and lenders have nearly complete control over the borrowers' source of funds, with an absence of competition among lenders.

Additionally, the past policies of private and state lending institutions have contributed to the maintenance of imperfect competition in the informal credit market and to the accompanying high rates of interest. Until 1959 there was no important institutional source of credit for the "low income sectors," and as late as 1964 only 4 percent of the total credit extended by private and state lending institutions went to farmers within this sector.[31] It is precisely the low income farm operators who negotiate most frequently with lenders of the informal credit market. Thus, historically, commercial lenders have been free from competition and have been assisted indirectly in maintaining their yearly expropriation of monopoly profits. This points out the need for action, but we would not suggest turning the moneylender into a development financing institution, as has been proposed,[32] nor introducing legislation to control usury, as Chile has done.[33] A more reasonable approach could take the form of: (1) introducing alternative sources of credit for borrowers of the informal credit market, or (2) transforming borrowers into potential clients of existing institutional sources. The former approach would create new credit institutions or programs for low-income farmers. To compete successfully with existing informal lenders, such programs would have to depart from traditional Chilean banking practices—i.e., require little or no paper work and no collateral, deliver money or goods without delay, etc. The latter approach would elevate the "creditworthiness" of borrowers, enabling them to compete for credit from existing institutional sources.

This problem has been recognized by the Institute of Agricultural Development, which plans widespread expansion of its credit program for small farmers,[34] and by the State Bank of Chile,[35] which in 1966 opened a new branch to service farmers normally dependent upon noninstitutional credit sources. This recent effort on the part of state lending institutions aims at offering a competitive source to borrowers of informal credit. The effectiveness of these institutions has been hampered because farm operators are (1) reluctant to submit to highly formalized loan procedures, (2) distrustful of the "outside" personnel used by these institutions, and (3) skeptical of the value of new seeds and fertilizers that cost more than substitutes available from informal sources. There appears to be an urgent need for more local administration, involving personnel born and raised in the rural areas who are as knowledgeable as the informal commercial lenders. Under their supervision, for example, farmers could not borrow animals from a neighbor to falsify loan security a few hours before the supervised credit inspector visits the farm. This type of rural shenanigan creates disrespect for the lending institution, which carries over to repayment habits. Some farmers do not feel obligated to repay loans to "these urban bureaucrats," with whom they have no socioeconomic ties, because they believe they are being loaned their own money—money the farmers claim they have paid in taxes to the government.

Lastly, the second approach, transforming borrowers into potential clients of existing institutional sources, demands an agrarian reform program. Such a program includes a combination of redistribution of rural wealth, expansion of extension services, increased emphasis on education, higher quality farm inputs, and greater accessibility to local markets. The Chilean congress in 1967 passed a new land reform bill which, if implemented, will have a profound effect on informal commercial credit in rural Chile.

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1 See, for example, U Tun Wai, "Interest Rates outside the Organized Money Markets of Underdeveloped Countries," *Staff Papers of the International Monetary Fund*, Vol. VI (1957–58), p. 124.

2 Very few empirical studies have been undertaken, especially in Latin America, to describe and analyze rural interest rates, the types of informal lenders, the form of competition among lenders, and other characteristics of informal credit transactions. See, for example, the conclusions reached by the Comité Interamericano de Desarrollo Agrícola (CIDA) in *Inventario de la Información Básica para la Programación del Desarrollo Agrícola en la América Latina: Informe Regional* (Washington: Secretaría General de la Organización de los Estados Americanos, Union Panamericana, 1963), p. 138.

3 The *patron* has been traditionally the hereditary owner of a farm property, but currently he is any immediate supervisor of farm labor on whom farm laborers are economically dependent.

4 The data on the informal credit market in rural Chile was obtained from a sample field survey of two hundred farm operators (owners, sharecroppers, administrators, commoners, and renters). The sample was selected on a quota basis from 10 of the more prominent agricultural provinces within the 35 provinces of Chile.

5 This classification infers that an informal lender must *not:* (1) receive deposits and/or require membership shares; (2) require written application forms, balance sheets, notarized property deeds, nor inspections by credit supervisors; nor (3) have home offices in Santiago or in other large cities where policies are formulated and where the personnel reside.

6 Interest rates in excess of the current bank rate are illegal.

7 Tom E. Davis, "Eight Decades of Inflation in Chile, 1879–1959: A Political Interpretation," *Journal of Political Economy* (August, 1963); David Felix, *Desequilibrios Estructurales y Crecimiento Industrial: El Caso Chileno* (Santiago: Instituto de Economía de la Universidad de Chile, 1958); Frank Whitson Fetter, *Monetary Inflation in Chile* (Princeton: Princeton University Press, 1931); Arnold C. Harberger, "La Dinámica de la Inflación *en Chile*," *Cuadernos de Economía* (May–August 1965); and "Inflation in Chile," Ch. 3 in Albert O. Hirshman, *Journeys Toward Progress* (New York: Doubleday and Company, 1965), pp. 215–96.

8 The striking exception is the *patron* who grants cash loans to his sharecroppers. The *patron* provides the land and working capital, and the sharecropper provides the tools and labor. The sharecropper normally turns to the *patron* for his financial assistance. *Patrones* often receive the benefit of cheap labor not only of the sharecropper, but of his family. Rates of return to some *patrones* were well over 100 percent on their investment, allowing them to lend without nominal interest.

9 The asset preference of investors for foodstuffs and other primary products under conditions of inflation in underdeveloped areas has been noted recently by Hugh T. Patrick; see "Financing Development and Economic Growth in Underdeveloped Countries," *Economic Development and Cultural Change*, Vol. 14, No. 2 (January 1966), p. 179.

10 For example, Table 2 shows four cases of neighbors lending in kind at no interest. When the money price is increased by an index of wheat prices, the nominal annual rate of interest charged is 42 percent.

11 Higher levels of interest rates resulting from discounting anticipated inflation was also found in Korean informal financial arrangements. See Colin D. Campbell and Chang Shick Ahn, "Kyes and Mujins—Financial Intermediaries in South Korea," *Economic Development and Cultural Change*, Vol. 11, No. 1 (October 1962), p. 63.

12 In contrast, the average size of loan to farmers from the largest commercial bank in Chile was about $10,000 during the agricultural year 1965–66.

13 In the formal credit market the terms range from 30 to 180 days, with some possibility of renewing the loan agreement.

14 The approach used in this section was adopted from an analysis of Southeast Asia and India; see Anthony Bottomley, "Monopoly Profit as a Determinant of Interest Rates in Underdeveloped Rural Areas," *Oxford Economic Papers* (November 1964), pp. 431–37.

15 At the outset of the study, it was hypothesized that commercial informal lenders were obtaining loanable funds from the formal market, thereby providing clear linkage between the two markets. Unfortunately, it was not possible to document this type of linkage. No overt examples of this linkage were observed during any part of the field study. In addition, all farm operators who borrowed from moneylenders were asked where the moneylender obtained his funds. The results were not significant enough to establish this type of linkage. Most said that the moneylender used his own capital, and few indicated he had institutional financing, but no concrete evidence was obtained on this latter assumption.

16 A *comuna* is a minor civil division comparable to the township in the United States.

17 A "rural neighborhood" in this paper refers to a dispersed settlement of farmhouses.

18 The informal credit market is composed of many small "rural credit market areas." The latter vary in size (in the sense of number of commercial lenders and borrowers) and are delineated according to population density, type of terrain, settlement patterns, and available transportation routes.

19 For similar findings in Southeast Asia and India, see Charles Gamboa, "Poverty and Some Socio-Economic Aspects of Hoarding, Saving and Borrowing in Malaya," *Malayan Economic Review*, Vol. 3 (October 1958), p. 44; and Report of the Committee of Direction, *All India Rural Credit Survey*, Vol. 2 (Bombay: Reserve Bank of India, 1954), p. 102.

20 Armand Mattelart, *Atlas Social de las Comunas de Chile* (Santiago: Centro de Investigaciones Sociológicas, Universidad Católica, Editorial del Pacífico, 1965), pp. 125–26.

21 See also William J. Smole, *Owner-Cultivatorship in Middle Chile*, Department of Geography, Research Paper No. 89, University of Chicago, Chicago, 1963, pp. 117–18.

22 To cite an interesting example of how village stores tie clients to themselves, a renter of a large farm made an agreement with a large-scale village store for financing the merchandise needs of his 15 sharecroppers. The renter would receive 180-day credit for $1,800 by giving the store owner promissory notes for the $1,800 plus 18 percent official bank interest. In turn, the renter passed on to his 15 sharecroppers, each month, authorization slips worth $20 which they could use only at this particular village store to obtain merchandise on credit. The owner would honor the authorization slips (signed by the renter), but would discount them 10 percent, giving the sharecropper $18 of merchandise. At harvest time the sharecropper would pay back the village store $20 for each of the six slips he exchanged for $18 of merchandise. The adjusted annual interest rate charged by the store owner was 72 percent (18 percent paid by the renter and 54 percent paid by the sharecroppers).

23 The Institute of Agricultural Development was created in 1962 as a government institution offering financial and technical assistance to small and medium farmers.

24 For other methods of securing repayment not usually encountered in Latin America, see Report of the Committee of Direction, *op. cit.*, pp. 171–72, 245–79, and 483; and C. R. Wharton, "Marketing, Merchandising, and Moneylending: A note on Middleman Monopsony in Malaya," *Malayan Economic Review*, Vol. 7 (October 1962), pp. 34–35. For circumstances in India that approximate those encountered in Chile to reduce risks of default, see B. L. Agrawal, "Risk and Uncertainty in Agriculture: Implications for Agriculture," *Indian Journal of Agricultural Economics*, Vol. 19, No. 1 (1964), p. 136.

25 The inelastic character of the demand for loans was also found in Southeast Asia; see Department of Census and Statistics, *Final Report of Economic Survey of Rural Ceylon, 1950–51* (Colombo, 1954), pp. 46–47.

26 In Colombia, I found that rural moneylenders were mainly "professionals"—that farming activities were but a front, and their annual gross income was made up almost entirely from their lending activities. See Charles T. Nisbet, "Banco Estatal, Banco Particular, Prestamista: Alternativas y Preferencias del Agricultor Colombiano," *Agricultura Tropical*, Volume 22, No. 8 (August 1966), pp. 420–25.

27 Indian moneylenders also were found restrained by limited operating capital; see Frank J. Moore, "Money-Lenders and Co-operators in India," *Economic Development and Cultural Change*, Vol. 2, No. 2 (June 1953), p. 143.

28 Throughout the poorest regions of rural Chile and in the more prosperous regions where farm plots are small, it is typical for younger members of a farming family to work away from the farm in mining, construction, and industry. They are expected to send money home to help support family and relatives.

29 This analysis has not attempted to consider the roles of risk premiums, administrative costs, or opportunity costs in determining interest rates in rural areas that have been stressed by Belshaw, Bottomley, and Schultz. See Horace Belshaw, *El Crédito Agrícola en los Países Economicamente Subdesarrollados* (Roma: Organización de las Naciones Unidas para la Agricultura y la Alimentación, 1959), pp. 102–11; Anthony Bottomley, "The Premium for Risk as a Determinant of Interest Rates in Underdeveloped Rural Areas," *Quarterly Journal of Economics* (November 1963), pp. 637–47; Anthony Bottomley, "The Cost of Administrating Private Loans in Underdeveloped Rural Areas," *Oxford Economic Papers*, Vol. 15 (June 1963), pp. 154–63; and Theodore W. Schultz, *Transforming Traditional Agriculture* (New Haven: Yale University Press, 1964), pp. 85–86.

30 The field survey discovered that the demand curves facing lending institutions of the formal credit market were also interest-inelastic. But in the

formal credit market, the real rate of interest has been negative for 10 of the last 14 years. See Julio César Barriga Silva, *Diagnóstic del Crédito Agrícola en Chile*, Memoria, Facultad de Agronomía, Universidad de Chile, Santiago, 1965, p. 55.

31 Instituto de Desarrollo Agropecuario, *Proyecto de Crédito Agrícola al Sector de Bajos Ingresos* (Santiago, 1965), p. 27.

32 Hugh Patrick suggests: "more should be done to explore the possibilities of utilizing these traditional financiers for production purposes, while reducing their monopolistic powers through increased competition;" *op. cit.*, p. 188. See Bert F. Hoselitz, *Sociological Aspects of Economic Growth* (New York: Free Press, 1960), pp. 149–56, for a discussion of the reasons why money-lenders would be unlikely to perform entrepreneurial functions for accelerating economic development.

33 The only result in Chile has been to drive usurous lenders underground. For a similar viewpoint in Asia, see Economic Commission for Asia and the Far East, *Mobilization of Domestic Capital in Certain Countries of Asia and the Far East* (Bangkok, 1951), pp. 41–42.

34 *La Nación*, Santiago, Chile, June 11, 1966.

35 Instituto Chileno de Administración Racional de Empresas, *Moneda y Credito* (Santiago: Editorial Andrés Bello, 1965), p. 141; and for a good analysis of the government's past performance at financing agriculture through its state bank, see Ernest Feder, "Feudalism and Agricultural Development: The Role of Controlled Credit in Chile's Agriculture," *Land Economics*, Vol. 28–29 (1962–63).

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