

PN-AAU - 730
1525 48479

Background Paper No. 9

EFFECTS OF FINANCE ON RURAL DEVELOPMENT

By

Dale W Adams
and
Robert C. Vogel

January 29, 1982

Effects of Finance on Rural Development

by

Dale W Adams and Robert C. Vogel

Suspicious and value judgments have permeated views about financial activities at least since man began to record history. The motives and morals of lenders are regularly questioned and many feel that it is difficult, if not impossible, for financial intermediaries to enjoy a pleasant after-life. These suspicions have obscured the substantial advantages that finance brings to a modern economy--advantages that dissolve barter and induce a rapid increase in financial intermediation with economic growth. Suspicion also nurtures the regulation of financial markets, especially in rural areas, and clouds understanding of the effects that finance have on development. Because policy makers and development technicians poorly understand the basic functions of finance, they often do things that damage or limit its contribution to economic development.

It is easy to overlook the importance of financial markets because of their nature. Financial intermediation is a diffused, subtle process that involves a large number of actors, and takes place in bits and pieces. Only parts of these activities leave tracks on accounting systems; loans among friends and relatives, activities in rotating credit-savings associations, and merchant credits all typically take place without recording. It is also difficult to nail down cause-and-effect in financial markets

because of the fungibility of financial instruments. A loan adds to the amount of liquidity that a borrower has at his disposal. One must have extensive information on the borrowing unit's sources and uses of liquidity to determine how a loan affects these flows. Illusions of control have also led policy makers to fuzzy thinking about the operations of financial markets. Controls, however, are often neutralized because lenders and borrowers can appear to be responding to the intent of regulations, while in fact they are doing something quite different. This appearance of control and compliance lulls policy makers into concentrating their attention on other areas where performance problems are more readily apparent. Governments and donor agencies have felt unreasonably comfortable, as a result, in rapidly expanding the amounts of agricultural credit in many low income countries. It has been felt that this supply-led strategy of finance would stimulate production, cause more new technology to be adopted, and also help the poor to improve their lot.

In the past decade some observers have begun to challenge traditional assumptions and policies that surround financial intermediation, especially in rural areas. Early work by Goldsmith documented the growth in financial activities that occurs with overall growth in an economy. Later work by Gurley, Shaw, and Patrick clarified some of the contributions that finance make to development. The work by Shaw was particularly useful in stimulating others to dig more deeply into how various regulations affected financial intermediation. Shaw's work

helped set aside the notion that financial intermediation was just a thin veil that lightly connected consumers and producers in an economy. He helped bring into focus the nature of firms in the financial sector and the fact that these firms produced goods and services that were very useful. In recent years, Gonzalez-Vega and others have placed particular emphasis on how rural financial markets affect income distributions as well as resource allocation. As is pointed out in other essays in this volume, a number of people have come to feel that rural financial markets in low income countries are performing poorly and that much of this is due to incorrect thinking, policies and assumptions. A major theme of this volume is that finance contributes a good deal to rural development, but that this contribution is warped and stunted, at least in part, by a poor understanding of what these contributions are.

In the discussion that follows we outline the main effects that financial intermediation has on rural development. We start by pointing out the ways finance benefits individual firms and households and then move to a discussion of how finance affects rural service organizations involved in financial intermediation. Our next topic is how finance influences the distribution of resources among groups and sectors in an economy. We also briefly discuss how financial and political systems interrelate. In the final section of the paper we present suggestions on how to increase and improve the contributions of finance to rural development.

Finance and the Firm or Household

It has been common to overlook the benefits that firms and households realize from finance. Long held biases against being in debt have been reinforced by the pain suffered by some who loose their property due to loan default. Nothing is more odious than a moneylender taking the collateral of a financially pressed borrower. The fact that some people are forced to go into debt by economic misfortune also tends to couple debt with misfortune.

It is curious that the discomforts caused by a few going into debt and not being able to repay tends to dominate general views held about financial intermediation. (Because people occasionally die in hospitals, it is not generally concluded that hospitals do not provide many other valuable services.) The use of extreme cases to make general points is refined to an advanced art form in discussions about financial markets. Stories about poor farmers who lose their land to evil moneylenders are retold to the point that people think that most loans go to default and that all lenders of money regularly take away collateral pledged for a loan. These biases ignore the much, much larger number of borrowers and savers who greatly benefit from financial services.

If all firms and households were alike there would be little need for financial intermediation. Heterogeneity in investment opportunities, life cycles, consumption preferences and sources and uses of liquidity is a fertile environment for financial intermediation. Individuals or firms may decide to use the services of a financial intermediary for any of a number of reasons.

A first is that financial instruments allow the user to reduce the costs of exchanging real resources. A rural family, for example, can buy a draft from a local bank to pay school fees for a child studying in the capital city. This is much less expensive than taking farm produce by bus to the city to exchange with the headmaster of the school for educational services. Generating and transferring these claims on resources is an important service provided by financial intermediaries.

A second, and more important, advantage of financial intermediation is to cause more efficient resource allocation. Because of the heterogeneity that exists in rural areas, households and firms may have very different investment and consumption alternatives. At the same time they may experience excesses or shortages of liquidity to respond to these opportunities. A simple example using three widely disbursed corn farmers in a low income country may help to illustrate this important point. Farmer A is elderly, lives on a very productive farm 10 kilometers north of the nearest town, Pueblo Viejo. He expects to receive very low rates of return at the margin, nevertheless, on any additional investments he makes, like using more fertilizer on his corn. He is satisfied with his current consumption pattern, has no desire to buy any new fangled consumer durable, is trying to put away something for his old age, and is holding a good deal of cash. But, he is worried about keeping the cash in the house because of theft, and he wants to keep the money out of

sight so that relatives do not ask for loans. He would also like to get a return from the money.

Individual B lives on his farm located 10 kilometers east of Pueblo Viejo. He is a good farmer, is middle aged, and he and his family very badly want to buy a television set for family entertainment. Because unusual flooding reduced his corn yields substantially during the past six months, the family does not have sufficient liquidity to buy the badly wanted television set.

Farmer C is a young person who lives on his farm located about 10 kilometers south of Pueblo Viejo. He recently inherited a parcel of land that was covered with brush. He has cleared most of the land and knows that he can get a very good yield of corn if he can apply moderate amounts of chemical fertilizer. Unfortunately, he has only enough cash to cover costs of seed purchases and family consumption needs until harvest.

Distance and lack of information preclude Farmers A, B and C from making face to face exchanges in claims on resources. Without financial intermediation, Farmer A will remain unsatisfied with holding a significant part of his savings in cash. Farmer B and his family will not be able to enjoy watching television, and Farmer C cannot buy the fertilizer that would substantially increase his corn yield and income. Substantial gains occur to all involved if a financial intermediary sets up shop in Pueblo Viejo, accepts deposits from Farmer A, and extends loans to both Farmers B and C. Both of the later are willing to pay a premium to the intermediary for this service. They expect

to receive considerable additional satisfaction or income from the things they buy with the borrowed claims on resources.

Farmer A would be happy with the arrangement because he would have his money in a safer place, and would also be receiving a large part of the premium paid by the borrowers for their loans as reward for saving. The intermediary is also happy because he is being rewarded for his services by the difference between what he pays Farmer A for his savings, and what he receives from the borrowers in interest payments. Society is also better off because output of corn has been increased through the more efficient allocation of resources resulting from exchanges of claims on resources through financial intermediation. Society is also better off because all four of the participants in financial intermediation are better off with, than without intermediation.

A third advantage of financial intermediation comes through gains made in risk management. Rural households and firms are typically subject to large variations in income and cash needs. Agricultural production is heavily dependent on the vagaries of weather and price variations are often substantial on agricultural products. The rhythm of production in agriculture also contributes to this problem. Production expenses may be heavy during planting periods, and incomes are largely realized with harvests. These variations and instability in sources and uses of liquidity force rural firms and households to be very concerned with risk management. This is in contrast to a public servant who receives a steady income paid twice monthly, has a

good deal of job security, and is also involved in a government retirement program.

There are a number of traditional ways for individuals to manage risk. Complex land tenure arrangements, multiple parcels of land and enterprises, diversified sources of income, and extended family relationships are some of the techniques commonly used. Households may also manage risks through holding various kinds of assets, labor exchange arrangements, and through loans. This not only includes the occasional use of loans but also maintaining unutilized credit reserves that can be called on in times of emergency. Loans and savings deposits can be an important and relatively inexpensive way for many of the rural households to manage part of their risks.

A fourth advantage of financial intermediation is that it facilitates the acquisition of large investments or large consumer durables. A loan may allow a farmer to buy a tractor years before he could save enough to buy one with his own cash. The tractor may help the farmer to generate more than enough additional income to repay the loan. Systematic saving in deposits may also allow a household to accumulate enough funds to buy the same tractor or some large consumer durable like a car, house, or refrigerator. The intermediary can benefit large numbers of households by accepting their short term deposits and providing a few borrowers with term loans. The scale of an intermediary's operations allows him to transform the term of these claims on resources to the benefit of both savers and borrowers. The saver

does not have to sacrifice liquidity to get a return on savings. And the intermediary can rely on large numbers of depositors for a steady flow of these short term deposits to provide the claims necessary to meet long run borrowing requests. Again, savers, borrowers and intermediaries all gain from the transformation of term structures that takes place through intermediation. One-on-one lending or even lending by informal moneylenders cannot provide the liquidity that savers often want, along with the term transformation that many borrowers require.

Life cycles are a fifth reason for using financial intermediation. The ability to generate income and an individual's or family's needs may be poorly synchronized. In traditional societies this problem is handled by extended families. Members who are in their most productive years are expected to sustain the young and the old in the family. The young "borrow" from their elders until they are old enough to contribute to the family's sustenance, and those of productive age "lend" to the young and repay obligations to the old. Borrowing and lending within extended families begins to break down with geographic dispersion of the family members and the individual independence that emerges in more commercialized economies. It becomes more common for the young to borrow through financial intermediaries to cover some of their educational expenses, to purchase houses and cars, and to get a start in farming. It also becomes more common for those in middle age to save in financial form for retirement purposes. Where attractive and stable forms of

financial saving are available, it is also common for the elderly to heavily rely on financial savings to sustain themselves. With people living longer, handling these intergenerational transfers of claims on what is produced would be virtually impossible without financial intermediation in market economies.

The rapid growth in financial services that accompanies economic advances in a country is a clear indication that there is a demand for these services. People are generally not forced to take a loan nor to make a deposit. The fact that the demand expands very rapidly strongly suggests that most people in a society realize substantial benefits from these services in the ways described above.

Finance and Rural Service Organizations

It is common for both private and public organizations to be involved in providing financial services. In most cases informal financial arrangements do relatively little in the way of offering savings deposit facilities. It is difficult for informal intermediaries to offer the liquidity, privacy, and security that individuals require for their savings. In rural areas many individuals and businesses do provide short term loans to relatives, friends, neighbors, or to clients. Some loans are made because the lenders hope to make a gain from providing the borrower with liquidity, but in many more cases the lender extends credit to reinforce or complement some social tie, or to encourage the purchase of goods or service. Given their

druthers, most merchants in low income countries would rather make cash sales than to hassel with credit. Likewise, few people enjoy lending to their brother-in-law, but feel compelled to do so to keep peace in the family.

Aside from banks, postal savings, credit unions, and savings and loan associations, a number of other agricultural service organizations often provide financial intermediation. In most countries rural cooperatives provide loans to members and in some cases deposit services. Agrarian reform agencies, area development programs, crop promotion and input supply organizations also get involved in granting credit. Provision of loans may also be a major ingredient used to help form rural groups. In many cases these credit activities are supported with funds provided by donor agencies or governments. The aims of the funds may be to help the poor, to promote agricultural production, or to help build the service organization itself. Credit is often viewed as a critical element in a "package of inputs" needed to spur agricultural production. Many of these organizations also view cheap credit as a major tool for helping the rural poor.

Similar to the local merchant, offering loans allows a service organization to build up its number of clients; offering cheap credit is a way of bribing people to do business with an organization. While carrying some benefits for the organization, extension of financial services may also result in some unanticipated results. If large amounts of funds are available for lending, the credit operations may swamp the other activities of

the organization. Agrarian reform institutions may change into largely a supervised credit agency, multiple purpose cooperatives may evolve into largely a lending agency, and extension programs may end up doing mostly loan collection. If the organization experiences serious loan collection problems, as many do, a large part of the management talent may be tied up in trying to recoup loans at the expense of other activities in the organization.

Ideally, financial intermediation services should return a surplus to the organization. This has been true in Taiwan where the credit-savings activities in the very successful farmers associations generate economic surpluses that underwrite many of the other activities of these organizations. This is not common in most countries, however. Most organization are forced to extend loans at interest rates that do not cover their costs of lending. If they offer savings deposit services, the interest rates paid do not provide enough incentive for savers to deposit large amounts. This may result in a large number of accounts with small deposits that are very costly to service. In addition, the agency may experience serious loan recovery problems. These costs of lending, costs of deposits, and defaults can undermine the entire financial integrity of the organization.

While a government or an outside donor may be willing to temporarily subsidize an agency to cover some of these costs, at some time it will be called upon to stand on its own feet. When this occurs the organization implodes. This is usually associated with accusations of mismanagement or dishonesty and a

change in management. The organization may be renamed, disappear, combined with some other organization, or exist for a time as a virtual empty shell. Like a victim of radiation, the members of the organization may never know what sapped the organization's financial vitality. They may not see clearly that it lost money on its financial intermediation activities and that its poor performance in handling savings and credit led to a loss in support at higher levels. One can always argue, for example, that extension services are making a valuable contribution, even though educational results are difficult to measure. It is much easier to criticize extension agents for being ineffective if they are associated with a credit program that collects few of its loans.

The provision of cheap credit affects organizations in other unanticipated ways. As Gonzalez-Vega points out later in this volume, there is generally excess demand for cheap credit. Borrowers want more loans than the organization is able to supply. This forces the lender to ration the credit through non-market means. The net result of this rationing process is that the well-to-do and the influential colonize the credit activities of the organization. Only a few of the potential clients or members of the organization receive loans. This, in turn, weakens the interest of clients and members, who do not get loans, in being involved with the organization. This has the opposite effect of a "sale." Some merchants use sales to increase the volume of traffic moving through their facilities in the hopes of

selling the customer something in addition to the good that is sale priced. Cheap credit results in fewer people coming to organizations providing this service. The organization is taken over by local elites who capture most of the credit subsidy.

Any organization, or individual for that matter, is beholden to those who provide support. The government or central bank may look to outside donors to provide funds to sustain or expand the amount of agricultural credit. This foreign aid carries obvious reciprocal obligations beyond repaying the foreign loan. Likewise, banks or cooperatives that draw money from the central bank for on-lending to farmers subject themselves to central bank control. By borrowing, the farmer also opens himself to intrusions by the lenders. Banks and agricultural service agencies may become addicted to the cheap funds provided by central banks, especially if they mobilize few local savings. This addiction may make these organizations very vulnerable to political intrusions, and evolve into a virtual patronal relationship from top to bottom in the financial system.

Finance and Groups in the Economy

All too often it is overlooked that the operations of financial markets can have a powerful differential impact on various groups in an economy. It may have a substantial effect on the amount of resources available to various sectors in an economy as well as on income distributions. Because of the diffused nature of finance, these effects are often not readily apparent. In

some cases the operations of financial markets yield results that are diametrically opposed to publicly stated goals.

As allocators and mobilizers of claims on resources, financial markets can play a major role in the movement of resources from one sector to another. If a financial system, for example, mobilizes more deposits in an area than it extends in loans, some of the claims on resources mobilized must be moved out through the financial system to other areas or sectors. These transferred claims allow borrowers in other areas or sectors to call on resources located in the areas where deposits were mobilized. It is common for financial markets to mobilize more money in deposits in rural areas than they extend in rural formal loans. It is also common for financial intermediaries to do the same thing in poor urban areas. In some cases the volume of savings transferred out of rural areas and poor urban areas may far exceed the amount of government assistance directed at easing problems in these areas. At least in the Japanese case, the transfers of resources through financial markets were very substantial (Kato).

Where negative real rates of interest are in force, widespread defaults on loans are tolerated, and large agricultural credit portfolios are involved, the operations of financial markets can also transfer large amounts of income to borrowers. This may cause a further skewing of the income distribution because the subsidy is always proportional to the size of the loan. Large borrowers get large subsidies, small borrowers get

small subsidies, and non-borrowers get no subsidy. In addition, negative real rates of interest on deposits transfers purchasing power from savers to borrowers. If borrowers are generally richer than savers, this will further skew income distributions. At least in Brazil, this income transfer has been very sizable. In recent years a relatively small number of borrowers in Brazil have received income transfers equal to 3-5 billion dollars U.S. each year because of negative real rates of interest on agricultural loans.

Finance and Politics

In most countries there is a close relationship between political and financial systems. Governments feel obligated to regulate the goings on in financial markets. This may include granting authority to open up shop as an intermediary through charters, interest rate controls, reserve requirements, and limitations on the range of activities that the intermediary can undertake. Typically, government controls on the financial system are more comprehensive than are controls on any other marketing system in the country. It is also common, especially in low income countries, for governments to manipulate financial markets for specific ends. The government may even go to the extent of nationalizing much or all of the banking system in order to "gain control" over its operations.

It is also very common for governments to use credit programs in attempts to promote a particular industry or

enterprise. Cheap credit may be used to support local industries that are part of an import substitution program, for example. Cheap credit can also be used to try to promote the production of a particular crop like rice or coffee. Credit programs may also be used as a form of disaster relief. Droughts, wars, frosts, typhoons, floods, and hail may all be used as excuses for initiating a new concessionary credit program. Governments may also try to promote long term investments in things like irrigation facilities, tree crops, or livestock by offering long term loans. In some countries these credit activities make up a very large part of all of the efforts aimed at rural development. As might be expected, donor agencies are heavily involved in activities that reinforce government priorities. As a result, agricultural credit projects have made up a large part of the agricultural portfolio of the World Bank, the Inter-American Bank, and the Agency for International Development.

At times, some of the economic considerations involved in manipulation of financial markets can be swamped by political considerations. Because of the normal use value of loans, the potential for default transfers, and the income transfer involved in negative real rates of interest on loans, credit can become a potent tool for allocating political patronage. The beauty of this tool is that it is very flexible, its results are generally well masked, the results can be highly focused, and the costs of the patronage are diffused throughout the economy.

Improving the Contribution of Finance

Few careful observers of formal rural financial markets in low income countries are satisfied with the performance of these markets. They are highly fragmented, provide little or no service to many rural residents, are shot through with politics, and are often on the edge of bankruptcy. In most low income countries the operations of financial markets are causing further skewing in income distributions, gumming up more efficient allocation of resources between firms and households, and retarding the capital formation process. These problems are compounded by the very low expectations that most policy makers have regarding agricultural credit programs. They have come to expect that loans will not be repaid, that rural people will not save in financial form, and that credit agencies cannot pay their own way. In all too many cases they assure these results by adopting policies that force lenders and borrowers to conform to these low expectations. These expectations and policies seriously limit the overall contribution of financial intermediation to rural development. Financial markets that are stunted and deformed do not support the development process adequately.

Improvements in the performance of rural financial markets will require major changes in how these markets are used, and a much clearer understanding by policy makers of the important contributions these markets make to economic development. Because of the diffused and subtle nature of these markets, much of this contribution must be taken on faith. Some additional

research, however, could help clarify the extent and nature of these contributions. Once policy makers more clearly understand financial markets, they will come to understand the limitations of policies aimed at altering the performance of these markets. All too often, policies are responsible for poor performance. As Kane points out elsewhere in this volume, adding more regulation on top of those that already exist does not solve the problem.

Specific recommendations for increasing the contribution of finance must be time and place specific, largely because of the delicate and intimate relationship between financial markets and politics. Broad outlines of the policy changes that are needed are sketched in the essays that follow. These suggestions include much more emphasis on mobilizing voluntary financial savings, maintaining positive real rates of interest in rural financial markets, using market force to allocated loans, placing more stress on the strength and vitality of the financial intermediary, and emphasis on the prices and yields of farm products rather than on cheap credit as a way of stimulating production. These adjustments will also include much more favorable treatment of informal intermediaries, and less emphasis on trying to measure the impact of credit at the borrower level to justify credit programs.

New thinking on rural financial markets also stresses the futility of trying to use financial markets as a major instrument to redistribute income in favor of the poor. Several essays in this volume point out that cheap credit and even cheaper saving

deposits are very damaging to the rural poor. Cheap credit programs are almost always captured by the non-poor. Under the best of circumstances, financial markets can have only a neutral effect on income distributions. With cheap credit policies income distributions will become even more concentrated.

In all too many cases agricultural credit programs are initiated because they are easy to start or expand, because they can be done rapidly, and because their ultimate effects are diffused and masked. These cheap agricultural credit activities divert attention and resources from more important problems in rural areas like paying producers decent prices for their products, improving technology so that farmers get decent yields, and investments in other services that will make rural areas pleasant places to live.

The operations of financial markets are difficult to understand. It is even more difficult to comprehend the effects that these markets have on economic development. Traditional suspicions, assumptions, and biases undermine this understanding. It is past time for more positive views to emerge about the contribution and importance of rural financial markets.

- 21 -

REFERENCES

- Goldsmith, Raymond W. Financial Structure and Development. New Haven, Conn.: Yale University Press, 1969.
- Gurley, John G. and Edward S. Shaw. Money In A Theory of Finance. Washington, D.C.: The Brookings Institution, 1960.
- Kato, Yuzuru. "Mechanisms For The Outflow of Funds From Agriculture into Industry in Japan." Rural Economics Problems. 3(1966): 1-20.
- Long, Millard. "A Note on Financial Theory and Economic Development." In Rural Financial Markets in Developing Countries: Their Use and Abuse. Edited by J.D. Von Pischke, Dale W Adams, and Gordon Donald. Baltimore: Johns Hopkins University Press, 1982.
- Patrick, Hugh T. "Financial Development and Economic Growth in Underdeveloped Countries." Economic Development and Cultural Change. 14(1966): 174-189.
- Shaw, Edward S. Financial Deepening in Economic Development. New York: Oxford University Press, 1973.