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Rural Financial Market Performance: Implications of Low Delinquency Rates

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In contrast to most developing countries, nonrepayment of agricultural loans has not been a problem for the Costa Rican banking system. Delinquency rates have in fact been lower for agricultural than nonagricultural loans and lowest on loans to small farmers. This good performance is due largely to efficient techniques developed for gathering information about potential borrowers and incentives for borrowers to repay promptly to maintain access to bank loans which carry interest rates substantially below equilibrium. The pattern of low delinquency rates reflects the structure of low interest rates which causes farmers, especially small farmers, to be rationed most severely.

Key words: agricultural credit, Costa Rica, credit rationing, delinquency rates, interest rates.

Low rates of delinquency and default often have been the primary criterion used to measure the success of agricultural credit programs in developing countries. This widespread concern with good repayment records is amply documented in various volumes of the Agency for International Development's (AID) *Spring Review of Small Farmer Credit* (Gonzalez-Vega). Low default and delinquency rates are said to be particularly praiseworthy because they indicate that lenders are careful in their selection of borrowers and forceful in their collection of loans. Good repayment records also are said to indicate that loans are being allocated to productive activities because enough additional income is being generated to repay the loans.

This paper argues that low default and delinquency rates do not necessarily indicate that an agricultural credit program is performing satisfactorily. This does not mean that good repayment records are not necessary for a successful credit program, but rather that they are not a sufficient condition for success. The overriding concern with loan repayments

can be explained, if not justified, by the high delinquency rates which typically have plagued agricultural credit operations in developing countries. In contrast to the widespread repayment problems reported by Bottomley (pp. 282-7), Donald (pp. 137-53), the World Bank (pp. 140-3), and the AID *Spring Review*, low delinquency rates characterize agricultural credit operations in Costa Rica, the case to be examined in this paper. However, these low delinquency rates have been achieved in part at the cost of a perverse selection of borrowers: that is, small farmers who are supposed to be the main beneficiaries of the Costa Rican agricultural credit system are in fact rationed more stringently in their access to credit than other classes of borrowers.

The evidence on delinquency rates in Costa Rica presented in the next section of this paper shows not only that overall delinquency rates are quite low, but also that delinquency rates tend to be lower for agricultural than for nonagricultural loans and lowest on loans to small farmers. This unusual pattern is worthy of detailed analysis, if not emulation. However, the analysis which follows reveals negative as well as positive aspects to this pattern of delinquency rates. The Costa Rican agricultural credit system is worthy of emulation in that it efficiently processes information about the probable repayment performance of potential borrowers and provides incentives that encourage borrowers to repay promptly. One of the main incentives for prompt repayment is

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the promise of continued access to credit at interest rates substantially below market equilibrium, but this interest rate structure also provides lenders with an incentive to lend only to those small farmers who are judged to be less risky than potential borrowers in other categories. Moreover, the subsidy implicit in these below-equilibrium interest rates makes it impossible to conclude that good repayment records show that loans are being allocated to productive activities.

Evidence of Low Delinquency Rates

The banking system in Costa Rica consists of a central bank and four commercial banks, all owned by the government of Costa Rica. These four commercial banks are the predominant source of agricultural credit in Costa Rica and provide virtually all of the institutional credit for agriculture (see Vogel and Gonzalez-Vega, especially pp. 10-35, 147). The commercial banks also lend substantial amounts for nonagricultural purposes, but agricultural lending (including both crops and livestock) is the primary component and comprises almost half of the total portfolio (see Banco Central de Costa Rica). The first set of data on delinquency rates to be examined pertains to all four commercial banks and includes nonagricultural as well as agricultural loans. For two commercial banks, more detailed information is available on delinquency rates for agricultural loans, and these latter data provide the basis for most of the main conclusions.

Delinquency rates for the commercial departments of the four banks as of the end of each year 1969-74 are reported in table 1. These delinquency rates are measured by the total value of loans with any payment of interest or principal overdue as a percentage of the total value of loans outstanding. However, some researchers, such as Donald (pp. 138-9),

have suggested that delinquency rates might better be calculated on the basis of the value of loans disbursed or falling due during a year. In the case of Costa Rica, such alternative bases for calculating delinquency rates would make little difference. Because of the predominance of short-term loans, the amount falling due each year has averaged over 80% of the amount outstanding at the end of each year, so that delinquency rates calculated on this basis would be only slightly higher than the rates reported. Delinquency rates calculated on the basis of amounts disbursed actually would be slightly lower than the rates reported because of the approximately 20% per year growth in lending.

The data in table 1 initially seem to suggest that delinquent loans may be a problem for Costa Rican commercial banks: as approximately one-third of credit outstanding is overdue. However, only 3%-4% have payments more than one year overdue, and the percentage of credit between ninety-one days and one year overdue has declined over the 1969-74 period. Moreover, the high proportion of credit with payments between one and ninety days overdue should not be taken to indicate a serious delinquency problem because it reflects primarily Costa Rican bank policy. Judicial proceedings against delinquent borrowers are not initiated until payments are ninety days overdue; but thereafter, delinquent borrowers are actively pursued. Judicial proceedings may be suspended if an agreement can be reached for reasonably prompt repayment, so that only about half the credit more than ninety days overdue is actually under judicial proceedings.

As stated above, more detailed information on delinquency rates is available for two of the four commercial banks. The first of these is the Banco Nacional de Costa Rica, which is by far the most important as it accounts for almost half of total bank credit and almost 60% of bank agricultural credit. In addition, the

Table 1. Commercial Departments of Costa Rican Commercial Banks: Delinquent Loans as a Percentage of Credit Outstanding at End of Year, 1969-74

	1969	1970	1971	1972	1973	1974
1-90 days overdue	19.78	18.11	24.05	24.16	26.84	25.59
91 days-1 year overdue	9.47	8.29	7.53	7.97	7.50	6.34
More than 1 year overdue	4.06	3.69	2.82	3.41	4.03	3.04
Total overdue	33.31	30.09	34.40	35.54	38.37	34.97

Source: Banco Central de Costa Rica, Auditoria General de Bancos, unpublished records.

Rural Credit Department of the Banco Nacional has long been a pioneer in lending to small farmers and continues to be an important source of agricultural credit (see Gonzalez-Vega).¹ Table 2 reports the delinquency rates at the end of each quarter of 1974 for the Rural Credit Department and the three components of the Banco Nacional's Commercial Department: the central office, the financiera section, and the regional offices. The figures in tables 1 and 2 are mutually supportive in two respects. First, most delinquency rates are reasonably stable during the year and, in particular, year-end delinquency rates do not systematically understate end-of-quarter delinquency rates. Second, year-end delinquency rates for the total Banco Nacional correspond quite closely to 1974 delinquency rates for the four banks combined, which suggests that the patterns observed for the Banco Nacional may accurately describe the other three banks.

The most significant pattern which emerges from table 2 is that delinquency rates are substantially higher for the central office and the financiera section than for the regional offices

and the rural credit department. This pattern closely parallels appreciable differences in average loan size and in purposes for which loans are granted (see Banco Nacional de Costa Rica). Less than 10% of the credit from the financiera section and about 60% from the central office is for agriculture, in contrast to more than 80% from the regional offices and 99% from the rural credit department. In addition, average loan size for the central office is more than 300,000 colones, in contrast to approximately 100,000 colones for the regional offices and less than 10,000 colones for the rural credit department (8.57 colones equals one U.S. dollar). Thus, lower delinquency rates appear to be associated with smaller loans and with lending for agricultural purposes.

The other commercial bank for which more detailed information is available on delinquency rates is the Banco Anglo Costarricense. The Banco Anglo is the third largest bank and accounts for almost 15% of bank agricultural credit and more than 15% of total bank credit (see Banco Anglo Costarricense). The detailed information on the Banco Anglo is particularly useful because delinquency rates are reported for different categories of loans and because loans which are on time without extensions or other forms of refinancing are distinguished from those loans for

¹ To qualify as a small farmer under Costa Rican banking regulations, a borrower must have a net income of less than 25,000 colones and total bank loans of less than 100,000 colones, and these same limits apply to all clients of the Banco Nacional's rural credit department.

Table 2. Commercial and Rural Credit Departments of the Banco Nacional: Delinquent Loans as a Percentage of Credit Outstanding at End of Quarter, 1974

	Central Office	Financiera Section	Regional Offices	Rural Credit	Total
March 31					
1-90 days overdue	16.91	33.39	22.46	16.71	19.18
91 days-1 year overdue	12.23	9.85	1.39	2.38	8.15
More than 1 year overdue	2.80	3.05	1.10	1.35	2.22
Total overdue	31.94	46.29	24.95	20.44	29.55
June 30					
1-90 days overdue	16.94	29.97	23.98	16.49	19.17
91 days-1 year overdue	8.99	9.94	2.00	2.28	6.59
More than 1 year overdue	2.58	2.78	0.94	1.29	2.07
Total overdue	28.51	42.69	26.92	20.06	27.83
September 30					
1-90 days overdue	20.33	30.48	20.37	16.62	20.72
91 days-1 year overdue	6.29	8.02	2.24	2.33	5.07
More than 1 year overdue	2.94	2.40	0.86	1.35	2.25
Total overdue	29.56	40.90	23.47	20.30	28.04
December 31					
1-90 days overdue	25.73	27.33	21.42	22.96	24.70
91 days-1 year overdue	10.70	5.68	1.78	2.54	7.13
More than 1 year overdue	2.88	1.95	0.64	1.26	2.10
Total overdue	39.31	34.96	23.84	26.76	33.93

Source: Banco Nacional de Costa Rica, unpublished records.

which extension or refinancing has been granted. The percentage of credit delinquent and with extensions or other forms of refinancing is reported in table 3 for the Banco Anglo as of the end of June 1974.

An important conclusion which emerges from table 3 is that a generous policy of loan extensions and refinancing is not primarily responsible for low delinquency rates in Costa Rica. Just 10% of livestock credit is on time because of extension or refinancing, and even this compares with only 2%–3% for crop and small farmer loans. In addition, delinquency rates for the Banco Anglo confirm the patterns indicated by the data for the Banco Nacional. Among the different categories in table 3, delinquency rates tend to be lowest on crop, livestock, and especially small farmer loans. The percentage of credit between 91 and 360 days overdue and more than 360 days overdue is particularly low for the agricultural categories, especially for small farmers.

The evidence presented above leads unequivocally to the conclusion that delinquent agricultural loans are not a serious problem for Costa Rican commercial banks. In fact, delinquency rates in Costa Rica tend to be lower for agricultural than for nonagricultural loans and to be lowest of all on loans to small farmers. As noted initially, this experience stands in marked contrast to the widespread repayment problems for most agricultural credit operations in developing countries, especially when the lending agency is a government institution.²

Causes of Low Delinquency Rates

Two attributes of the Costa Rican banking system are primarily responsible for the pattern of low delinquency rates achieved. The first is that the Banco Central de Costa Rica establishes the interest rates at which commercial banks can lend, and these interest rates have been set well below the equilibrium levels which would equate demand with supply. From before 1969 through September 1974, interest rates on agricultural loans were set at 8% or 9% (plus commissions of 1%–2% on some loans), while interest rates on various types of nonagricultural loans were set as high as 13% plus commissions. Small farmers are charged the lowest rate, 8%, and pay no commissions.³ The stated objective of these low interest rates is to promote developmental activities, especially in the agricultural sector, and to benefit disadvantaged borrowers, particularly small farmers. However, the main result of such below-equilibrium interest rates is an excess demand for credit which necessitates some form of rationing.

Excess demand for bank agricultural credit in Costa Rica has been documented thoroughly in a 1969 survey by Vogel and Gonzalez-Vega that includes interviews with more than four hundred farmers and more than fifty bank officials. Those interviewed reported that loan applications were rejected and amounts lent were limited because the

³ Faced with mounting inflation, the Banco Central raised interest rates somewhat at the end of September 1974. Interest rates on some agricultural loans were set as high as 11% and for some nonagricultural loans as high as 18%, but loans to small farmers remained at 8%. These changes are too late and too small to have influenced the behavior of delinquency rates for the period covered in this paper.

² Delinquency rates on bank agricultural loans in Costa Rica are not appreciably higher than delinquency rates in the United States on loans from Federal Land Banks and Production Credit Associations and appear to be somewhat lower than delinquency rates on loans from the Farmers Home Administration.

Table 3. Commercial Department of the Banco Anglo Costarricense: Delinquent Loans as a Percentage of Credit Outstanding by Category as of 30 June 1974

	On Time without Exten- sion	On Time with Exten- sion	Total Overdue	1-90 Days Overdue	91-360 Days Overdue	More Than 360 Days Overdue
Crops	86.85	2.30	10.85	6.11	1.28	3.46
Livestock	77.35	10.10	12.55	10.34	1.94	0.27
Small farmer	91.90	3.31	4.79	3.25	1.20	0.34
Industry	74.71	5.20	20.09	9.93	5.84	4.32
Commerce	49.95	15.47	34.58	13.97	8.33	12.28
Service	76.57	7.05	16.38	7.92	2.82	5.64
Other	54.98	4.53	40.49	26.10	13.15	1.24
Total	77.51	5.25	17.24	10.40	3.79	3.05

Source: Banco Anglo Costarricense, unpublished records.

demand for credit by qualified borrowers at low bank interest rates substantially exceeded the funds available. Many farmers reported borrowing from nonbank sources at higher interest rates, and even those farmers with bank loans reported using on the average 1.5 nonbank sources of agricultural credit. No comprehensive survey has been carried out since 1969, but the excess demand for bank agricultural credit almost certainly has increased because higher rates of inflation have reduced real interest rates to negative levels in 1973 and 1974. The rate of inflation in Costa Rica remained well below 5% per year through 1969, hovered around 5% from 1970 through 1972, and then accelerated dramatically to 15% in 1973 and well over 20% in 1974.

Promises of continuing access to bank credit at interest rates well below equilibrium can provide borrowers with strong incentives to repay loans promptly. However, as the AID *Spring Review* thoroughly documents, low interest rates on bank agricultural loans are as widespread as repayment problems in developing countries. What distinguishes Costa Rica from the high delinquency rates found elsewhere is the promise of more low interest rate bank credit in the future if repayment is prompt, but not otherwise. Costa Rican farmers are aware not only of the longevity and continuity of the banking system and of the increasing amounts of credit available for agriculture, but also of the sanctions for failing to repay promptly. Even if the only sanction were the refusal of future loans, most Costa Rican farmers would nonetheless repay promptly because the likelihood of a larger low interest rate loan in the future outweighs in most cases the transaction costs of repaying and negotiating a new loan.

The relatively high proportion of loans between one and ninety days overdue provides an important illustration of the trade-off between prompt repayment and delinquency. In spite of the absence of explicit sanctions during the first ninety days, the majority of borrowers nonetheless repay on time and thereby avoid the possible damage to their reputations which might restrict future access to bank loans. Those borrowers who delay repayment for up to ninety days apparently find that the profitability of employing these resources for the additional time outweighs the possible damage to their credit worthiness. The increase after 1970 in loans between one and ninety days overdue (see table 1) may well

reflect a change in this delinquency-repayment trade-off associated with increasing inflation in Costa Rica. Higher rates of inflation imply lower real interest rates which, other things being equal, make it more profitable to delay repayment for up to ninety days.

The second attribute responsible for the pattern of low delinquency rates is the internal operation of the Costa Rican commercial banks and, in particular, the incentives which lead bank officials to ration credit in a certain way and the mechanisms which have been developed to obtain information about the probable repayment performance of potential borrowers. It should be noted initially that the long tradition of professional banking in Costa Rica and the high salaries compared to most government and many private-sector institutions make it quite easy for the banks to attract highly qualified personnel. Because the commercial banks are government institutions, these personnel might be more strongly motivated to promote developmental activities and to aid the disadvantaged than to maximize profits. However, nonprofit objectives are given little weight for a variety of reasons. Allocating credit to projects with good repayment prospects, and thereby promoting bank profits, can readily be justified as supporting projects with high returns and hence promoting economic development. The low interest rates established for disadvantaged groups (e.g., small farmers) can be an excuse for not giving additional consideration to these groups in allocating credit.

Profit maximization is the dominant objective, mainly because it directly benefits bank employees. Salary increases are based in part on bank profits, and a portion of profits is channeled into pension funds and other fringe benefits for bank employees. Promotion is influenced in part by the profitability of the office or operation for which an employee is responsible. In addition, profitable banks grow more rapidly, and working for a large and growing bank can provide more power and prestige, as well as a higher salary.

In an attempt to assure some compliance with the objectives of promoting development and aiding the disadvantaged, the Central Bank sets various upper and lower limits on the amount of bank credit for certain activities and groups of borrowers. However, Gonzalez-Vega (pp. 20-30) argues convincingly that these credit limits are not part of any systematic plan, but rather are based largely

on projections of historical trends and are also quite vulnerable to political influence. Because the credit limits are often not binding and bank officials generally have some flexibility in allocating credit, even these limits have come to reflect profit considerations as much as development or welfare objectives.

Various models have been developed to explain bank lending under conditions of profit maximization (see, for example, Jaffee and Modigliani). The Costa Rican case is simpler in most respects because interest rates are fixed, so that bank officials can influence revenues only by varying the amounts lent in each category (within the credit limits). Allocating credit under conditions of excess demand to minimize costs thus becomes the primary focus of the analysis, and costs can be divided conveniently into four components: (a) cost of funds, including opportunity costs; (b) fixed costs associated with processing each loan; (c) costs resulting from delinquency and default; and (d) costs incurred attempting to reduce the probability of delinquency and default.

The first two costs can be dealt with quite simply. Although certain categories of activities and borrowers have special lines of credit from the Central Bank or foreign sources, there is no evidence that the cost of funds differs among categories at the margin. The fixed costs of processing a loan will, of course, decline per dollar lent as loan size increases. The last two costs involve a trade-off, as the risks of delinquency and default can be reduced by obtaining more information about potential borrowers and their prospective projects before loans are made and, afterwards, by pursuing problem borrowers more diligently. Higher costs of obtaining information about a particular category of borrowers imply, other things being equal, less information gathering and hence higher perceived risks of delinquency and default for that category.

The mechanisms developed in Costa Rica to obtain information at low cost about the probable repayment performance of potential borrowers are particularly important because in most developing countries the high cost of obtaining such information has severely limited the access of small farmers to bank credit. The Costa Rican banks are quite decentralized, in that most loans can be approved at local offices by branch managers (who typically are trained in agriculture as well as banking) together with local boards of directors. Each

local board is composed of three residents of the area, mostly successful farmers, who are intimately aware of the reputations of potential borrowers for honesty and ability as farmers. This innovative approach to evaluating loan applications (see Gonzalez-Vega, especially pp. 43–48, 96–100) was begun as early as 1914 by the predecessor of the Banco Nacional's rural credit department and, more recently, has been adopted by the other three banks' small farmer credit offices.

Statements made by Costa Rican bank employees during the 1969 agricultural credit survey (and reiterated more recently to the author) indicate clearly the costs of obtaining different kinds of information and the value of this information in reducing the risks of delinquency and default. According to these statements, the main criteria used to evaluate potential borrowers are prior economic success, especially in farming, and a reputation for fulfilling past obligations. Such information can be obtained quickly and cheaply from bank records and from the knowledge of residents who serve on local bank boards. On the other hand, investment plans showing the anticipated returns from projects receive almost no weight in loan approval decisions, even though such investment plans normally are a required part of loan applications. The detailed analysis necessary to make these investment plans useful in projecting returns would be costly and time consuming. Moreover, with low, even negative, real interest rates on bank agricultural loans, most projects proposed by successful farmers are likely to appear profitable, so that prompt repayment can be expected from those farmers who also have good records of fulfilling past obligations.⁴

Guarantees normally are required for bank loans in Costa Rica and might be expected to provide additional assurance of repayment, but bank employees reported that guarantees receive little weight in evaluating loan applications. The reluctance to rely on guarantees

⁴ The recognition that credit often may be diverted to uses other than those indicated in the investment plan further reduces the importance of investment plans. Farmers present the projects which they think will be most attractive to bankers, but the credit obtained often is used to finance alternative investments that appear more profitable to farmers. To the extent that alternative investments actually yield higher returns, bankers should not be too displeased because loan repayment prospects are enhanced. Moreover, efforts to prevent credit diversion, such as those criticized by Lipton (especially p. 549), are likely to be both costly and futile.

reflects the costly procedures and political problems that can arise in exercising guarantees to collect overdue loans. The relative costs of exercising different types of guarantees are reflected in the preference of Costa Rican bankers for cosigners and mortgages over cattle rather than mortgages over farms. Cosigners can be as ready as bankers to apply pressure for prompt repayment, while taking away a delinquent borrower's cattle is procedurally and politically far less costly than taking away his farm.

The cost and value of different kinds of information in reducing the risks of delinquency and default not only have resulted in heavy emphasis on prior success in farming and a record of fulfilling past obligations but also have tended to bias the allocation of bank credit away from new crops and new borrowers and toward traditional crops and returning borrowers. Because gathering information about new crops and new borrowers is relatively costly, they are viewed as too risky and consequently receive little bank credit. Traditional crops, on the other hand, are allocated a much larger share of credit than their share of agricultural output would warrant. According to the Ministerio de Agricultura y Ganadería, just five crops (coffee, rice, sugar, and beef and dairy cattle) accounted for almost 90% of bank agricultural credit disbursed during the 1970-74 period, and coffee and beef cattle alone accounted for about 75%. However, information costs are not necessarily biased against small farmers. Many of them are returning borrowers growing traditional crops, and the innovations discussed above have been particularly effective in reducing the costs of obtaining information about small farmers. Nonetheless, the availability of credit for small farmers, especially if they are new borrowers, should not be overestimated, as the Banco Nacional's rural credit department actually made fewer loans each year in the early 1970s than in the early 1950s (see Gonzalez-Vega, p. 50).

The Costa Rican policy of setting interest rates below equilibrium has been shown to create an excess demand for bank agricultural credit and to necessitate some form of rationing. The structure of these interest rates, together with the foregoing examination of costs, especially information costs, also can explain in the context of profit maximization why Costa Rican bankers have rationed credit to achieve the observed pattern of delin-

quency rates: lower for agricultural than for nonagricultural loans and lowest on loans to small farmers. For each loan application, bank officials will obtain information about the potential borrower until the cost of this information equals, at the margin, its value in reducing the anticipated risks of delinquency and default. Bank officials can then be viewed as ranking loan applications according to the probability of delinquency and default and allocating available credit by going down the list of potential borrowers from low risk to high risk. If Costa Rican bank officials are competent evaluators, this *ex ante* assessment of risk should be reflected in the delinquency rates achieved *ex post*.

Risks, and hence delinquency rates, will not be equalized for different categories of borrowers to the extent that revenues and costs differ among categories. As indicated above, the Central Bank has set lower interest rates for agricultural loans than for most nonagricultural loans and has reserved the lowest rates for small farmers. Bank officials thus will proceed farther down the list to serve higher-risk applicants in the higher-revenue nonagricultural categories and least far down the list in serving small farmers whose loans produce the lowest revenues. If it is assumed that costs of funds are equal for different categories of borrowers, that fixed costs of processing loans are negligible, and that *ex post* delinquency accurately reflects *ex ante* risks because of efficient information gathering, then interest rates (including commissions) of 8% for small farmers, 10% for other farmers, and 14% for nonagricultural loans imply that nonrepayment rates of 3% for small farmers, 5% for other farmers, and 8% for nonagricultural loans would equalize the expected returns to the bank for the different categories. Such nonrepayment rates would not be inconsistent with the pattern of delinquency rates reported in tables 2 and 3.

Conclusion

The Costa Rican banking system has achieved relatively wide service to the agricultural sector, including small farmers, together with low rates of delinquency and default because of the efficient techniques developed for gathering information about potential borrowers and the profit orientation of bank employees. The system also provides strong incentives for

borrowers to repay promptly, not primarily because of explicit sanctions but rather because of the promise of continuing access to bank credit if repayment is prompt but not otherwise. Continuing access to bank credit is attractive in part because of the below-equilibrium interest rates charged on bank loans. However, below-equilibrium interest rates imply excess demand and hence rationing, and the structure of low interest rates for certain categories of borrowers further implies that these borrowers will be rationed most stringently in their access to bank credit. Such rationing, which tends to offset the benefits for the agricultural sector of innovations in information gathering, is reflected in the pattern of lower delinquency rates for agricultural than for nonagricultural loans with lowest rates on loans to small farmers.

The stated objective of low interest rates on agricultural loans, especially to small farmers, is to promote developmental activities and to benefit disadvantaged borrowers. However, as shown above, these deserving borrowers are in fact more severely limited in access to bank credit than other borrowers. Moreover, low delinquency rates do not provide evidence that bank loans are used to finance productive activities in the agricultural sector. Negative real interest rates, such as existed in Costa Rica for bank agricultural loans in 1973 and 1974, mean that borrowers can undertake projects with negative real rates of return and still generate enough income to repay bank loans. The fungibility of credit, including the limited ability of bankers to control even outright diversion of credit to unprescribed uses, means, furthermore, that agricultural loans may not have financed even unproductive agricultural activities.

If low interest rates in Costa Rica are associated with low rates of delinquency and default, might not a movement to higher interest rates provoke an undesirable increase in delinquency? In part such an increase in delinquency would be desirable as it would reflect incentives for bank officials to lend for riskier projects provided the projects had high expected returns. Higher interest rates also could encourage further innovations in information gathering to evaluate new borrowers

and new crops and thereby lessen the concentration of credit in loans to returning borrowers and traditional crops. However, the increase in delinquency would also undoubtedly reflect a reduced incentive for borrowers to repay promptly because maintaining access to bank credit would not be as attractive with higher interest rates. Even this undesirable increase in delinquency might have beneficial aspects if it prompted bank officials to search for other ways to improve service and thereby to increase the attractiveness of bank credit.

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