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FINANCIAL DEEPENING FOR AGRICULTURE IN CENTRAL AMERICA

Abstract

This paper has four parts. The first one examines the importance of financial deepening in economic development. The second one describes the process of financial deepening in Central America and identifies its deficiencies. The third one explores the impact of the recent economic crisis on the real size and performance of the Central American financial systems. The fourth one briefly analyzes the role of financial services in agricultural development as well as the difficulties of supplying these services to the rural population. Finally, the paper explores the differential impact of the crisis on the provision of financial services for agriculture.

After two decades of substantial financial deepening, with the crisis the real value of deposits mobilized and loans outstanding dramatically declined and the favorable trends were reversed. The private sector was "crowded out" from loan portfolios. Portfolio concentration and default increased. The financial system became less of an intermediary between private savers and investors and more of a fiscal instrument to tax resources away from savers. Transaction costs increased, and the urban bias of financial development augmented. The share of agricultural loans in total credit declined; the share of small farmers declined even further. The concept of the iron law of interest-rate restrictions is used to explain these changes in portfolio composition after financial repression increased.

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The Importance of Financial Deepening

Until recently, the role of the financial system and the nature of its contributions to economic growth in the less developed countries (LDCs) had received little attention. Although Schumpeter had recognized the role of finance in the unlocking of resources for innovation, investment, and growth, this role was excluded from the main traditions of theory and practice with respect to the LDCs. Following the seminal work of Shaw and McKinnon, however, it has become increasingly accepted that the financial sector does matter in economic development.

Shaw insisted in looking at the financial system as just another productive sector, with its industries, markets, prices, institutions, and policies. Financial firms combine inputs, primarily human, in order to produce a complex set of financial services, used mostly as intermediate inputs into other production processes. These financial services are not costless, however. Supplying them is expensive in resources, so their provision is justified only if they increase aggregate productivity sufficiently to compensate for their opportunity cost.

The contributions of the financial sector to economic growth are associated with the provision of at least four types of services (Long). The most basic of these services is the provision of a universally accepted medium of exchange, which reduces the cost of conducting transactions in commodity and factor markets, increasing the flow of trade and enlarging market size, and thus improving the productivity of resources through specialization and the division of labor, greater competition, and the exploitation of modern technologies and of economies of scale. This "monetization" of the economy releases resources from the search and bargain processes associated with barter and, through greater market integration, increases the efficiency of resource allocation.

Second, the financial system provides services of intermediation between surplus (savings) and deficit (investment) units, thus enhancing the accumulation of capital and improving its allocation. Surplus units are those with abundant resources of their own, as compared to their internal investment opportunities. They earn low marginal rates of return on their assets, when compared to deficit units. These, in turn, possess few resources, relative to opportunities, and could earn relatively high marginal rates of return, if they had access to the resources needed to take advantage of those opportunities.

In the absence of finance, producers are condemned to take advantage of their opportunities only to the extent allowed by their own endowment of resources, while in other cases are forced to invest them poorly. There is no reason to expect that those with the capacity to save are necessarily those with the best investment opportunities. Through the provision of intermediation services, the financial system contributes to the elimination of inferior uses of resources and, at the same time, facilitates better alternative uses of them. This is accomplished when the financial system offers wealthholders new assets (e.g. bank deposits) that are more attractive forms of holding wealth than the unprofitable uses thus eliminated. The intermediary, in turn, transfers claims on resources to others with better opportunities. From this perspective, the financial system offers valuable services not only to borrowers, but also to depositors.

Market fragmentation, and the small size of transactions, high costs of information, and uncertainty and risks characteristic of rural economies cause high transaction costs in the financial markets of LDCs. As a result, returns to savers are low, the total cost of funds to borrowers is high, the size of financial markets is small, and the volume of funds channeled and the variety of financial services provided are limited. In turn, market fragmentation and high transaction costs imply a large dispersion in marginal rates of return accross the economy, signaling unexploited opportunities for improved resource allocation. Financial progress results from the reduction of risks and transaction costs, through the exploitation of economies of scale and of scope, professional portfolio management, risk-reducing diversification, the accumulation of information, and the establishment of bank-customer relationships. Borrowing and lending costs cannot be reduced by decree (e.g. usury laws). Rather, interest-rate restrictions and other forms of regulation usually increase the level of the transaction costs imposed on actual and potential market participants (Gonzalez-Vega).

Third, the financial system provides reserve-management services. Most economic units accumulate stores of value for emergencies or to take advantage of future investment opportunities. The financial system may reduce the costs and risks of these precautionary and speculative reserves while, through the provision of "unused lines of credit," it reduces the desired stock of reserves, thus releasing resources for productive purposes. Finally, the financial system provides services of fiscal support for the public sector. This is an important contribution, in view of the weakness of tax structures and securities markets in LDCs. The financial sector also contributes to foreign-exchange management.

Economic development both depends on and contributes to the growth and diversification of the financial system. Financial deepening matters to the extent to which it provides incentives for savings and investment, it encourages savers to hold a larger proportion of their wealth in the form of domestic financial assets (rather than unproductive inflation hedges, foreign assets, and other money substitutes), and it channels resources toward better alternative uses. The extent to which these services are provided depends on the real size of the financial system and on the efficiency of its performance, as measured by the magnitude and dispersion of the transaction costs imposed on all market participants.

Financial Deepening in Central America

During the 1960s and most of the 1970s, the Central American countries experienced a steady and significant process of financial deepening. This process was reflected by the establishment of numerous financial institutions, the provision of a wider range of financial services, increasing competition, the geographical expansion of the branch network, and the growth of deposits mobilized and of credit volumes in real terms. By 1961 the financial system of the Central American countries was still comparatively small, as reflected by the ratio of the money supply (in the broad sense of currency plus demand, savings, and term deposits) with respect to the GDP of only 15%. This resulted from comparatively low incomes, small domestic markets, and large subsistence sectors. This ratio had increased to 29% by 1976, a comparatively high levels for LDCs, ranging from 24% for Guatemala to 41% for Costa Rica. Financial deepening was made possible by vigorous output growth, exchange-rate stability, and the absence of inflation. This, in turn, resulted from the openness of these economies and from cautious fiscal, credit, and monetary policies targeted to maintain a fixed exchange rate.

Despite financial deepening, as measured by the ratios of financial magnitudes with respect to the GDP, the Central American economies continued to rely heavily on foreign savings for the financing of domestic investment. Domestic financial markets remained highly fragmented and of mostly an urban character. Only a small proportion of the total population has had access to the new financial services offered, particularly in the rural areas. Less than 20% of all agricultural producers have had access to institutional loans. The loan portfolios of formal lenders have shown much concentration: among those priviledged enough to have access to loans, few have captured the largest proportion of the funds disbursed. In the case of agricultural loans, about 10% of the number of borrowers have received 85% of the amounts outstanding. High transaction costs have been imposed on financial-market participants, so high that these costs have excluded large segments of the Central American population from access to formal finance. Government intervention, in the form of interest-rate restrictions, reserve requirements, rediscounting schemes, selective credit allocations, and restrictions to entry have accentuated market fragmentation and augmented transaction costs. These deficiencies have been worsened by the recent economic crisis.

Impact of the Economic Crisis on the Financial System

The Central American countries are in the midst of an acute economic crisis, characterized by stagnant or contracting outputs, declining exports and imports, growing unemployment, large public-sector deficits and public external debts, accelerating inflation, and the explicit or implicit devaluation of their currencies. The magnitude and evolution of the crisis have responded to a combination of long-term trends and of unfavorable short-term circumstances, both abroad and at home. The long-term, structural determinants of the crisis reflect a contradiction between the region's most basic characteristics (small market size, very open, rural, labor-abundant economies) and some of the features of the protectionist strategy of import-substitution industrialization adopted in the late 1950s. High costs and distortions have resulted from the penalization of agriculture and of exports. The crisis has also reflected an increasing role of the public sector in production, while its short-term causes have included sizable external shocks and incorrect domestic policies adopted in response to these shocks, which have included sharp swings in international terms-of-trade, changes in the terms and conditions of international financial flows, and regional turmoil. Recovery will require drastic policy changes.

The Central American financial systems have suffered significantly with the crisis. There has been a fiscal reason for this. When the contraction of real incomes in the early 1980s reduced the rate of growth of government-revenue collection, with expenditures expanding rapidly, for a while the authorities financed their budget deficits by placing their debt abroad. Eventually, however, they were forced to finance the growing deficits with domestic credit, with two consequences. Too rapid an expansion of domestic credit led to the loss of international monetary reserves, accelerating inflation, and eventual devaluation. Second, the private sector has been "crowded out" of bank loan portfolios. Before the 1970s, less than 20% of domestic credit was allocated to the public sector; in the early 1980s this proportion had increased to over 45%. Public-sector credit represented almost 70% of the value of domestic deposits mobilized. As a proportion of the GDP, credit for this sector increased from 3% in 1961 to 22% in 1982. In summary, fiscal deficits have been financed with losses of international reserves, increasing borrowing abroad, and finally with the inflation tax, thus accentuating financial repression.

Inflation and devaluation expectations, resulting in negative interest rates, in real terms, have led to capital flight and currency substitution. Inflation has also eroded the real value of credit portfolios and of domestic deposits. All financial magnitudes have declined, when measured in real terms, and as a proportion of the GDP. First, during most of the 1970s the money supply of these countries, in a broad sense, steadily increased. In real terms, the average annual rates of growth of the money supply for 1970-77 were 9.7% (Guatemala), 9.2% (El Salvador) 10.1% (Honduras), and 16.7% (Costa Rica). For 1978-82 these rates became negative in three countries: - 5.6% (El Salvador), - 1.1% (Honduras), and - 4.5% (Costa Rica), and declined to 0.3% in Guatemala. Second, in view of this less dynamic resource mobilization, domestic credit has also declined, especially the share allocated to the private sector. For 1970-77, the average annual rates of growth of credit for the private sector had been 6.8% (El Salvador), 9.8% (Honduras), and 11.5% (Costa Rica). For 1978-82 these rates became negative: - 7.9% (El Salvador), - 1.8% (Honduras), and - 16.5% (Costa Rica). This contraction in the real value of the flows of domestic credit coincided with a curtailment of the flows of foreign credit and with a reduction in the real value of the working capital of firms.

Important changes have taken place with respect to the extent to which the Central American financial systems have been providing their services. The reduced comparative advantage of domestic currencies in supplying monetary services has resulted in currency substitution, thus limiting the ability of the financial system to provide other services. Domestic financial assets have become poor stores of value for precautionary and speculative purposes, forcing savers to search for unproductive inflation hedges. An excessive emphasis has been placed on the fiscal-support function. The domestic financial system has become much less of an intermediary between private savers and investors, and more of a fiscal instrument, to tax resources away from wealthholders in order to finance public-sector expenditures. This abuse of the fiscal function has reduced the ability of the financial system to promote recovery and growth. Intermediation, however, is particularly important during periods of adjustment, when resources must be reallocated.

Financial Services for Agriculture

Market fragmentation and the dispersion of marginal rates of return are greater in the rural areas of LDCs, suggesting a crucial role for financial deepening. High transaction costs and inadequate regulation, however, have contributed to the urban bias of financial development. Borrowing and lending costs are high in view of the heterogeneity of rural populations, the lack of experience of urban-based institutions, and high risks. Producer diversity increases the dispersion of the distributions of the probability of default and increases the cost of information. The geographic dispersion of clients, absence of an adequate infrastructure, and the distance from bank branches also increase the costs of bringing borrowers and lenders together. Illiteracy, lack of banking experience, and loan targeting increase the costs of processing loans. The substantial influence of exogenous factors on yields, small size, and limited opportunities for diversification increase risk. Lack of legal tenure and of mortgageable assets reduces access to loans. Interest-rate policies that limit revenue generation, combined with high lending costs, further reduce the willingness of formal lenders to penetrate the countryside. These transaction costs have been very high in Central America, excluding most of the rural population from access to financial services.

The agrarian nature of the Central American countries, however, has been reflected by the shares of agricultural loans in credit portfolios. In 1961 these shares were 21% in Honduras, 26% in El Salvador, 48% in Guatemala, 56% in Costa Rica, and 63% in Nicaragua. The unusually high shares in the last two countries responded to specific policies to expand agricultural credit services. During the 1960s, this share increased in Honduras and declined in Guatemala. By 1970, it was 27% in El Salvador, 32% in Honduras, 36% in Guatemala, 57% in Costa Rica, and 60% in Nicaragua. By 1980, the share of agricultural loans in total credit had declined in all countries but El Salvador, when these shares were 22% in Guatemala, 27% in Honduras, 29% in El Salvador, 43% in Costa Rica, and 54% in Nicaragua. In part, these changes in the relative importance of agricultural credit have reflected the structural transformation experienced by these economies during the past two decades. However, during the most recent years, they have also reflected the impact of increased financial repression, as reflected by declining ratios of agricultural credit flows with respect to the value of the agricultural output.

The contraction of the financial systems of the Central American countries has been accompanied by important changes in the composition of credit portfolios. As indicated, the private sector has been "crowded out" from these portfolios, while the public sector has significantly enlarged its share. The contraction has been particularly dramatic in the case of the Nationalized Banking System of Costa Rica (Cespedes et al). In real terms, by 1982 total domestic credit represented only 40% of its 1978 value. Credit for the private sector represented only 36% of its former level. Even credit for the public sector had declined in real value, to 41% of its 1980 level by 1982. Too rapid an expansion of domestic credit, in nominal terms, had eventually resulted in a sharp contraction of credit volumes, in real terms. In the race between nominal credit volumes and inflation, the latter was the easy winner.

The components of the loan portfolio, by sector of use of the loans granted, have experienced the contraction to a different degree. The share of productive sectors, including agriculture, has contracted at the expense of the share of real estate, commerce, and other speculative activities. In Costa Rica, the real value of credit outstanding for crops in 1982 represented 44% of its 1978 level, while the real value of credit for livestock represented 34% of its former level. In Honduras, where the contraction has been less dramatic, by 1982 the total loan portfolio represented 69% of its 1978 value, while the agricultural portfolio amounted to 61% of its former value. The 1982 value of loans for crops was 55% and the value of livestock credit was 90% of the 1978 levels.

By the turn of the decade, not only was the real size of the Central American banking systems shrinking, but the number of bank clients was declining, loan portfolios were showing an increasing concentration in favor of a smaller number of larger borrowers, and several financial institutions were experiencing severe default problems. In Honduras, the share of agricultural loans in total credit had declined to 24% in 1981 from 30% in 1976. In Costa Rica, the share of small farmers in agricultural credit flows had declined from 20% to 10%. Given the fungibility of funds, a greater proportion of agricultural loans were being diverted toward other sectors of economic activity. The provision of financial services for agriculture had suffered a more than proportional blow from the crisis; small farmers had suffered even more.

The iron law of interest-rate restrictions may be used to explain these changes in portfolio composition that result from increased financial repression (Gonzalez-Vega). Inflation and the contraction of the financial system in real terms have accentuated the impact of interest-rate limitations. Preferred borrowers have maintained the real value of their loans and, therefore, have increased their participation in credit portfolios. Non-preferred, marginal clients have seen the real size of their loans shrink in the face of inflation and their portfolio shares reduced. Many have been excluded from furtner access to formal credit. Others have seen borrowing costs increase, as new restrictions and requirements have been imposed. With the economic crisis, the financial systems of Central America have substantially reduced the amount and quality of financial services provided to agricultural producers.

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