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RURAL FINANCIAL MARKETS IN LOW INCOME COUNTRIES:

RECENT CONTROVERSIES AND LESSONS

by

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During the past two decades many low income countries (LICs) have experienced rapid expansion in the volume of agricultural loans as well as in the number of rural offices of financial intermediaries. In some countries, such as Brazil and Thailand, loans have been the main tool used to stimulate agricultural development. In other countries, such as India and the Philippines, the building of rural bank branches has been an important part of rural development. While agricultural loans have been emphasized, relatively little attention has been given to mobilizing voluntary financial savings. In many countries, most funds lent for agricultural purposes are provided by governments, urban based banks, or foreign donor agencies.

Governments have used credit programs to boost agricultural output by encouraging farmers to use modern inputs, to make more on-farm investments, and to compensate farmers through inexpensive loans for other government policies that discourage production. They have also been used to help the rural poor by setting lower interest rates on small than on large loans. As is the case with most development efforts, these programs include successes and failures. Some credit efforts, for example, have encountered serious loan recovery problems, and many countries have also found it easier to expand the volume of short-term

credit than it was to supply medium- and long-term rural loans. In a few instances loan recovery problems, combined with relatively large loan transaction costs, have undermined the financial integrity of the intermediary and caused lender collapse.

Over the past decade there has been a large increase in the number of studies, evaluations, and publications focusing on rural finance. Since much of this literature is summarized in Donald (1976), the Von Pischke and others book (1983), and the Adams and others book (1984), we cite extensively from these three sources. (References that follow in the text will give the number and Roman numerals of publications cited in the list of publications at the end of the paper, and page numbers where appropriate.) Our presentation is divided into eight parts. The next section provides a brief discussion of the contribution that rural financial markets (RFMs) make to development. This is followed by additional sections that cover important controversies in, and lessons that can be drawn from, the recent experience with RFMs in LICs.

Finance and Rural Development

Most financial markets conform to the contours of the societies they serve; where economic management is centralized, lending decisions tend to be rigid, concentrated, and programmed; while in societies where production decisions are dispersed, financial markets must be flexible. In most cases financial markets play a more dynamic role in decentralized than in centrally planned economies.

Typically, intermediaries in RFMs are diverse across countries (III, 77-96), but there is more uniformity in agricultural credit policy objectives, rural financial policies, and in problems encountered (I, 36-58). It is common for RFMs to suffer more severe problems than are found in other segments of a country's financial system. This is because the most difficult thing a financial market can be asked to do is to serve clients who are widely disbursed, those who require large numbers of small transactions, and those who operate in an industry that experiences unanticipated shocks in prices, incomes, and yields. Also, because adversities in rural areas often affect a large number of rural households at the same time, it is difficult for lenders to diversify assets and liabilities to cushion such shocks. Government policies that repress agricultural incomes add to RFM problems.

Discussions about RFMs are often confusing because the fungibility of financial instruments is poorly understood. Fungibility, or interchangeability, means that one unit of money, be it owned or borrowed, is just like any other unit of money (V, 74-83). This feature of financial instruments makes it difficult--some say impossible--to control the use of the additional liquidity provided by a loan. In agricultural lending there is no necessary relationship between the justification given on the loan application for borrowing and the marginal change in liquidity use by the borrower. Rural households and firms typically have multiple sources and uses of liquidity.

Fungibility is involved when a borrower substitutes borrowed funds for owned funds, that they planned to commit to the particular activity with or without a loan. In some cases the borrower may decide to divert all of the funds borrowed to some unauthorized purpose. With either substitution or diversion, borrowers do less of the activity specified in the loan document than planners or the financial intermediary intended. Even when loans are given in kind, the borrower has the option of reselling the borrowed goods and to use the funds received from the sale for any purpose.

Because large numbers of borrowers and lenders are involved in rural financial intermediation, it is virtually impossible for policymakers to allocate loans effectively through a decentralized financial system in accord with a credit allocation plan (I, 449-458). Policymakers may program cheap loans for a crop such as rice, for example, and try to force financial intermediaries to extend loans for that purpose. The intent may be to compensate rice farmers for low rice prices through cheap credit. The fact that rice prices are low, however, causes the expected returns from investments in rice-growing activities also to be low. Under these circumstances rice farmers will divert the additional liquidity provided by loans to activities other than rice production, that provide higher returns at the margin or more satisfaction. Because of fungibility and the large number of participants involved in RFMs, the ability of the credit planner to target loans in a decentralized economy is largely illusory.

In recent attention given to RFMs seven major controversies stand out. These are (1) What institutional form is best? (2) How does the economic vitality of agriculture affect RFMs? (3) Which policies are most effective in influencing lender behavior? (4) What is the appropriate interest rate policy in RFMs? (5) How important are borrowers' and lenders' loan transaction costs in RFMs? (6) What is the best way to improve loan repayment performance? And (7) do rural financial savings matter? Each of these topics will be discussed in the following sections, and lessons that have been learned will be drawn where appropriate.

Institutional Form

During the past 30 years numerous institutions have been created to provide rural financial services in LICs. The organizational form has depended on the dominant economic philosophy of the country, the nature of the rest of the formal financial system, and what international donors were interested in at the time. As a result, a large variety of rural financial intermediaries are found across LICs. Most of these institutions can be grouped into four categories: cooperatives, various types of government-owned agricultural development banks, rural private banks, and lending activities included in multipurpose development agencies focusing on a region or commodity. Most countries have experimented with more than one institution and often sustain several types of rural lending agencies.

Initially, many new credit agencies were modeled after those in high income countries. Examples of this are the farmers associations in Taiwan and in South Korea that were patterned after the farmers associations in Japan, rural private banks in Vietnam and the Philippines based on similar banks in the U.S., and the credit unions in Africa and Latin America similar to credit unions in North America.

Recently, there has been less emphasis placed on institutional transfers and more emphasis placed on developing financial intermediaries unique to LICs or on strengthening existing financial intermediaries. Also, there is now less emphasis placed on substituting formal for informal credit. Recent research from various countries has shown that monopoly profits are less in informal lending than had been widely assumed, and that informal lenders often provide some financial services more efficiently than is possible through formal credit programs (V, 233-275). Several countries, including Malaysia, have gone so far as to experiment with using marketing intermediaries as retail outlets for loans provided by government credit agencies (V, 218-224). It is becoming more widely recognized that when formal loans are spent by borrowers, much of this additional liquidity moves into informal financial systems. As a result, an expansion in the formal credit system causes a growth in informal finance and also results in more competition and smaller monopoly profits among informal lenders.

Lessons Learned

Cases can be found where most institutional forms for providing financial services in rural areas have had serious shortcomings or have failed. At the same time, cases can also be found where virtually every institutional form has been at least moderately successful. While certain institutions such as cooperatives work better in some societies than in others, it appears that all financial intermediaries will flounder if the sector it serves is heavily taxed and if repressive policies are used against financial intermediaries. As discussed later, institutions that mobilize savings as well as lend are more likely to be viable than intermediaries who only lend. Policies, not organizational form, appear to be the main determinant of institutional success or failure.

Economic Returns in Agriculture

The well-being of a financial markets largely depends on the economic vitality of the firms and households they serves (I, 194-225). If farmers receive low prices for their products due to distorted exchange rates, food price controls, imports of cheap food, or inefficient markets, their ability to use financial markets will be diminished; they will be less willing to borrow, be less able to repay loans, and have less capacity to save. Low and unstable yields and lack of public investment in agriculture reinforce adverse effects of low farm prices. It is much

easier to develop a healthy RFM where returns to agricultural investments are high, and relatively stable, and rural incomes are increasing.

It is common for countries to attempt to compensate farmers for these adverse effects of other economic policies by providing loans that carry concessionary terms. For example, the government may feel that farmers are "taxed" through low product prices resulting from food price controls, and that this tax decreases farm production. The government may feel it is impossible to remove the tax and decide to use a second-best policy of giving farmers an offsetting "subsidy" through cheap credit (I, 73-75). They hope that the cheap credit will encourage the borrowers to increase production to levels expected without the tax, and that the low-interest-rate subsidy will offset farmers' losses in income due to the tax.

The second-best argument has serious shortcomings when used to justify cheap credit as an equitable and efficient way to compensate farmers for the adverse effects of other policies. This is because the low interest rates on loans induce both borrower and lender to concentrate loans (I, 78-95). That is, lenders have powerful incentives to minimize their cost of lending by concentrating the cheap loans in the hands of relatively few borrowers: those who have borrowed from the lender previously, those with excellent loan collateral, and those who take large loans. At the same time, these influential borrowers have powerful incentives to capture as much of the cheap credit

as possible. These reinforcing special interests result in only a small number of the farmers getting most of the cheap credit and many of the farmers being unable to obtain any cheap loans.

Because only those who receive cheap loans are subsidized, while all who produce the taxed product are disadvantaged, there is an inefficient match between incidence of the tax and subsidy. Those with no loans, or those getting only small amounts, receive little or no compensation through a credit subsidy. Clearly, those who do not receive a loan cannot be expected to increase the output of a product that has a depressed price resulting from government policy, because someone else gets a cheap loan. Even those producers who receive cheap loans are not induced to make investments that are not privately profitable. If it does not pay farmers, without loans, to invest in producing a low-return product such as rice (because of price ceilings) it is still not profitable for them to produce rice after getting cheap credit. Because of fungibility, the producer will divert the additional liquidity to other uses that provide higher private returns.

Because cheap loans tend to be concentrated in relatively few hands, second-best policies also result in less equitable income distribution. Because the size of the interest rate subsidy is proportional to the size of the loans, large borrowers get large subsidies while borrowers of small amounts get small subsidies (I, 120-132). The majority of the farmers who are rationed out of the financial market are unable to obtain any of the cheap credit and realize no subsidy. Since credit access and size of loan are highly correlated with levels of income and

assets owned, the well-to-do benefit most from cheap credit. The second-best argument thus fails on both equity and efficiency grounds.

Lessons Learned

It is unrealistic to expect RFMs to work well if the sector they serve is not economically healthy and growing. Likewise, it is not realistic to expect that cheap and abundant credit can offset low incomes or low returns to investment in agriculture. Cheap credit does not make an unprofitable investment profitable. Cheap credit that is largely captured by the well-to-do also worsens income distributions and the efficiency with which resources are used.

Important Policies and Regulations

Because of the diffuse nature of financial markets it has been common for governments to attempt to influence lender behavior through regulations. While some regulations are used by all governments to maintain orderly activities in financial markets, many policies are aimed at tilting the behavior or performance of the financial system toward a certain group or activity: small farmers, medium- and long-term loans, land reform participants, or producers in a specific geographic area. These attempts to target loans can be grouped into five major categories: those that specify loan portfolio requirements, those that use rediscount facilities, those that shift the risk of loan default to others through crop and loan insurance, limits on branch banking, and nationalization of banks.

Loan Portfolio Requirements

A common way for governments to try to influence intermediary behavior is through requirements placed on loan portfolios. This may include setting of floors or ceilings on certain types of lending and limitations on loan size. For example, in the Philippines and Colombia banks are required to lend at least a certain percent of their total loans for agricultural purposes. In the Dominican Republic the government has set maximum sizes on loans that can be made by the government-owned agricultural bank, and in the Philippines the government has required banks to lend a certain percentage of its loans to small farmers or to rice producers. The main problem with loan portfolio restrictions is that it is relatively easy for the lender to conform to the restriction, yet evade its intent. The lender may make multiple small- to medium-sized loans to one individual to evade a loan-size ceiling, for example. Or a lender can redefine the purpose of a loan: e.g., from that of purchasing a truck to that of an agricultural transportation loan.

Rediscount Facilities

Another popular policy tool has been rediscount facilities. These are windows in the central bank that allow ultimate lenders to discount targeted loans with the central bank and receive additional loanable funds at concessionary interest rates. Most of the LICs that have large and relatively well-developed

financial markets make extensive use of these rediscount facilities. Governments and donor agencies have been particularly aggressive in promoting these facilities as ways of moving outside funds into RFMs. Typically, the ultimate lenders are allowed a spread between the concessionary rate paid to the central bank for the funds and the rate they are allowed to charge the ultimate borrower. Wide spreads are thought to be an effective way of inducing the lender to stress targeted loans.

There are two weaknesses in these rediscount facilities. First, the concessionary interest rates set on rediscount funds are often lower than the rates that intermediaries must pay to mobilize voluntary private savings. This provides powerful incentives for the intermediaries to ignore or even discourage private deposits. The second limitation is that concessionary discount facilities have a weak effect on how lenders make loan decisions. As is true with the ultimate borrower, intermediaries take advantage of the fungibility of funds when it is in their economic interests to do so. Take, for example, a case where a government has imposed a low ceiling on the price that farmers receive for their crop. Yet, the government may feel it is necessary to promote the production of that crop to maintain or expand exports. As a result, the government may open a rediscount window in the central bank to provide cheap loans for that crop. There are strong reasons, however, for the ultimate lender to be very hesitant to expand lending for the crop in question: because expected farm returns for that crop are low. Lenders will

likely transfer their current loans that meet the target requirements to the rediscount line, and thus expand the volume of total funds available for other lending.

Loan and crop guarantees

Several countries have made extensive use of guarantees or insurance to lessen the lenders' risks due to loan default (e.g., Mexico and Costa Rica). In some cases this might be a loan guarantee administered by a government agency that insures the bank will be reimbursed a certain percentage of qualifying loan defaults. These percentages typically range from 20 to 50 percent. In other cases the guarantee may be in the form of crop insurance that is often payable to the intermediary (e.g., Philippines, Sri Lanka, and India). Here the crop insurer agrees to pay the lender a certain percentage of the loan made to the farmer for the crop after allowable crop damage has been verified. The main objective of these guarantees is to induce lenders to extend more loans to a certain target group by transferring part of the loan recovery risk to other agencies.

There are two main problems in these loan and crop guarantee programs. First, they are often expensive. The government may be forced to provide large subsidies to pay for the costs of insured default not covered by premium payments. The government is also often required to subsidize substantial administrative costs. This is particularly important in crop insurance program in the tropics. Because crop damage in these areas often affects a large number of producers at the same time, a large insurer staff is required to make timely assessments of crop damage.

Rural Bank Branches

A few countries have been very aggressive in promoting new rural banks or rural branches of existing banks. In India and Bangladesh commercial banks are forced to open a certain number of rural branches before they can receive permission to open additional, more profitable urban branches. Also, in Vietnam, the Philippines, and in Ghana donor or government funds have been used to induce the formation of private rural banks. The government or donor funds may be given or lent to the new bank on concessionary terms. In many cases these funds provide part of the equity needed by the new bank owners to establish a rural bank.

Banks may respond to government pressure and open token branch offices in rural areas. This may include offices that are only open a few days a week or that only offer a very limited range of financial services. In extreme cases, the new rural branch may mainly mobilize rural savings for use in urban areas.

Bank nationalization

A number of countries have nationalized part or all of their commercial banks. In some cases this occurs as a country changes from a colony to an independent nation. In other cases the government nationalizes banks in an attempt to have greater control over their activities. Costa Rica, for example, nationalized most of its banks over 40 years ago, while Mexico has

done so within the past several years. India, Pakistan, and Bangladesh also have banking systems that are largely nationalized.

The nationalized banks in the subcontinent have been particularly effective in expanding rural financial offices. It is less clear, however, if nationalized banks are more effective than other types of financial intermediaries in increasing the financial services available to the rural poor, in increasing the amounts of medium-and long-term loans that are available to farmers, in providing extensive and attractive financial savings services, in setting up a financial system that lowers the transaction costs associated with financial intermediation, and in creating rural financial institutions that are innovative and self sustaining. Recent research in Costa Rica, for example, has shown that the government-owned financial system there is having difficulty in reaching a large number of the rural poor with loans. Its performance in this regard is not much better than the performance in other countries that do not have nationalized banks.

Lessons Learned

The results from various policy measures aimed at altering lender behavior in favor of a target group or commodity have been mixed. In a few cases the results have been quite different from those intended, and in other cases there have been undesirable side effects. In many cases the net result of these policies has been to orient the financial intermediaries away from mobilizing

private savings in rural areas, and toward getting loanable funds from governments and donors (I, 298-307). Also, because rural financial intermediaries are widely disbursed, it has been relatively easy for them to evade the intent of regulations if it was not in their best interests to conform. It is also common for these regulations to force financial intermediaries to increase their transaction costs as they attempt to conform to or evade the intent of regulations.

Transaction Costs

The amounts of resources used for transactions by RFM participants are important measures of performance. Like a well-oiled and efficient machine, financial markets that perform with little friction create few transaction costs for participants. Where financial markets are not working efficiently these transaction costs can be quite large for both lender and borrower. Transaction costs for the lender include the expenses of mobilizing funds for on-lending, costs of collecting information about potential borrowers, and cost of extending, maintaining and collecting loans (I, 104-119). A significant part of these costs may result from loan targeting requirements placed on the lender by policymakers (I, 96-103). It is often overlooked that borrowers and savers also incur transaction costs in financial markets. For small and new borrower-savers, these costs can be a relatively large part of the costs of making financial transactions. These costs include the time taken by the borrower-saver to make deposits or negotiate loans, transport

costs to visit the intermediary, paperwork costs, possible bribes to get the loan, and the costs of providing loan collateral in a form acceptable to the lender. For new and small borrowers these loan transaction costs can be a major part of the value of their loans, and can be several times the interest paid on loans.

Recent research by Ladman has shown that the costs of financial intermediation are not shared by borrowers-savers and intermediaries in fixed proportions (I, 104-119). Under some circumstances the lenders may find it in their interest to absorb, for preferred clients, some of the loan or deposit transaction costs normally incurred by borrower-savers. At the same time, a lender may force non-preferred clients to incur transaction costs normally absorbed by the intermediary as a way of discouraging them from asking for a loan.

When financial markets are repressed through interest rate ceilings, intermediaries are limited in their ability to discriminate among clients on the basis of interest rates; they often use increased collateral requirements and reallocation of transaction costs as substitute rationing mechanisms. The shifting of transaction costs can be an important part of loan rationing and a way for intermediaries to discourage or encourage people seeking loans.

Several examples can illustrate how transfer of these transaction costs affect credit rationing. When intermediaries are eager to obtain certain borrower-saver business, they might reduce the transaction cost for the preferred clients by sending

mobile banks to villages to do financial transactions (Philippines, Pakistan). They may also allow preferred borrowers to negotiate new loans by phone or by visiting a bank's office only once. At the same time, non-preferred clients may be forced to visit the intermediary numerous times to negotiate, obtain, and repay the loan (Sudan, Brazil), forced to wait in long lines in the sun during each visit, fill out numerous forms to obtain the loan (Haiti, Tunisia, Portugal), and also give gifts to the loan officer in order to receive rapid and favorable attention.

Lessons Learned

The amount and the way transaction costs are shared tell a great deal about how well financial markets are performing. They also reveal how intermediaries react to regulations. If financial markets are working efficiently, the total costs of financial intermediation per unit of money handled should decline over time for both the intermediary and the borrower-saver. These reductions should result from innovations. In most countries those who work in financial markets are creative, but when markets are heavily regulated and repressed, a large part of this creative energy is directed at innovations that dilute the effect of regulations on the financial intermediary. These innovations often increase, rather than decrease, the total costs of financial intermediation.

When loans are targeted, the government or donor agency often requires the intermediary to adopt new procedures to reach those targeted and also provide the funding source with periodic

reports on the extent to which program objectives are met. Often, the effect of this targeting is to increase sharply the lender's cost (I, 96-103). In some cases these additional transaction costs have been so large that they undermined the economic base of the intermediary. Also, in some cases these programs impose additional loan transaction costs on the borrower because of farm plans and collection of information needed to prepare reports for funding agencies. Extensive loan targeting appears to increase significantly the amount of friction in financial markets and also to reduce the overall efficiency.

Loan Repayment Performance

High rates of loan delinquency and default have plagued agricultural credit programs in LICs, especially in agricultural development banks (III, 137-153). It is not uncommon to find more than 30 percent of loans outstanding have payments overdue, and this is often a substantial underestimate of the number of problem loans because of loan refinancing. Accounting practices used in many LICs also disguise the extent of loan problems. A careful analysis of loan delinquency often reveals that the problem is even more serious than appeared at first sight.

There is substantial literature on loan delinquency in LICs, especially pertaining to agricultural credit and public-sector development banks. The traditional view expressed in this literature is that borrowers become delinquent for either of two basic reasons: they are unable to repay, or they are unwilling to repay (V, 183-189). The inability to repay may result from

inadequate incomes which, in turn, are explained by fortuitous events such as bad weather, pests or sudden price declines, or by structural deficiencies such as inadequate markets, infrastructure or technology. The main reasons given for the unwillingness to repay are that loans are viewed as welfare grants or political patronage or simply that borrowers plan from the beginning not to repay and therefore divert loans to consumption expenditures.

Most research on loan delinquency in LICs is based on asking delinquent borrowers why they failed to repay on time. Not surprisingly, most delinquent borrowers report that they were unable to repay for one or more of the reasons suggested above, and not that they were unwilling to repay. This often leads to the conclusion that little can be done about loan delinquency short of basic structural reforms in agriculture. Agricultural development banks, especially those that are supposed to focus their lending on small farmers, are thereby given an excuse for tolerating high rates of loan delinquency.

In more recent work on loan delinquency in LICs (IV, 58-67), it has been shown that delinquency rates are not always high on agricultural loans, even when the lenders are state-owned banks with development objectives. In fact, in the case of Costa Rica, delinquency rates were found to be lower on agricultural than on non-agricultural loans and lowest on loans to small farmers. This performance is explained, in part, by the efficient techniques that the banks have developed to gather information about potential rural borrowers and also by incentives for bank employees to achieve low delinquency rates and for borrowers to repay

repay promptly in order to maintain access to cheap credit. Other authors have pointed out that patronage and politics are often paramount in the operation of state-owned development banks, so that bank employees may have few incentives to implement the policies that are often recommended to reduce high rates of loan delinquency (V, 175-182 and 337-345; I, 36-48 and 183-193).

This increasing awareness of the importance of incentives for both lenders and borrowers in determining loan delinquency can be termed the new view of delinquency, in contrast to the traditional view where borrowers are seen as either unable or unwilling to repay. A more appropriate point of departure suggested by the new view is the costs and benefits to a borrower of repaying or not repaying a loan. A model along such lines has been developed in which a utility maximizing borrower is seen as choosing to play either of two lotteries, where one is to repay and the other is to become delinquent (II). The main advantage of playing the repayment lottery is the probability of receiving a new larger loan in the future on which a positive rate of return can be expected. Against this must be weighed the explicit financial charges on the possible new loan, the transactions costs involved in repaying and then negotiating and receiving a new loan, and the timeliness of the new loan.

When a borrower chooses to play the delinquency lottery, two main outcomes are possible. The lender may do nothing, in which case the borrower keeps the current loan but is denied future loans from that lender, or the lender may take strong action so

that borrowers lose collateral pledged for the loan, in addition to which they may be denied future loans from other lenders. The possible loss from failing to receive a new loan may be larger than the most severe sanctions that a lender might impose on a delinquent borrower.

Christen and Vogel have applied this model to a sample of over six thousand loans made by thirty credit unions in Honduras and have obtained results that support the usefulness of this new approach to explaining loan delinquency (II). The most important factors in determining whether a loan is likely to be repaid on time or to be delinquent were those related to the borrower's assessment of the probability of obtaining a new larger loan in the future on a timely basis. On the other hand, variables traditionally associated with the willingness or ability to repay, such as the stated use of the loan, were not helpful in explaining delinquency.

Lessons Learned

There may be some borrowers who fail to repay because they are absolutely unable to do so and there may be others who plan never to repay under any circumstances. However, the new view of loan delinquency suggests that it is more fruitful to analyze the incentives that borrowers have to repay on time or to become delinquent. Borrowers will find it attractive to repay on time and maintain a good credit rating if they view the lender as able to provide new larger loans in the future on a timely basis with minimum transactions costs. The new view supports improvements:

in selection and collection policies, but goes on to ask what incentives bank employees must have to implement such policies, particularly in the case of agricultural development banks where politics, patronage and the feast-or-famine cycle of project funding may be important. With respect to increased borrower supervision and more stringent guarantees, the new view asks to what extent such policies will simply add to the transactions costs of borrowers and hence make it less attractive for borrowers to maintain a good credit rating with the lender by repaying on time. The new view is clearly skeptical about the extent to which loan delinquency is beyond the control of the lender and is hence skeptical about recommendations of generous refinancing of overdue loans.

Appropriate Interest Rate Policies

The traditional view of appropriate interest rate policies for the agricultural sectors of LICs is that they should be kept low to promote agricultural development and to assist the rural poor. However, it became clear by the early 1970s that agricultural credit projects based on low interest rates were encountering serious difficulties in most LICs (III, 97-117). Some observers began to argue that these widespread difficulties were not due to a different set of specific problems in each country, but rather to the low interest rate policies themselves (V, 365-372; I, 65-77). Low interest rate loans did not appear to increase agricultural output or encourage the adoption of new technologies, and they often failed to reach the rural poor.

Moreover, policies of low interest loans frequently undermined the financial viability of lenders and almost everywhere discouraged the mobilization of voluntary domestic resources by the financial institutions involved.

To analyze low interest rate policies, it is essential to define what is meant by low and to distinguish among different measures of interest rates. With the prevalence of inflation in LICs during the past decade, it has become common to distinguish between nominal and real rates of interest, where real rates are adjusted for the rate of inflation (e.g., I, 65-77 and 120-132). Such an adjustment is necessary because loans are almost always made and repaid in nominal terms (i.e., in money), so that when inflation is significant the nominal rate of interest may seem high while the real rate is actually low or even negative. When the real rates are negative, (i.e., when the rate of inflation exceeds the nominal rate of interest) borrowers repay lenders less in terms of goods and services than what they initially received.

It is also useful to distinguish between the stated rate of interest on a loan and the effective rate, where the effective rate takes into account all charges on a loan, including not only fees and commissions but also such conditions as whether interest is collected in advance and whether compensating balances are required. As pointed out earlier, when governments attempt to set interest rates on loans significantly below the equilibrium rates that would be determined in competitive markets, lenders often respond by imposing additional charges and conditions that

raise effective rates substantially above stated rates. Borrowers will largely be willing to accept these additional charges and conditions so long as effective interest rates remain at least slightly below what would be paid in competitive markets. Moreover, government regulators will find it difficult to keep up with the innovations of lenders who continue their efforts to raise effective interest rates above stated rates, in some cases only doing so by transferring transaction costs to borrowers (I, 166-182).

The foregoing discussion of real versus nominal interest rates and effective versus stated rates helps to clarify problems that arise whenever governments in LICs attempt to establish interest rates below the equilibrium rates. As discussed earlier, low-interest loans for agriculture help to concentrate income distributions, result in productive resource being allocated less efficiently, and also undermine the financial viability of lenders. Lenders must be able to charge adequate interest rates on loans to cover costs, and costs are likely to be particularly high when lenders are supposed to serve a large number of small borrowers in rural areas and sometimes to provide technical assistance and supervision as well as loans. Governments and international donor agencies have often attempted to overcome this cost problem through grants or low interest rate rediscount facilities at the central bank for lenders who serve the designated clientele. Unfortunately, these grants and rediscounts have almost always undermined the incentives and the abilities of lenders to mobilize resources in domestic financial

markets. This not only penalizes domestic savers, and especially the rural poor among among these, but also substantially reduces the likelihood that lenders can avoid serious problems of loan delinquency.

Lessons Learned

The new view of interest rate policies rejects the traditional approach of low-interest loans. These traditional policies have generally failed to achieve their primary objectives of promoting agricultural production and assisting the rural poor and have instead often undermined the financial viability of the lenders involved. The traditional approach has often overlooked the distinction between real and nominal interest rates and has generally failed to recognize the importance of effective, as opposed to stated, interest rates as well as the relationship between interest rates and transactions costs. The main recommendation of the new view is that interest rates must be high enough so that depositors can be adequately compensated and so that lenders can cover their costs.

Savings Mobilization by Agricultural Lenders

Savings mobilization is the forgotten half of rural finance (I, 248-265). The role of financial intermediaries is not only to lend but also to provide deposit facilities for savers in order to have funds to lend. Nevertheless, almost all rural finance projects in LICs have stressed low interest loans for agriculture and have neglected savings mobilization in rural

areas. The bias toward lending is also reflected in the literature on rural finance (III, 159-177). The studies that do deal with savings generally ignore savings mobilization by financial intermediaries and focus instead on the determinants of the portion of income that is saved rather than consumed.

The neglect of savings mobilization can perhaps be explained in part by the often-heard arguments that savings cannot or should not be mobilized in rural areas. It is said that most of the rural population has no margin for saving over consumption and, in any case, does not respond to incentives such as higher interest rates. It is also argued that if financial institutions were encouraged to mobilize savings aggressively, savings would simply be diverted from one institution to another or from rural to urban areas, and higher interest payments to depositors would drive the institutions toward bankruptcy or force them to lend outside of rural areas where higher returns can be obtained. A more basic explanation for the neglect of savings mobilization may be that it is inconsistent with the predominant policy of low interest rate lending.

Three important arguments can be made that savings mobilization should be given at least as much emphasis as rural lending. First, more equitable income distribution is an important objective of rural finance projects, and traditional projects based on low interest rate lending have tended to bias the distribution of income away from the rural poor for reasons discussed earlier. Policies to improve savings opportunities

can, on the other hand, effectively redistribute income toward the rural poor. An essential function of financial intermediaries is the pooling of funds, that is, bringing together small amounts from many savers so that relatively large projects involving economies of scale can be undertaken. Hence, by their nature, financial intermediaries serve more savers than borrowers and have individual deposits that are smaller on average than loans. Policies that focus on improving services for savers are a way to help the rural poor.

There is a myth, mentioned above, that most of the rural population has no savings. If this were true, the rural poor would have become extinct long ago with the onset of the first emergency, and small farmers would have starved while waiting for the next harvest if they failed to save something from the previous harvest. The rural poor, more than anyone else, must have a liquid reserve to meet emergencies. Even the moneylender will not lend to someone with no accumulated or potential surplus, and friends and relatives, as well as rotating savings and credit associations, usually require the ability to reciprocate (I, 232-247; V, 262-268). Bouman has emphasized the widespread importance of savings in informal financial arrangements in LICs, and other authors have reported numerous instances of significant savings capacity among the rural poor (e.g., V, 134-147).

The most important service that financial institutions can provide for rural savers is the opportunity to hold liquid deposits paying interest rates that are at least positive in real

terms. Without this, the rural poor are forced to hold a variety of inflation hedges, many of which earn low or negative rates of return, and to pay an inflation tax on any cash that is held to meet current obligations. The rural non-poor, on the other hand, can often avoid these unfortunate alternative because they have access to a wider range of investment possibilities.

There is another myth, also mentioned above, that most of the rural population does not respond to interest rate incentives. This view is often based on the weak response to so-called interest rate reforms in which interest rates are raised somewhat, but continue to be negative in real terms. In other cases, interest rates on deposits are raised significantly, but financial institutions are expected to continue to lend at low rates of interest. These institutions respond quite logically by discouraging deposits through the imposition of high transactions costs on depositors in the form of inconvenient locations and hours, slow service, excessive paperwork, and high minimum balance requirements. Recent research has shown substantial responsiveness by savers to appropriate policies, including higher real rates of interest (V, 399-407).

Improved resource allocation is the second major argument for emphasizing savings mobilization. Savings mobilization by financial intermediaries draws resources away from unproductive investments, especially inflation hedges, as the opportunity is provided to make deposits that earn positive real rates of interest. These resources can be on-lent by financial intermediaries for those activities that promise the highest rates of

return. Some arguments frequently heard against savings mobilization can actually help to clarify the ways in which savings mobilization can improve resource allocation. It is often said that aggressive savings mobilization by one institution will only divert deposits from other institutions with no gain to society. However, this neglects the gain to savers, who would not have moved their deposits without being better off, and the fact that financial institutions earning the highest risk adjusted returns on the funds entrusted to them will be able to compete most effectively for savings.

It is also argued that no additional savings will be generated because the rural population will not save more in response to higher interest rates. Such arguments often confuse the flow of savings from income with the allocation of a stock of savings among competing assets, and also raise the question of whether savings allocated to inflation hedges, such as inventories of commodities, should be counted as saving or consumption. Regardless of whether more is saved out of income, which is an open question both theoretically and empirically, effective savings mobilization can deploy the stock of assets of the rural population in more productive ways. Arguments for savings mobilization are also supported by the assertion that higher interest rates for depositors will force financial institutions to lend outside of rural areas and away from priority activities in order to obtain higher returns. However, because credit is

fungible, these funds are already flowing toward higher returns, albeit at a higher cost to society from the circumvention of credit controls.

The beneficial effect of savings mobilization on the viability of financial institutions is the third major argument for greater emphasis on savings mobilization. Financial institutions that neglect savings mobilization are incomplete institutions (I, 36-48). They not only fail to provide adequate services for rural savers, but they also make themselves less viable, as can be seen most clearly in the high rates of loan delinquency. When financial institutions deal with clients only as borrowers they forego useful information about the savings behavior of these clients that could allow them to improve estimates of creditworthiness. Furthermore, borrowers are more likely to repay promptly and lenders to take greater responsibility for loan recovery when they know that funds come from neighbors, rather than from a government or donor.

Financial institutions that mobilize savings effectively are likely to have a continual flow of funds available for lending, while those that neglect savings mobilization are inevitably subject to the feast-or-famine cycle of government and donor projects. Financial institutions are likely to have little interest in savings mobilization or loan recovery when cheap funds are available through government loans, central bank rediscounts or loans from international donors. It is generally ignored that the volume of resources that can be obtained through effective programs of savings mobilization and loan recovery is

potentially far greater than the most optimistic estimates of the amount of subsidized loans and grants available from governments and donors.

There is not only mounting evidence that substantial amounts of savings can be mobilized in the rural areas of LICs, but also increasing knowledge about the techniques, including especially positive real rates of interest for depositors, that are particularly effective in mobilizing these savings (V, 399-420). Vogel describes in detail a successful savings mobilization project that was recently carried out in rural Peru by a cooperative bank. The key factors in this success, which far surpassed the goals of the project, were high interest rates on deposits and good service for depositors in terms of convenient locations and hours of operations, a minimum of paperwork and other formalities and rapid attention to clients by the employees of the bank. Savings campaigns which included publicity, prizes and lotteries also proved to be effective, and a particularly significant aspect of these campaigns was incentive payments for bank employees, so that more deposits did not simply mean more work.

Lessons Learned

Research in rural areas of LICs indicate that savers place considerable importance on access to future loans in selecting a financial institution. Also, research in various LICs indicates that innovative institutions have often been quite successful in

mobilizing savings (V, 289-307). At the same time, many formal financial intermediaries have been used by governments or international donors for purposes such as low interest lending that are inconsistent with aggressive savings mobilization, and in these cases savings mobilization has been neglected and the institutions have performed poorly (V, 340-362). Savings mobilization, which can assist the rural poor and improve resource allocation as well as make financial institutions more viable, appears often to have been forgotten because of powerful incentives to neglect savings mobilization.

Looking ahead

Continued population growth, shortfalls in agricultural production, and widespread rural poverty will force policy makers to continue to promote agricultural development in most LICs. If the past is any guide to the future, agricultural credit will continue to be a major part of the efforts aimed at resolving these problems.

It is likely, however, that the problems and controversies that exist in RFMs in LICs will persist. The tendencies of governments to use policies that turn the terms-of-trade against agriculture and their use of a heavy hand in repressing financial markets will not provide healthy environments for the growth of RFMs in the future, any more so than they have in the past. The subtle and complex nature of financial markets make it all too easy for harried policy makers to assume success in agricultural credit projects when more careful analysis shows substantial

shortcomings. Few countries take the time and effort to do a careful diagnosis of the performance of their RFMs. This lack of analysis allows policy makers to sustain fanciful thinking rather than face reality.

The main lesson to be learned from a review of recent research an evaluation of RFMs in LICs is that these markets could play a more efficient and equitable role in development if appropriate policies were adopted. These policies include much more emphasis on mobilization of voluntary private savings in rural areas, interest rate policies that sustain positive real rates of interest most of the time, less attention to eliminating the informal lender, and more stress on improving the overall quality of financial services provided by these markets.

NOTES

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