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STATE-OWNED AGRICULTURAL DEVELOPMENT BANKS: LESSONS AND OPPORTUNITIES FOR MICROFINANCE

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Abstract

This paper examines the potential role of state-owned agricultural development banks as a source of microfinancial services. It first discusses elements of a new consensus on microfinance, including the importance of formal and informal finance for the poor, the consequences of credit rationing, and progress in microfinancial technologies. While key lessons are identified from past experiences of government intervention in financial markets and from new experiments in microfinance, no dominant organizational model emerges among examples of best practice. The paper provides a conceptual framework to interpret the failure of state-owned agricultural development banks, their lack of success in reaching the poor, and their lack of viability. Key defining dimensions deserve special attention: (a) their specialization in agricultural credit, with the accompanying instances of market failure and high monitoring costs as well as the negative impact of policies that penalize agriculture; (b) their development orientation and lack of profit motive; (c) their possession of a bank charter which authorizes deposit mobilization; and (d) state ownership, with the resulting inadequate level of internal control and incentive problems. Attention is given to the consequences on financial transactions of the special material conditions that characterize agriculture. The results from these defining features are lack of viability, borrower domination, and a disappointing performance of most development banks. In a second-best world, there may be reasons, however, to restructure a few of them, in order to protect information, human, physical, and clientele capital. The paper discusses preconditions for success in restructuring these banks and elements of the ideal type framework for the transformation. Histories of development banks illustrate the issues while some lessons are derived from assessments of more or less successful restructuring attempts.

STATE-OWNED AGRICULTURAL DEVELOPMENT BANKS: LESSONS AND OPPORTUNITIES FOR MICROFINANCE[1]

Claudio Gonzalez-Vega and Douglas H. Graham[2]

I. Microfinance: Achievements and Challenges

Over the past decade, the international community of donors, academics, and professionals concerned with economic development and poverty alleviation, as well as bankers, social workers, and policymakers in low-income countries have increasingly focused their attention on microfinance. This has reflected a growing recognition of the wide range of demands for financial services emerging in the highly diversified markets of the urban and the rural poor, women, small farmers, the self-employed, diverse microentrepreneurs in the trading, services, and manufacturing sectors, and small firms which may in turn employ the poor.

Although their original motivations and objectives have been varied and their approaches diverse, the intense dialogue promoted by some international donors, in particular by the Agency for International Development (AID), has led to key areas of consensus among academics, policymakers, and practitioners.

Elements of a New Consensus

The emerging consensus has gradually included several of the following conceptual perspectives:

(a) financial services matter for the rural and the urban poor;

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[2] The authors are Professors of Agricultural Economics at the Ohio State University. They are grateful with Roberto Castro (AID) and Lori Olson (DAI) for their insistence that they write this paper, and with Richard Rosenberg, Larry Abel, Eric Nelson, George Gardner, Matthew Gamser, Joanna Eigen, Jorge Daly, Tracy Atwood, Joan Parker, and other seminar participants for their comments. Colleagues at Ohio State have influenced their views on development banks over the years. Richard Meyer and J.D. Von Pischke offered detailed comments on the paper. The views presented here are those of the authors, however, and do not necessarily represent those of the sponsoring organizations.

(b) although numerous sources of informal finance offer valuable services to the poor, these are not sufficient to accelerate income growth;

(c) lack of access to a wider range of (formal) financial services still represents an important constraint on entrepreneurship;

(d) increasing the array of financial options available to poor entrepreneurs will be (Pareto) welfare-improving from a social perspective;

(e) significant progress has been made in the past decade in understanding the basic nature of the efforts required to provide financial services to the poor;

(f) moreover, over the past decade, a number of successful initiatives have made important gains in outreach and sustainability, the two key criteria of success in offering financial services to the poor;

(g) despite serious attempts to make financial services available to the poor, however, millions of low-income entrepreneurs in the developing world still do not have access to semi-formal or formal financial services; and

(h) while key lessons about the provision of financial services to the poor have been learned from the experience of well-performing programs, there is no dominant organizational model that can be successfully replicated everywhere.

This is not the place to discuss in detail the justification and ultimate validity of these claims, to assess the degree of the (actual or apparent) consensus that has been achieved in each case, and to consider dissenting views.[3] Rather, several dimensions of the emerging consensus offer a motivation and provide a new context for a preliminary discussion of the role of state-owned agricultural development banks in the provision of microfinancial services, the topic of this paper. They are discussed next.

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[3] A number of excellent books collect elements of this convergence of thinking on finance at the frontier: Adams, Graham, and Von Pischke (1984), Von Pischke (1991), Patten and Rosengard (1991), Adams and Fitchett (1992), Otero and Rhyne (1994), Krahnen and Schmidt (1994), and Bouman and Hospes (1994), among others.

Financial Services Matter

Most people recognize that financial services are important.[4] Indeed, financial services are pivotal when investment opportunities and wealth endowments diverge, as is frequently the case in the heterogeneous microenterprise world. In such circumstances, financial intermediation allows those with better productive opportunities and insufficient resources of their own to fully take advantage of socially and privately profitable alternatives, while those without opportunities can benefit (through a competitive return on deposits) from making their resources available to others. The key is to facilitate transfers of purchasing power that improve resource allocations.

In general, financial services contribute to more efficient household and firm inter-temporal decisions about saving (postponing consumption), the accumulation of assets, and investment (to take advantage of productive opportunities). These services include the role of finance in smoothing consumption patterns over time, in the presence of unstable income flows. This is important not only for the inter-temporal maximization of utility, but also to avoid the unnecessary depletion of productive capital when small producers suffer a negative shock (Rosenzweig and Wolpin). Financial services facilitate a more cost-effective management of risk, liquidity, and the accumulation of stores of value for precautionary and speculative purposes. These services are particularly important among the poor, who live close to subsistence levels.

Financial services are not a panacea, however, and credit cannot solve all of the problems of small and microenterprises. Moreover, a misunderstanding of the potential contributions of finance can lead to unexpectedly undesirable results (Gonzalez-Vega, 1994a). Governments have frequently attempted, nevertheless, to use financial markets to pursue a broad range of non-financial objectives, with disastrous consequences (Adams, Graham, and Von Pischke, 1984).

Prominent among the reasons for the generalized failure of most state-owned agricultural development banks were precisely attempts to use them as instruments to promote a number of (development) objectives (growth of agricultural production, adoption of new technology, agrarian reform and regional development) at the expense of sound financial intermediation, when such directives created excessive costs and risks for the organizations. Moreover, arbitrary (politicized) criteria adopted in the approval of loans contributed to worsen, rather than improve, resource allocation.

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[4] Despite some exaggeration, there is much truth in the claim by a representative of the International Labor Office (ILO) that "without finance there can be no income generation or poverty alleviation. Without finance enterprises cannot be created or sustained. All businesses --whether they are large or small, engaged in manufacturing or trade, located in the countryside or in the city, owner-managed companies or public corporations-- need access to regular and adequate financing for production, sales and distribution. Even informal income-generating activities need financial resources for working capital and investment purposes, as well as the know-how required to manage such resources" (Balkenhol, p. 645). Moreover, "credit may not always be the most suitable financial service. Safe deposits, leasing or insurance may be more appropriate" (*Ibid.*, p. 654).

Value and Shortcomings of Informal Finance

Financial services obtained from numerous sources in informal markets successfully meet a good number of the demands from poor households and enterprises and offer valuable services to their clients (Adams and Fitchett; Bouman and Hospes). Informal loans are timely, reliable, and imply low transaction costs for the borrower.

Informal intermediaries typically do not provide, however, a sufficiently wide array of the services for which a (latent) demand exists, including safe deposit facilities, convenient mechanisms to transfer funds, and certain types of loans (especially large, long-term). The (explicit and implicit) cost of informal financial services is also frequently high, as revealed by the strong demand that materializes when cheaper semiformal and formal services are offered by organizations still able to cover their costs with the interest rates charged.

As a result of these shortcomings, the frontier of informal finance is shallow; its services are very valuable but do not go deep enough in scope (geographically, across products, and over long terms) and are vulnerable to the covariant risks of locally-based finance. Thus, informal finance is not always a good vehicle for investment.

Moreover, informal financial arrangements show comparative advantages only within small market segments, for transactions among agents in close proximity of each other. Beyond these local boundaries, profitable opportunities for informal finance disappear, given screening, monitoring, and contract enforcement costs that increase with distance. As a result, in a regime of informal finance, many opportunities to improve resource allocation are left unexploited, given the prohibitive transaction costs involved, and in fragmented markets marginal rates of return remain quite disparate. Thus, informal finance may be insufficient for rapid income growth. If informal markets are repressed, however, the welfare of the poor will decline. Rather than destroying informal finance, new (formal) services should complement its valuable contributions.

Credit Constraints

Lack of access to a broader set of financial options thus represents a (potential) constraint on entrepreneurship and on the ability to undertake socially and privately profitable investment projects. There are two possible sources of these credit constraints.

Information and incentive problems may lead to market imperfections (asymmetric information, moral hazard, and adverse selection) that induce credit rationing, in the sense that the borrower would like to borrow more at the going rate of interest but cannot.[5] Thus, not all potentially creditworthy investors may get the amount of funds demanded at the going rate of interest.

Information, incentive, and contract enforcement problems tend to be particularly acute in attempts to lend to the poor, particularly in the rural areas of developing countries. Thus, credit-rationed small potential investors with socially and privately profitable projects may not be able to undertake them for lack of sufficient purchasing power.[6] Moreover, given such financial market imperfections, differences in the initial distribution of wealth may have long-lasting implications for the ability to accumulate capital and thereby on growth and not just on equity (Tsiddon; Binswanger and Deininger).

Even in the absence of market imperfections, however, limited development of the financial infrastructure and the high transaction costs resulting from incomplete physical infrastructures and organizational frameworks may reduce the set of credit options open to poor entrepreneurs (Gonzalez-Vega, 1993). Progress would result from economic growth itself, institutional development, and financial innovations that move the frontier outward, toward firms, households, and individuals with previously limited or no access to formal financial services (Von Pischke, 1991). The resulting broader array of financial options available to poor entrepreneurs would be welfare-improving from a social perspective. The difficult question is how to intervene.

Government Intervention

The existence of potential market imperfections and of incomplete organizational infrastructures in developing countries suggests that, in principle, it may be possible to find ways of influencing the development and performance of financial markets that would increase both social welfare and the well-being of the rural and urban poor. The intense (theoretical) debate about the

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[5] If the borrower could clearly commit himself to not undertaking too risky a project when the interest rate increases, the lender would be willing to grant the larger amount demanded, but in the presence of asymmetric information and given the possibility of moral hazard, the borrower cannot commit himself and the lender cannot enforce such a promise even if it were made. Credit rationing ensues, in the form of a smaller loan than that demanded at the equilibrium interest rate (Stiglitz and Weiss; Stiglitz, 1993a).

[6] Credit rationing may also occur when, among a group of identical borrowers, some get loans and some do not (Keeton). Such instances of financial market failure hold under fairly restrictive assumptions, not discussed here (Besley; Gonzalez-Vega, 1994b). Similarly adverse credit rationing effects also result from government intervention, such as interest rate ceilings and other regulatory restrictions on loan terms and conditions (Gonzalez-Vega, 1976).

appropriate conditions for and the correct nature of potential (government and/or donor) interventions cannot be resolved here (Stiglitz, 1993b; Gonzalez-Vega, 1993).

Although such (theoretical) identification of reasons for intervention is a necessary condition for government and/or donor action, it is not sufficient. Not only must appropriate instruments be chosen for the intervention, but its benefits must outweigh its (usually high) costs (Gonzalez-Vega, 1994b). The pitiful record of government intervention in rural financial markets clearly signals that this is not a trivial task (Adams and Graham). Experience suggests better results from avoiding protectionist interventions, that distort financial prices and allocation decisions, and focusing on development of the institutional infrastructure (Gonzalez-Vega, 1994b).

The long history of small credit programs in developing countries, many managed by public agricultural development banks, illustrates numerous pitfalls of government intervention in financial markets, well-documented elsewhere (Adams, Graham, and Von Pischke). Because of these shortcomings, most organizations engaged in small farmer lending programs experienced substantial losses and many withered away, disappeared, or have been temporarily sustained only by (fiscally costly) outside recapitalization.

Some analysts predict that, to the extent to which they face similar obstacles and if they adopt similar policies and follow similar patterns of behavior, many credit programs for microenterprises will encounter the same fate: loans will not be repaid and the intervention will be only transitory (Adams and Von Pischke, 1994).

New Vision and Practice in Microfinance

Significant progress has been made in the past decade, however, in recognizing lessons from failed small farmer credit programs and in understanding the basic nature of the appropriate actions required to successfully provide financial services to the poor. "The principles behind the emerging techniques for offering financial services to the poor are the same as those found in any financial system and involve ... a market perspective that understands the preferences of the client group and designs products to meet them; a recognition that savings can be as important as credit for microenterprises, financial institutions, and the economy; and insistence that financially viable institutions provide only financial services. These principles require the institution to break even or turn a profit in its financial operations and raise funds from nonsubsidized sources" (Rhyne and Otero, p. 11).

From correct basic principles to actual successful financial organizations there is a long and difficult road. There is, nevertheless, considerable optimism in the international development community that progress in the microfinance field has been significant. Not only do donors, governments, and practitioners feel that now they know more, but also a number of successful organizations have made important gains in outreach (number and income level of clients) and sustainability in offering financial services to the poor (Yaron). This progress has required correct pricing (interest rate) policies, adoption of cost-effective service delivery methodologies,

and significant institutional competence in such areas as delinquency control, information management, and staff development (Christen, Rhyne, and Vogel). Sustainability (without subsidy dependence) is critical in order to offer permanence in the provision of services (a most valued feature) and thus create adequate incentives for borrowers as well as management and staff (Gonzalez-Vega, 1994b).

At the same time, considerable frustration arises in many quarters with the recognition that, despite such serious attempts, millions of low-income entrepreneurs still do not have access to the semiformal or formal financial services that would allow them to increase their productivity and rise from poverty.

Variety of Best Practice Experiences

A casual examination of the list of "successful" (best practice) organizations that offer financial services to the poor reveal ample variety in terms of organizational design and structure. Such a list would typically include:[7]

(a) the Bank Rakyat Indonesia unit desa system, a branch network of a government-owned, commercial-cum-development bank that operates in the rural areas at the national level (Patten and Rosengard);

(b) several networks of decentralized financial units owned by the provincial governments, the village, or their own clients, also operating in Indonesia, such as the Badan Kredit Kecamatan (BKK), Badan Kredit Desa (BKD), Lembaga Perkreditan Desa (LPD), and other equally "successful" small financial institution systems (Chaves and Gonzalez-Vega, 1995);

(c) Bank Sampoerna and Bank Dagang Bali, private commercial banks in Indonesia that successfully provide financial services to the poor (Robinson, 1992);

(d) Grameen Bank, a specially licensed sectoral bank in Bangladesh that has developed a large network of branches with substantial donor assistance (Rhyne and Rotblatt);

(e) the Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand (Yaron);

(f) Banco Solidario (BancoSol), a private commercial bank created in Bolivia on the basis of the earlier success of a non-government organization (PRODEM) and with substantial donor assistance (Glosser);

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[7] This list is merely illustrative of the variety of organizational designs associated with microfinance programs that have been widely considered to be "successful." It is not supposed to be exhaustive or to endorse the performance of particular organizations.

(g) FinanSol, a finance company created in Colombia on the foundation of the earlier success of ACTUAR Bogota, another NGO within the network of ACCION International (Otero), as well as Servicio Crediticio de AMPES (Financiera CALPIA) in El Salvador and PROCREDITO (Banco De Los Andes) in Bolivia (recently upgraded to formal financial organizations with the assistance of the German firm IPC);

(h) several urban NGOs, such as ACEP in Senegal, and ADEMI and ADOPEM in the Dominican Republic (Christen, Rhyne, and Vogel), as well as rural NGOs, such as the Kenya Rural Enterprise Programme (K-REP) and FINCA in Costa Rica (Gonzalez-Vega et al, 1993); and

(I) a number of credit unions, most prominently those developed by the Ohio State University Rural Finance Program, currently associated with AIRAC (Asociación de Instituciones Rurales de Ahorro y Crédito) in the Dominican Republic (Poyo, Gonzalez-Vega, and Aguilera), and several systems restructured with the assistance of the World Council of Credit Unions (WOCCU) in Guatemala, Bolivia, Niger, and other countries.

This partial list includes state-owned development banks and private commercial banks; credit unions; NGOs that have been transformed into formal financial institutions; urban and rural, small and large NGOs; village banks, and specialized financial organizations. Clearly, there is no dominant organizational model among these examples of best practice. Such organizational diversity is surprising and deserves further comment.

Organizational Design

There is growing expert recognition that institutional design matters for the success of organizations that provide financial services to the poor. Indeed, "while policies, procedures, and technologies matter, policies will not be enacted, procedures will not be revised, and technologies will not be adopted, unless it is in someone's interest to do so. In the end, all decisions are made by individuals, who pursue their own objective functions, given existing constraints. In their broadest sense, institutions constrain individual behavior, define property rights and incentives for decisions, and embody the rules of the game (North). Organizational design defines who has the right to make which decisions and determines the structure of incentives (who gains and who loses) which will guide those decisions. It matters because individual choices are induced and/or constrained by the structure of incentives within the organization. Organizational design is critical because it influences behavior (choices) and behavior influences performance (outcomes)" (Gonzalez-Vega, 1994a, p. 18).

The scope and quality of the services offered by specific financial organizations is closely related to their governance structure (Krahnen and Schmidt). Because of their ownership arrangements, private commercial banks are expected to be cost-conscious and (technically) efficient in their operations. Their owners provide an optimum level of internal control. Given prudential regulation that constrains their actions, banks are also comparatively stable institutions. They are,

however, typically not close to the poor, in terms of social and physical proximity, and would find that their lending and deposit-taking technologies are too expensive to reach these clientele, if they were so inclined. They typically do not find rural branches to be profitable and require large loan sizes to dilute their high fixed costs. *Downgrading* their operations to reach the poor would be difficult.

Local credit cooperatives, village banks, and NGOs are closer to the target clientele, but are not well-connected to the national financial system. Their funds are limited and they have few opportunities for intermediation and for portfolio diversification. They lack appropriate regulation. *Upgrading* strategies would make them increasingly formal and presumably more stable and efficient.

There are serious questions, however, about the ability of organizations with diffused property rights structures, such as most NGOs, or with conflicting governance constitutions and weak mechanisms for internal control, such as credit cooperatives and client-owned village banks, to engender sustainable financial intermediation (Chaves, 1994). Organizations that are not disciplined by market forces and have not clearly defined owners may act in ways that serve the interests of their employees or managers and ignore those of their so-called beneficiaries or the sustainability of the institution (Adams, 1994).

Given the (theoretically) critical importance of organizational design for the long-term success of financial institutions, it is surprising, therefore, to find such a variety of property rights and incentive structures, some of them quite flimsy, among the examples of best-practice interventions included in the list above. In many instances, it appears that such organizational deficiencies have only been overcome by the presence of highly-motivated exceptional individuals, who have provided outstanding leadership.

Such deficiencies of organizational design should be corrected, however, if those institutions are to become permanent participants in competitive financial markets. This may be the most important challenge for international donors in the future (Krahnen and Schmidt, Gonzalez-Vega, 1994a). In the second-best world of feasible interventions, however, observed combinations of mostly-correct policies, comparatively more cost-effective technologies, and not-that-vulnerable organizations (mostly due to *sui generis* local circumstances) have already allowed substantial progress of microfinance. Rigorous research and aggressive experimentation in the field will be needed to develop even more robust financial technologies and organizations.

Second-best Options

It is in the context of the (tangled and complex) second-best world, nevertheless, that this paper explores the potential role of the old state-owned agricultural development banks as a source of microfinancial services. After discussing some basic issues and definitions, the paper addresses the difficult question of why even to consider these banks, typically among the most extreme examples of failure of supply-leading strategies of credit delivery (Bourne and Graham).

If the state-owned agricultural development banks are going to play any role in the delivery of microfinancial services, the reasons for their earlier demise must be well understood and difficult corrections must be made. Since their deficient performance has been well documented elsewhere, the paper merely provides a conceptual framework to interpret the reasons for their lack of success in reaching the poor and the causes of their lack of viability (Gonzalez-Vega, 1990). These lessons are useful in determining when and where (in only very few cases) it may be worthwhile to restructure these banks, in order to convert them into viable microfinance organizations or, in other cases, add a microclientele to their broader range of banking operations. The paper then suggests key elements of a transformation strategy.

II. State-owned Agricultural Development Banks

The state-owned agricultural development banks were created several decades ago with the objective of supplying, either the longer-term agricultural credit that the commercial banks were not prepared to grant, or the loans "needed" by specific (risky) clientele, such as medium and small farmers, who lacked access to the financial services of the traditional banking sector, but who were considered by the governments of the developing nations to be a priority.

Government-owned, the agricultural development banks typically received the largest share of their funds from international donor agencies, national or provincial governments, and/or central banks. They granted credit at subsidized interest rates and to the extent allowed by the availability of these public-sector funds, to beneficiaries who frequently were not creditworthy (Gonzalez-Vega, 1990).

Given those common features, state-owned agricultural development banks found it difficult, if not impossible, to remain financially viable. Most eventually became insolvent, many of them several times over the years, and required additional capitalizations (with the customary change of name and of managers) in order to be able to continue their operations.

Eventually, however, they lost support of international donor agencies, increasingly exposed to the shifting preferences of politicians and the scrutiny of taxpayers. At the same time, governments and central banks in developing countries withdrew their support of money-losing parastatal banks, as a consequence of the fiscal difficulties and macroeconomic stabilization programs of the 1980s.

Several of these banks have been dismantled (Bolivia), a few have been privatized (The Gambia), a few have been allowed to go bankrupt (Banco Anglo in Costa Rica), a few have benefitted from more or less successful restructuring efforts (The Dominican Republic, Nicaragua), but most have withered away, becoming even less significant participants in national financial systems. A brief but careful analysis of their intrinsic nature, the reasons for their failure, and the opportunities they offer follows below.

Key Features

Opportunities and threats are associated with each of the four defining features of these financial organizations:

(a) their state (national or provincial government) ownership,

(b) their focus (complete specialization) on agriculture,

(c) their development (non-commercial) orientation, and

(d) a bank charter (with the accompanying regulatory framework).

Focus on Agriculture

One important explanation of the shortcomings of state-owned development banks arises from the enormous difficulties that typically hinder financial transactions in agriculture. Their complete specialization in agricultural lending thoroughly immersed these banks in the complexities of crop and livestock finance, but they were not given the tools (policies and technologies) to overcome these hurdles. Their creation reflected a naive response to the perceived limitations of credit markets, in the belief that all it took to overcome the extraordinary difficulties of agricultural finance was to get the government involved. With state intervention these difficulties did not go away, however. Rather, they are an important part of the explanation of their lack of success in this endeavor.

Additional explanations of the failure of agricultural development banks can be found in the policy environment in which they operated, which severely penalized the agricultural sector and further exacerbated difficulties typical of rural financial markets (Adams, 1994). Further, their public sector nature made them even more vulnerable than other banks to repressive regulation and political intrusion, further reducing their ability to succeed.

Agriculture is characterized by special material and informational features that constrain supplies and demands for financial services and may even precipitate imperfections in financial markets (Binswanger and Deininger). Agricultural production is set apart by spatial dispersion, the heterogeneity of soils and climate across and within regions, and high variability of weather over time and space. These conditions give rise to information asymmetries and to monitoring difficulties, as well as to covariant incomes, which arise from weather and price fluctuations that affect all similar producers in one region in substantially the same way.

Given the spatial dispersion of production and the comparatively high incidence of location-specific factors and exogenous shocks on yields, it is very difficult to determine the extent to which (negative) outcomes reflect (less than optimum) levels of effort by the agent or simply conditions beyond his control. Monitoring of borrowers is thus very costly. Lenders feel

threatened by their less comprehensive knowledge of the riskiness of the borrower's activities and by the ability of the latter to modify the level of risk (probability of default) in opportunistic attempts to profit (gamble) that may hurt the lender (moral hazard).

The covariance of farmer incomes implies, in turn, that lenders cannot diversify across local borrowers but only across regions with different crops and climates. Even when they operate at the national level, moreover, agricultural banks may find it difficult to diversify their portfolios in small countries with highly specialized resource endowments (that lead to monoculture). The seasonality of sowing and harvest cycles contributes to the covariance of cash flows, as well, making local intermediation difficult, with deposits increasing after harvests and most loans being demanded in the sowing season. Both intermediation and diversification motives thus suggest the desirability of operating in as wide (geographical and sectoral) spaces as possible.

By concentrating their attention on agriculture (frequently on a few "priority" crops) rather than on both farm and off-farm activities, state-owned development banks further reduced their opportunities for portfolio diversification (Bourne and Graham). As indicated, this drawback was only partially compensated by their operation on a national scale. In the future, nevertheless, the wider geographical scope of their operations may offer stronger opportunities for intermediation and diversification, a possibility not enjoyed by other, inevitably-local financial organizations. These opportunities would be reinforced by additional diversification into non-farm finance, such as providing financial services to small and microenterprises.

Specialization in agriculture and the accompanying seasonality of flows of funds reinforced, in turn, the aversion of public development banks to mobilize local deposits, further reducing the range of the services they provided. Properly restructured agricultural development banks have recently been able to take advantage, however, of a strong rural demand for deposit facilities (Gonzalez-Vega et al, 1992; Robinson, 1992). Such deposit mobilization has allowed them, in turn, to reduce their dependence on outside donors and improve their portfolio management performance (Poyo, Gonzalez-Vega, and Aguilera).

Monitoring Costs

Spatial diversification, needed to reduce portfolio risks in agricultural banks, may however make the typical principal-agent problems of financial organizations even more complex, as banks (principals) find it difficult to monitor distant small farm borrowers (agents). Even when local branches possess some advantages in monitoring local borrowers, bank headquarters still need to monitor branch staff. This is not an easy task.[8] Given the special material conditions of agriculture, it may be very difficult for any bank headquarters to determine if generalized default in a given locality is due to widespread hardship, pervasive fraud, or simply poor lending criteria

[8] Chaves and Gonzalez-Vega (1995) found that, in the case of Indonesia, monitoring local branches is a less expensive undertaking than attempts to monitor small borrowers at a distance. The most effective technology-cum-organization mix may be location specific, however.

and practices at the branch. Costly monitoring efforts thus make the provision of agricultural loans expensive for all types of financial organization. The key is to recognize these high costs and their determinants, in order to search for cost effective technologies.

It is the combination of covariance and monitoring costs, rather than the (already complicating) presence of just one or the other, that makes agricultural credit uniquely difficult and costly. Monitoring becomes particularly expensive and, given traditional banking technologies, commercial (and some development) banks have found it worthwhile for sufficiently large and safe loans only. Since borrowers with substantial collateral have required less costly monitoring, wealthy farmers have obtained access to bank credit, but smaller farmers (perhaps with equally profitable projects) have not. Credit subsidies, rather than compensating for, have actually accentuated this result.

The costs of screening and monitoring borrowers may simply be too high for agricultural lending to be profitable, especially when there are numerous and heterogeneous small borrowers scattered across the countryside. As a result, many creditworthy producers may be locked out of formal financial markets. These problems are exacerbated by the possibility of market imperfections, which increase the costs of screening and monitoring borrowers and of enforcing financial contracts and which may lead to credit rationing. Such imperfections arise when private market participants, acting in their self-interest, do not allocate resources efficiently.

Market Failure

Stiglitz and Weiss, for example, have shown that under some restrictive assumptions, adverse selection and moral hazard could prevent interest rates from equilibrating the supply of and demand for credit. Adverse selection arises when lenders cannot ascertain the truthfulness of the borrower and hence the riskiness of the activity being financed. In these circumstances, riskier borrowers/projects would be attracted to higher interest rates. Moral hazard, in turn, allows borrowers to undertake riskier actions after the funds have been disbursed.

In these circumstances, the lender would not raise interest rates to ration funds, but may instead deny loans to those he does not know well or whose reputations cannot vouch for their honesty. Such credit rationing may preclude worthwhile activities from being undertaken, reducing investment, output, and welfare. The question becomes, what to do in this case? Given the asymmetric information associated with agriculture, some have suggested several forms of government intervention (including the operation of public development banks) to correct for such instances of market failure.

Intervention is not, however, a panacea, even in the presence of adverse selection and moral hazard, because the government faces very much the same information, agency, and incentive problems as private lenders do. Moreover, if principal-agent problems are acute in rural financial markets, they would be inevitably worse for equity and insurance markets. Thus, similar covariance and monitoring problems would preclude solutions that rely on insurance

schemes (e.g., loan rescheduling, partial forgiveness of debt in cases of regional disasters, and crop and credit insurance).[9]

While considerations about information imperfections and contract enforcement costs may provide some (theoretical) justifications for the operations of state-owned development banks, they also highlight the nature of the difficulties to be encountered and the risks associated with such interventions. It is not surprising, therefore, that faced with such formidable tasks and ill-equipped for them, state-owned agricultural development banks have generally failed in their supply-leading efforts.

Repressive Policies

Most developing countries heavily repressed their agricultural sectors, both through taxes on food and non-food export commodities, for which these countries possessed comparative advantages, and indirectly, through overvalued exchange rates and the protection of manufacturing (Krueger, Schiff, and Valdes). These policies dampened loan demand, lessened the credit-worthiness of potential farm borrowers, weakened their ability to repay loans, and reduced rural capacity to save, making the task of agricultural development banks even harder (Adams, 1994).

Unsuccessful macroeconomic policies (inflation, overvaluation of the domestic currency, crowding out) also discouraged financial intermediation, while repressive financial regulation constrained the behavior of financial intermediaries with interest rate controls, confiscatory reserve requirements, extensive loan targeting, and restrictions to entry into financial markets that reduced the efficiency of intermediation. Burdened by their more intrinsic shortcomings, state-owned agricultural development banks were only artificially sustained in this environment. When deregulation took away the artificial life-jacket, they sunk.

Development Orientation

In addition to their complete specialization in agriculture, another defining feature of these state-owned banks has been their development orientation. The design of these banks did not seek, as a key objective, the profitability and financial viability of these organizations, but rather the pursuit of broadly-defined development objectives. This feature implies that they have not been concerned with profits (and, thereby, with revenue-enhancing pricing policies and efforts to reduce costs) and that their viability has been subordinated to the pursuit of non-financial objectives. The improvement of financial intermediation, *per se*, has not been among these goals. Their difficulties are not surprising, given their lack of concern with financial viability.

In particular, the management autonomy of these organizations was seen as less important than their non-financial objectives. These banks were expected to promote the growth of agri-

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[9] Worldwide, commercially viable crop insurance exists only for a very narrow set of risks, usually associated with large farmers.

cultural production, regional development, the adoption of new technology and/or agrarian reform. No one was concerned with viability, as available (donor and government) funds were apparently abundant. This was a model of the development bank as a top-bottom conduit to disburse funds from outside sources; it was expected to be "successful" only as long as the external resources lasted.

The sound growth and strength of the financial institution *per se* was not a design priority. What was created was an instrument to promote other development objectives, even if these purposes introduced excessive costs and risks for the institution. Burdened by their efforts to reach multiple and frequently inconsistent goals, these banks were subjected to outside pressures that gradually weakened them.

In order to survive, the agricultural development banks must first emphasize their role as financial intermediaries. They must operate under the assumption that the efficient provision of financial services is already an important contribution to economic development (Gonzalez-Vega, 1990). Instead of attempting to promote the production of particular crops or the adoption of specific technological practices, they must recognize that the role of financial intermediation is, precisely, to improve aggregate efficiency, via the reallocation of resources through the discipline of the market mechanism. For this reason, what matters most is to strengthen them as key actors in the process of financial intermediation itself.

Successful financial intermediation, based on intertemporal decisions about contracts with uncertain (risky) outcomes, requires trust and credibility. Depositor and borrower confidence rely, in turn, on perceptions of permanency of the financial intermediary. Permanency is based on financial viability and on growth based on profits. "Unremunerative lending is transitory, unstable, and not robust in the face of adversity. Credit markets function poorly when lenders are not adequately rewarded. Experience at the frontier clearly indicates that weak financial institutions do not do a good job serving society in general and firms and individuals at the frontier in particular" (Von Pischke, 1991, p. vii).

A true development orientation will have to recognize the need for viable financial organizations. Adequate organizational design, to be discussed below, may thus be key for the improvement of the financial intermediaries that service the poor. Sustainable organizations are needed, given the limitations of available resources, to reach the millions of potential clients still beyond the frontier of semiformal and formal finance. Economic development may still depend more on the availability of good institutions than on anything else (Krahnen and Schmidt).

Bank Charter

State-owned agricultural development banks have typically operated under (at times nonstandard) bank charters. These charters have usually authorized them to perform typical bank functions, such as deposit mobilization. Given their public sector nature, moreover, several have been in a position to mobilize deposits cheaply, by overcoming fears of bankruptcy that constrain

mobilization by other financial intermediaries, and by utilizing the sunk costs of their extensive (usually subsidized) branch networks. In view of privileged access to public sector and donor funds, however, they have seldom exercised this option. When they have, nevertheless, their success as deposit-taking organizations has been significant (Patten and Rosengard; Poyo, Gonzalez-Vega, and Aguilera).

This (greater) capacity to mobilize domestic savings represents a genuine advantage of state-owned agricultural development banks over other non-bank intermediaries, which are not allowed to do so by the existing regulatory framework or which lack the organizational capability to successfully engage in deposit mobilization. Preparing development banks for a more vigorous mobilization of domestic funds should represent, therefore, a key component of any transformation strategy.

Given their public sector nature, although agricultural development banks have been formally covered by prudential regulation and supervision, in the past the supervising authorities did not usually worry about strictly applying prudential standards in their case. Rather, they were more concerned with making sure that interest rate ceilings and loan targeting directives were complied with (repressive supervision). Thus, policymakers took advantage of state ownership to levy on the development banks even more repressive directives about prices and quantities in financial transactions than in other cases, in a futile attempt to influence the allocation of resources. The comparative ease with which they could be covered by prudential regulation and supervision is another advantage in contrast with other non-bank intermediaries.

Operation within a banking regulatory framework thus creates both dangers and opportunities for state-owned development banks. On the one hand, by making them more vulnerable to repressive regulation, their viability is jeopardized. On the other hand, by including them within an established prudential regulatory and supervision framework, their ability to mobilize deposits, so critical for viability, is enhanced. Given the diffused structure of property rights and inadequate incentives that characterize these banks, however, special idiosyncratic prudential rules must be designed for them (Chaves and Gonzalez-Vega, 1994).

State Ownership

A most problematic defining feature of agricultural development banks has been state ownership.[10] This property rights structure has had several negative consequences. It has made these banks vulnerable to political intrusion, in the sense that decisions about whom to lend to, what to lend for, and on what terms and conditions have not been autonomously taken by the

[10] In other documents we have referred to these organizations as "public" banks. Here, we have chosen "state-owned" instead, to denote government ownership. J.D. Von Pischke reminded us that a publicly-owned corporation is one listed on the stock exchange and owned by numerous members of the general public. It would be unusual that the public would have tolerated the abuses of state-owned banks if they had been shareholders directly rather than indirectly.

financial intermediary, but have been imposed from outside by presumed government "owners" and external sources of funds. Such principals have pursued objectives not necessarily compatible with the viability of the organization.

In some instances state-owned development banks have been asked to act as agents for the central government, in providing financial support for its policies for the agricultural sector. In the case of *Banco Agrícola* in the Dominican Republic, for example, these objectives included support for agrarian reform, income redistribution through subsidized credit, production of basic grains in order to achieve self-sufficiency and lower prices for urban consumers, and agricultural diversification (Poyo, Gonzalez-Vega, and Aguilera).

Because of interest of international donors in such credit programs, state-owned development banks also served as convenient mechanisms for governments to borrow and obtain foreign exchange, at highly subsidized interest rates, for balance of payments support. This behavior converted development banks into agents for international donors, as well. The implicit and explicit contracts with both sets of principals (governments and donors) were typically paternalistic and induced the banks to lend to high-risk, default-prone clientele. Many of the resulting credit programs clearly became mechanisms for fiscal transfers, which belonged more appropriately in a welfare agency rather than in a financial institution. This resulted in a high proportion of non-performing assets and in a reduction of bank profitability.

The fiscal nature of these agency contracts promoted highly centralized operational structures, lack of accountability, deficient risk management, technological obsolescence, and limited investment in human capital. The banks' credit operations were carried out through different credit lines (programs), each one with their own set of terms and conditions, operational standards, and target groups. All of this significantly increased the banks' operational costs.

The political aspirations of the managers of state-owned development banks injected in the decision-making process additional objectives that were not necessarily compatible with the viability of the organization. Moreover, because managers can obtain political capital from the fiscal nature of their agency relationships with the central government and foreign donors, it is in their interest to encourage these agency contracts (Poyo, Gonzalez-Vega, and Aguilera). This discouraged domestic deposit mobilization and further reduced the viability of these organizations. Politically-motivated forgiveness of loans in arrears further destroyed the credibility of public banks and accelerated the accumulation of non-performing assets.

Because they have not been accountable for their lending decisions, development bank bureaucracies have not managed risk efficiently (Von Pischke, 1991). In some cases they have been too conservative (discouraging on-farm innovation and the search for new crops), while in other cases they have allowed external pressures to threaten the viability of the organization, by incorporating lending criteria that ignore creditworthiness. All of this has resulted in higher costs and risks of servicing an already difficult clientele and decapitalization of these banks (Gonzalez-Vega, 1994c).

In addition,absence of well-defined owners resulted, at best, in suboptimal levels of internal control. No mechanisms were created to effectively provide such control from outside, either. Managers and staff frequently sought to maximize their own benefits (salaries, fringe benefits, and other non-pecuniary perquisites of their jobs), and had few incentives to improve operational efficiency. In the absence of appropriate incentive structures, they did not make socially optimum decisions. The most difficult challenge, if development banks are going to play a role in a liberalized, competitive market, is to overcome the deficiencies arising from state ownership.

Lack of Viability

The main problem of state-owned agricultural development banks has been lack of institutional and financial viability, a consequence of the features described above (specialization, public ownership, and lack of a profit motive). Viable financial institutions are self-sustaining and valued by their clientele. This requires organizations that cover their costs when providing high quality services, reach increasing numbers of customers, are dynamic in offering new financial services and products, and actively search for ways of improving their efficiency, as reflected by the level and the degree of dispersion of the transaction costs incurred by their depositors and borrowers and by the intermediaries themselves. Viable institutions possess credibility and are able to mobilize deposits from the public, collect their loans, and retain competent management and staff (Meyer). Only an appropriate organizational design and incentive structure will make it in the interest of decision-makers to secure viability.

The lack of viability of state-owned agricultural development banks has been reflected in a steady reduction of their relative importance within the financial sector of developing countries. This decline in importance has occurred because most development banks have not been able to increase and, in many instances, even to sustain the flow of their loanable funds, in real terms.

The lending capacity of agricultural development banks has declined, in turn, because they have not protected their portfolios from inflation nor have they vigorously collected their loans, in order to be able to grant new credit. Furthermore, they have not aggressively mobilized local resources, in order to be able to widen the range of their services and, in view of the poor quality of their services and the high transaction costs that they impose, they have lost the support of their clientele.

Increasing levels of loan default have evidenced loss of the support of their customers. They have been a signal that borrowers do not expected the organization to be able to provide a permanent service. The expected value of their relationship with the bank has been low and they have not taken care to protect it with the timely service of their loan obligations.

Moreover, as their institutional weaknesses have become increasingly evident, they have lost the support of international donor agencies and, as a result, their loanable funds have substantially declined. Ironically, their lack of viability has been in large part a consequence of their

strong dependence on outside funds, from international donors, central banks, and governments (Gonzalez-Vega, 1990).

State-owned agricultural development banks have retained, however, the support of local politicians, who still see them as mechanisms to favor some groups of society at the expense of others; that is, as instruments for political patronage. They can easily capture these organizations without clearly-defined owners and use them for their own immediate purposes.

Borrower Domination

The operations of state-owned agricultural development banks were characterized by borrower domination. All practices and procedures were designed with the interest of borrowers in mind, not for the sake of depositors or the institution's viability. Thus, the rapid disbursement of funds was favored. Target clientele were chosen independently of repayment capacity and without reasonable guarantee of loan recovery. Credit was subsidized.

In depositor-dominated organizations, practices and procedures seek to protect depositor savings. In this case, the borrower's repayment capacity is taken seriously and procedures for loan collection are emphasized more than the quick disbursement of funds. Portfolio diversification is used as a tool to manage risk, instead of concentrating loans in a few crops or activity types. Borrower-dominated institutions have been characterized, instead, by the absence of a clear concept of risk in their operations. In depositor-dominated intermediaries, careful risk management is the most important component of the organization's culture. This is why deposit mobilization represents a promising founding block for a transformation strategy for state-owned development banks.

At the same time, supervised credit programs have not trusted borrower decisions. Instead, they have insisted on rigidly targeting credit and on detailed supervision of the use of funds. These efforts, despite good intentions, have resulted in unexpected negative consequences. On the one hand, the fungibility of money has frustrated attempts to control end uses of loan funds (Von Pischke and Adams). On the other, rationing, needed in view of excess demand created by underpriced credit, and excessive supervision have increased transaction costs, for the bank as well as for the borrowers. Implicit costs have been particularly high for small loans and marginal customers, thus disproportionately hurting the poor. Development banks to be restructured must be allowed to set the terms and conditions of credit and deposit contracts in response to market circumstances.

Deposit Mobilization

Agricultural development banks have been pessimistic about opportunities for successful mobilization of local deposits. They have assumed, instead, that rural households do not save, do not want to transform some of their assets into bank deposits, and do not react to interest rates and other economic incentives. Those few institutions that have emphasized savings mobilization

have been successful, however. They have actually discovered a high demand for deposit facilities in the rural areas of developing countries and have tapped these additional loanable funds to their advantage (Robinson, 1992). By ignoring deposit mobilization, agricultural development banks have been truncated, incomplete, and vulnerable intermediaries. They must become full intermediaries, by adding deposit facilities as a preferred service to their clientele A most attractive feature of these banks, in the provision of microfinancial services, is precisely their comparative advantage in the mobilization of deposits in the rural areas of developing countries.

Disappointing Performance

Despite good intentions, state-owned agricultural development banks have been weak instruments to achieve non-financial objectives while, in the end, the primary goal of improving rural access to formal credit has been poorly met. The great majority of the rural poor still lack access to a broad range of reasonably priced financial services. A reduction in the cost of borrowing has been achieved only for large borrowers, while small producers have been saddled with high transaction costs. Credit portfolios have been concentrated in a few hands, with regressive consequences on distribution (Gonzalez-Vega, 1976). Small rural savers have found no safe and convenient facilities to deposit. Given lack of concern for viability, their own policies and procedures eventually destroyed these financial organizations. The institutional landscape of the developing countries is littered with failed state-owned development banks.

If this is the case, is there any hope (even in a second-best world) to transform state-owned agricultural development banks into valuable financial intermediaries that can provide microfinancial services? This question is addressed next.

III. Development Banks and Microfinance

The analysis of the previous two sections suggests several conclusions relevant for the discussion of this paper:

(a) despite significant attempts (including a few successful ones) to make financial services available to the poor, millions of low-income small and microentrepreneurs in the developing world still do not have access to semiformal or formal financial intermediaries (for loans, deposit facilities, funds transfers, and other valuable financial services);

(b) strong theoretical and political considerations (from both efficiency and equity perspectives) recommend continued efforts to promote greater outreach and sustainability of organizations with an ability to expand the supply of those services;

(c) while robust general (policy) principles for microlending have been derived from theory and experience, recognized well-performing (best practice) organizations presently supplying financial services to the poor exemplify several types of organizational design;

(d) perceived deficiencies in the organizational design of existing successful and potentially successful organizations should be corrected, to achieve further sustainability; and

(e) additional experimentation in the creation, transformation, and restructuring of financial organizations for the poor represents the most basic challenge for the donor and professional community.

There is a strong willingness to push the frontier of semiformal and formal finance outward, but no dominant organizational model has been identified to accomplish the task. This state of affairs raises important questions about the opportunities and dangers of considering some of the old state-owned agricultural development banks as candidates for a process of institutional restructuring that would enable them to become important suppliers of microfinancial services. Given their historically-revealed weaknesses, such a strategy would require a strong justification.

Role of Public Banks

Three basic questions must be addressed in order to consider such a task:

(a) Is there a clearly justified role for state-owned agricultural development banks in a competitive financial system where repressive regulation has been dismantled and prudential supervision strengthened?

(b) What is the nature of an appropriate restructuring process that would convert them into viable, stable, and competitive intermediaries? While basic principles are known, there is little knowledge about the actual process of transformation. Initial conditions and strategic decisions appear to matter during implementation.

(c) Is there room for the development of an important microfinance mission within these restructured organizations? It is not immediately clear if the match is appropriate or not.

It is not within the scope of this paper to resolve the first question, a key issue in the debate about the role of the state in financial markets. Arguments about the need to promote government-owned financial intermediaries to provide services in particular market niches have been justified in terms of market failure (Stiglitz, 1993b), slow supply reactions to financial market reform (Krahnen and Schmidt), or the need to pursue socially valuable objectives (Gomez).[11]

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[11] "One should not expect that even an extremely far-reaching and successful financial sector reform would eliminate the need for specific efforts to initiate and support target-group-oriented financial institutions. There does not seem to be a "market mechanism" which would induce established financial institutions to start providing financial services to the lower-income target groups as soon as financial sector reform has taken place" (Krahnen and Schmidt, p. 80).

The historical experience highlights numerous sources of difficulties in any such endeavor, however. Our preliminary belief is that it is probably not worthwhile to start **new** state-owned agricultural development banks anywhere, but this is an issue that would need additional consideration, for which there is no room in this paper.

A different question, however, pertains to the costs and benefits of restructuring some of the **existing** agricultural development banks and reorienting, at least in part, their activities to microfinance[12]. These two questions are intimately related. On the one hand, there is no point in adding a microfinance dimension to these banks if they are not properly restructured. On the other, widening the range of their functions to provide services to small and microenterprises may, in turn, help strengthen them.

Reasons for Restructuring

To address the issue of restructuring state-owned agricultural development banks one must ask: why? when? where? and how? The "why" logically precedes the other questions. Why bother to restructure organizations with such a stubbornly flawed past history? What services could they offer that are not being satisfactorily supplied by private banks, non-bank intermediaries, and NGOs? What are the benefits and costs involved?

In a second-best world, sufficiently strong arguments can be made about the advantages of protecting (socially) valuable assets that would be destroyed with the abolishment of a particular agricultural development bank. It may be argued that some of these organizations possess valuable information capital, human capital, and an infrastructure (i.e., branch network) that can reach further down toward lower-income clientele than private commercial banks can and at the same time service a rural (agricultural and non-farm) clientele better than most NGOs do. Moreover, such a bank may be able to mitigate the consequences of covariant income risks through enterprise and geographical diversification due to possession of a branch network with a national scope as well as through access to liquidity markets and lenders of last resort (e.g., a central bank).

Information and Human Capital

Information is a key input in the production of financial services. In the rural areas of developing countries, banks cannot rely on audited financial statements and stock prices, as they do in more advanced financial markets. Instead, lenders generate information about their clients

[12] That this is a potentially promising undertaking is suggested by the transformation of Bank Rakyat Indonesia (BRI), where the *unit desa* program is possibly the most outstanding microfinance effort in existence (Patten and Rosengard).

through the repeated screening and monitoring of their borrowers.[13] This information capital is built over time, through durable banking relationships (Caprio).

Agricultural development banks in several countries have accumulated such information capital (credit histories, repayment records, knowledge of the local environment) over many years of close and continuing relationships with their local rural clientele. This is their most valuable asset. It represents a sunk cost to the bank and it cannot be easily transferred to another lender.

The value of this information capital depends on the bank's past history. Financial repression frequently leads banks to underinvest in information capital. If governments and donors target loans to particular clientele, bankers find less incentives to evaluate creditworthiness and to accumulate information on repayment performance (Aguilera-Alfred and Gonzalez-Vega). Structural adjustment programs, by modifying relative profitabilities, may also make the existing information capital obsolete, as some old clients would no longer possess viable enterprises. In several agricultural development banks, however, there are valuable repayment records that would allow the reconstruction of credit histories as a tool for future risk management and evaluations of creditworthiness.

Moreover, much of this information capital is embedded in the human capital of the bank. The technical staff of agricultural development banks possesses valuable information about the local environment and about individual borrowers. They have acquired skills in dealing with marginal clientele, as well. They are frequently quite capable of evaluating creditworthiness; simply, they were not given an opportunity to exercise those skills within the repressed framework of the past. Research in the Dominican Republic, for example, showed that the staff of *Banco Agrícola* was able to recognize bad from good credit risks, and that most of the delinquency problems of the bank could be explained by the external constraints on its operations resulting from the main agency contracts with the government and donors (Aguilera-Alfred and Gonzalez-Vega).

Valuable "Lost" Clientele

Most importantly, this information and human capital have been frequently developed around a "lost clientele" of good, regularly performing borrowers, who would disappear from formal financial markets when these institutions are closed or privatized. This market segment typically consists of a substantial majority of the bank's clientele (in numbers), namely, small to medium-sized farm and non-farm enterprises, made up of largely responsible borrowers with good credit records.

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[13] Even informal local lenders, for whom much of this information represents a sunk cost, specialize in tracking, accumulating, and interpreting creditworthiness data about their clients. Non-local lenders must generate cost-effective, information-intensive lending technologies to operate competitively.

Agricultural development bank failures are not typically due to these well-performing small clients, but rather to a much smaller number of considerably larger farm and non-farm borrowers engaged in rent- seeking behavior, built on political favors which in the end protect them from sanctions on defaulted loans. Although much less numerous, the latter have captured the largest share of the bank's portfolio and account for the bulk of the losses from default. Their delinquency puts pressure, nonetheless, on the interest rates to be paid by good borrowers and on bank profits.

Upon closure of the development bank, however, private commercial banks do not absorb these good and thereby lost clientele, since they do not have convenient bankable collateral and the new bank management does not entirely trust such past credit records without additional screening, for which it is not well prepared. NGO programs also ignore them, as they do not constitute the poorest of the poor, or because NGOs do not typically lend for agriculture. Thus, in the process of eliminating an agricultural development bank, an important market segment is lost to formal finance.

The question of "when-where" to restructure agricultural development banks must recognize that this information and human capital is worth little in institutions suffering unusually high default rates (over 20 to 30 percent of outstanding balances). These institutions would not typically be considered to be viable candidates for restructuring, as high default rates suggest either a deterioration of the risk characteristics of the clientele (perhaps contaminated by demonstration effects from unpunished delinquent clients) or inadequate information capital. If, instead, useful information and human capital exist and valuable banking relationships can be saved, the restructuring of a state-owned agricultural development bank can use those assets to take advantage of opportunities for portfolio diversification and deposit mobilization that other non-bank intermediaries cannot enjoy.

Development banks are more likely to be reformed successfully when they are experiencing some degree of crisis, but not so severe that there are no valuable intangible assets left to be saved (i.e., information capital on viable market clientele). The bank's information capital and valuable infrastructure and branch network can be instrumental in a restructuring process only if there is a critical minimum clientele size that has not been compromised by severe delinquency. Additional portfolio management safeguards would be obtained as the bank is granted sufficient autonomy to operate as a regular financial intermediary.

Given deficiencies of organizational design (property rights, incentive, and internal control structures) of other microfinance institutions, a few state-owned agricultural development banks may offer an interesting complementary alternative in the search for better microfinance organizations. Given their banking charter and the application to them of prudential regulatory rules, they are able to mobilize deposits, a considerable advantage over non-deposit-taking organizations. Given a national network of branches, they can also better diversify their portfolio and link themselves to the aggregate financial sector. Properly restructured, a few of them may

be among interesting options for donor intervention, given present knowledge and practice about technologies-cum-organizations for microfinance.

Preconditions for Success

Given basic flaws revealed by their history, only a few state-owned agricultural development banks may be viable candidates for successful restructuring. The intrinsic challenges are so major, that several dimensions of the environment and other initial conditions must be taken into account in the careful selection of the few instances ("when-where") this is potentially desirable.[14] These preconditions for success should include a strong combination of several of the following:

(a) the development bank operates in a country that has achieved at least a moderate degree of macroeconomic equilibrium, such that inflation rates are low and there is no major overvaluation of the domestic currency;

(b) the development bank operates in a country that is fully committed to a process of financial reform, such that no ceilings prevent interest rates from being determined by supply and demand considerations (or at least be freely chosen by financial institutions) and no politically-induced allocations of resources are attempted through targeted uses of borrowed funds (e.g., portfolio quotas); moreover, competition in the financial system is encouraged;

(c) the development bank operates in a country that is in the process of developing and implementing an effective framework for the prudential regulation and supervision of deposit-taking intermediaries and would be fully covered by this framework in its operations;

(d) the development bank operates in a country with a dynamic agricultural (rural) sector, where repressive policies have been eliminated and there is little price penalization of agriculture (e.g., Southeast Asia). At the same time, there are well-developed rural support services and the authorities do not resort to the credit lines of the development bank in a fruitless attempt to make up for low yields, poor extension services, and underdeveloped marketing channels;

(e) the development bank operates in a country with a sound fiscal system, able to pay for justified subsidies from transparent budget accounts. This means that policymakers will not be tempted to use the development bank as a substitute for the failure of their other policies or as the only feasible channel for disbursing subsidies;

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[14] The task of institutional transformation is so difficult itself that, unless the environment is hospitable to the concept, it would be an impossible undertaking. For this reason, the strict list of preconditions is not unreasonable.

(f) the development bank has access to predictable and cost-effective legal recourse in order to enforce financial contracts;

(g) there is not an excessively high rate of default in the bank's portfolio (e.g., non-performing loans amount to no more than 25 percent of the total) and past default problems are largely government-induced (e.g., through forcing the bank to lend to clearly non-creditworthy clientele, for political or rent-seeking reasons), rather than due to the bank staff's incompetence in evaluating credit risks or corruption. If this is the case, it may be possible to design a hands-off governance structure that would allow the bank to successfully utilize its demonstrated technical competence, once political intrusion is removed; and

(h) a management information system is in place or can be rapidly installed, in order to track loan performance and repayment and the bank possesses a human capital base that can undertake this task.

Experience suggests, moreover, that most successful restructuring efforts are started during a period of crisis for the organization. This is important to reduce (internal and external) political opposition to the reform. In the case of the restructuring by The Ohio State University team of *Banco Agrícola* in the Dominican Republic, the bank was in the process of requesting additional external funds (which were denied), as decapitalization of the organization had sharply deteriorated its loanable funds base. This crisis made possible the introduction of deposit mobilization which, in turn, modified the existing agency relationships with donors, furthering the bank's independence, and created internal tensions that required additional restructuring efforts (Poyo, Gonzalez-Vega, and Aguilera-Alfred).

The Ideal Type Framework

In restructuring state-owned agricultural development banks, the "how" question is necessarily influenced by the political and institutional environment in which the bank operates (initial conditions). A list of ideal structural features and operating and organizational procedures and practices will be attempted here, nonetheless, following earlier suggestions by Graham and Von Pischke. The key question is how to reorganize these institutions so they do not fall prey to the same rent-seeking behavior that largely destroyed their usefulness as financial intermediaries in the past and how adequate incentives are introduced to motivate decisions that protect viability. Changes in their governance structure are thus critical.

This restructuring should include:

(a) **Deposit mobilization**.

The main source of new funds should be a strong local deposit base. The bank should offer a wide range of deposit facilities throughout its branch network, to support growing

lending (Patten and Rosengard). This reduces its dependency on outside donors and cultivates new attitudes toward risk management (Poyo, Gonzalez-Vega, and Aguilera-Alfred);

(b) **Capitalization**.

Initial recapitalization by the government (if necessary) should be followed by additions to capital limited to retained earnings and sales of shares to the public. The expectation of no future bail outs should be credible, while appropriate capital adequacy requirements should reflect the particular property rights structure of the organization (Chaves and Gonzalez-Vega, 1994);

(c) **Independence**.

Defense against political intrusion is critical, especially from the Ministry of Agriculture, which seems always concerned with loan targeting and seldom with promoting viable lending organizations. Any official appointed to the board of directors should be from the Ministry of Finance or the Central Bank. Exemption from usury laws and other interest rate controls is also required; in particular, the bank should fully benefit from the deregulated environment created by financial reform. Policy changes away from interest rate subsidies may actually reduce rent-seeking and other political pressures on the bank.

(d) **Incentive-compatible governance**.

A board of directors must be appointed in which no government official is the chairman. Private and public sector nominees may serve on this board, but independent private sector members (with reputations to protect) should be in clear majority, with strict conditions for their removal, and preferably long terms of service. Typically board members should be chosen for their technical qualifications, rather than as representatives of vested interest groups. Clear criteria and mechanisms of enforcement of their accountability for the bank's performance are needed, as well.

(e) **Safe and diversified portfolio**.

Emphasis on portfolio diversification would suggest that in rural areas non-farm enterprises would be equally important as farmers. Explicit targeting of uses of loan funds would be avoided, but appropriate monitoring of changes in creditworthiness will be undertaken. Screening will emphasize expected returns under risky scenarios (Von Pischke). Commercial short-term overdraft facilities should be incorporated in the bank's portfolio to balance medium-term lending, along with remunerative treasury bills (up to a specified portion of assets). This asset composition would give the institution the means to properly manage both risk and liquidity.

(f) **Decentralization**.

Branches should be brought as closed to the clientele as possible. Decentralized decision-making should rule loan allocation at the branch level and the transaction costs of borrowers and depositors should be minimized. Performance-based remunerations, based on criteria including profits, number of loans, loan recovery, and deposit mobilization would create compatible incentives for branch staff and management (Chaves and Gonzalez-Vega, 1995). Transfer pricing would be required to reward deposit mobilization where and when it exceeds local loan demand. Credit rating indicators for a borrower should be available to any branch in the bank.

(g) **Human resource policies**.

The organization should enjoy freedom to hire and fire employees and to set wages free from civil service regulations, and to offer performance incentives rather than pay rigid wages based on seniority.

(h) **Transparency**.

State-owned agencies, especially financial institutions, should be at the forefront of disclosure. Accountability should include quarterly and independently audited reports, issued to the public, specifying financial conditions truly and fairly. Such reports should include adjusted balance sheets, income statements, sources and uses of funds, and additional data showing the aging of loan arrears, write-offs, accumulation of reserves, and the market value of the investment portfolio. Similar and more detailed information should be available to the prudential supervisor.

(I) **Financial performance**.

Most importantly, performance measures (such as portfolio net present value, accounting profit, subsidy dependence, sources of funding, and constancy of services) should figure prominently in all financial reports. Income should be realized in cash only, excluding accruals, given the uncertainty of obtaining payment of interest in arrears. Expenses, instead, should report accruals, because these represent actual obligations to be fulfilled.[15] Large defaulters may be listed by name. Likewise, loans to directors, officers, staff and family members should be disclosed, if not forbidden. Statements of loan and other policies, particularly those relating to loans on which payments are not received in full and on time, should be included in annual reports. Any events having a material impact on the bank's financial condition should be announced (Graham and Von Pischke).

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[15] Independently of accounting method (accrual, cash), profits should not be declared against accrued interest income not effectively received or ignoring accrued expenses not yet paid for.

(j) **Donor support**.

Donors should not (typically) fund loans to the organization, but rather should build up its human capital to manage credit risk intelligently. Thus, training, technical assistance, and judicious support for computerization are appropriate donor interventions. Some of the institution's own funds should be committed to these endeavors as well, to ensure continued investment in management information systems upon donor withdrawal. Any donor intervention should not create subsidy dependency, as is the case with support for operating expenses; instead, donor interventions should mainly capitalize the organization (Chaves and Gonzalez-Vega, 1995). Loan funds may eventually be used, nevertheless, but perverse incentives against deposit mobilization should be avoided.

Expected outcomes

If such an institution performed well, it could offer a range of deposit and savings services for the poor (as legitimate a demand as there is one for loans) far better than many NGO programs can. Second, these organizations can serve agricultural clientele that are rarely included in NGO portfolios, particularly because of the complications arising from covariant income and seasonality.

Third, their deposit services could be used by NGO programs to manage their own liquidity, thus initiating a banking relationship that can lead to attractive wholesale-retail networks. Effectively restructured state-owned rural banks with an extensive branch network would be in a position to mitigate covariant income risks and offset seasonal cash-flow farming cycles for local branches. Non-farm enterprise lending may help in this process. Possession of a large network would also allow the bank to offer funds transfer services.

These restructured state-owned banks would be better positioned to serve agribusiness input suppliers and output buyers which play such an important role in lending downstream to small farmers and microentrepreneurs. In short, these banks could positively shape the market environment within which small and microenterprises operate. Finally, these banks would be structured within the formal financial frontier but would be able to downscale toward the rural environment more effectively than private commercial banks, given their information capital and accumulated experience in the rural areas. In the end, viable NGO intermediaries and reformed rural development banks could complement each other in a few developing countries.

Despite positive dimensions of development bank restructuring efforts, however, the fundamental empirical question would be the extent to which these organizations will be able to overcome basic flaws emerging from state ownership and other dimensions of their organizational design. The extent to which one can be optimistic about enlightened governments allowing efficient state institutions to flourish, the answer need not be lethal. The experience of Bank Rakyat Indonesia confirms the possibility; but there are not many examples of success in this area.

In the end, their property rights structure will always represent an Achilles' heel for government-owned banks. This shortcoming is not unique to them, nevertheless. Successful financial organizations in the NGO and credit union world also suffer from inadequate property rights structures, which raise questions about their sustainability in the long term (Chaves). This is why institutional design has become the most urgent and difficult challenge in the field of microfinance.

Microfinance

The potentially successful restructuring of a few state-owned agricultural development banks creates an opportunity for the provision of microfinancial services in the rural areas of some developing countries, particularly if the bank possesses an extensive network of branches that reach beyond provincial capitals and large towns. The revamped intermediary would be in a position to reach a diverse clientele of medium, small, and micro rural entrepreneurs, previously without access to a wide range of financial services. That is, the network of branches must be transformed from conduits for donor/government targeted lines of credit, to full-service rural banks (Patten and Rosengard). Rather than converting them into specialized microlenders, restructuring would include the addition of a new client base to their broader operations.

Addition of a microfinance dimension will not be a trivial task, of course. The challenge will be in many ways equivalent to that of downgrading any other (private) bank (Krahnen and Schmidt). The assumption is that agricultural development banks are already more accessible and closer to small producers than private commercial banks. The difficulty is to undertake this new (politically attractive) task while at the same time adhering to the fundamentals of sound financial policy.

Before initiating such an effort, the organization's past experience in making and recovering small loans must be evaluated. Evidence of such a capacity would be encouraging. The differences between small farmer loans and microenterprise credit must be recognized and dealt with, nevertheless. Agricultural lending typically uses farm budgets to formalize information on a project's technical and financial feasibility. Representative budgets reduce bank costs by making it unnecessary to construct separate analyzes for each applicant. Typically this methodology fails to address risk properly. In order to recover microloans, therefore, the restructured development bank must abandon some old techniques and improve its skills in determining repayment capacity (Von Pischke).

IV. Lessons from Development Bank Histories

Latin America and Asia

The (partial) list of ideal restructuring steps above is useful as a guide but unrealistic, except as a long-term goal for viable development banks. The choice of actual reform steps for a salvageable institution is largely an empirical question, depending on circumstances ruling in

the political economy environment for financial reform in each country. Such initial conditions will specific actual strategic decisions in diverse countries. In the short run, priorities must be established and sequences of reform efforts undertaken, rather than imagining that all ideal features could always be adopted immediately and simultaneously.

In the Dominican Republic, for example, an opportunity for reform appeared through changing the funding base of the institution. The opening of the deposit side of the bank's balance sheet introduced a new internal constituency within *Banco Agrícola* concerned with prudent lending behavior. This created, in time, second generation pressures on branch managers. They became more concerned about recovering deposit-based loans than they had been with loans funded through donor sources (Aguilera-Alfred and Gonzalez-Vega).

Thus, increasingly shifting the funding base from external donor funds to domestic deposits reduced behavior incompatible with viability, by tightening managerial accountability and improving loan evaluation and collection practices. The institution became less borrower-dominated in its procedures and practices and substantially improved its lending performance in the early 1990s. Most importantly, it added a valuable deposit service to its functions, for which strong rural demand was revealed (Gonzalez-Vega et al., 1992).

Bank Rakyat Indonesia (BRI), possibly the most successful restructuring of a public agricultural development bank, also emphasized decentralized branch management in its *unit desa* program. This effort focused on deposit mobilization on a large scale, reaching approximately 11 million depositors by the early 1990s (Robinson, 1994). At the same time, BRI also high-lighted the role of performance-based remuneration schemes for branch managers and loan officers, to ensure that the growing deposit base was converted into secure and remunerative character-based loans (Patten and Rosengard).

An important feature of the BRI policy shift was diversification out of a previously dom-inant agricultural portfolio into a broader range of non-farm rural enterprise lending. The earlier BIMAS credit program, designed to promote the adoption of new high-yielding rice varieties, was replaced by a more balanced and diversified portfolio. After this transformation, BRI has served an increasing number of traders, artisans, and microentrepreneurs. Finally, market rates of interest replaced the former subsidized credit, consistent with successive macro-financial liberalization measures carried out by the Indonesian government in the mid-to-late 1980s.

In summary, shifts to deposit-based lending and decentralized delegation of loan activity to branch officers, jointly with performance-based remunerations, facilitated the rapid success of BRI restructuring within a new deregulated environment. It is noteworthy that no explicit shift in governance rules occurred at BRI. The new policies and procedures were adopted through explicit directives from the top, given existing governance arrangements. Such enlightened government intervention is rare in developed and developing nations. Furthermore, there is always the danger for the bank of a mood shift by the authorities.

It is also noteworthy that effectively functioning rural or agricultural development banks in Indonesia (BRI), Thailand (BAAC), and Malaysia (Bank Pertanian) operate in environments with dynamic agricultural sectors, well-developed support systems, and favorable price policies. Clearly, rapidly growing rural economics facilitate the more diversified lending to non-farm enterprises that is linked to the bank's restructuring. In an environment of low productivity agriculture, with little to no support services, instead, political pressures would likely force development banks to try to jump-start agricultural development through credit programs that would be destined to experience high arrears. This is largely the history of agricultural development banks, particularly in Sub-Saharan Africa.

Africa

The history of development banks in Africa has been indeed an unhappy one. The Egyptian experience highlights several of the obstacles and challenges to the restructuring of public agricultural development banks. The Principal Bank for Development and Agricultural Credit (PBDAC), a large institution with hundreds of branches and about 40,000 employees, had enjoyed a monopoly in rural finance until recently. PBDAC was the sole distributor of fertilizer and agricultural machinery until the early 1990. It benefitted from monopsonistic marketing boards that collected loans on its behalf, for its agricultural input loans. Not surprisingly, its loan recovery was excellent. However, the privatization of input supply distribution and of marketing boards left the bank without a mission (Baydas, Bahloud, and Adams). At the same time, the bank has only perfunctorily supplied conventional deposit services.

The bank's lending to farmers has recently declined substantially, as new private input dealers and crop buyers have begun establishing their own trade credit arrangements, for their network of downstream retailers. The bank is beginning to recognize the challenge. It expects to downsize its operations (and staff) to meet its new market opportunities. However, this confronts established civil service rules on personnel decisions.

The PBDAC should become a rural, instead of exclusively a farm lender. Indeed, it should explore supplying financial services to the private wholesalers and retailers who have acquired its previous marketing functions and to other rural non-farm enterprises. At the same time, it should aggressively expand and market its savings services through Islamic deposit instruments designed to attract a broader Muslim public acceptance than its current conventional accounts.

In short, it should change its image from a farm credit institution to becoming a rural financial intermediary with a diversified portfolio, based largely on mobilized deposits, and with a substantially downsized staff, trained to serve a broader rural clientele. Such a radical restructuring will not be easy given its present governance structure, based on a board dominated by the Minister of Agriculture. Action will be required to restructure board membership and the bank's mission statement, to more adequately support its new role as a rural financial intermediary.

The experience in West and Southern Africa adds material to this history of state-owned agricultural development banks. Most development banks in Francophone West Africa have been closed (Niger, the Ivory Coast, and Togo) or repeatedly recapitalized with outside funds to little effect (Senegal). All these institutions had followed a supply-driven strategy that neglected domestic deposit mobilization in favor of external funding, emphasized top-down hierarchical control with no decentralization or staff incentives, and heavily concentrated loan portfolios in a risky agricultural sector, with poor to non-existent support services for a low-productivity farm clientele. It is not surprising that they rapidly became insolvent in the 1980s.

Several Anglophone West African countries, such as Ghana and The Gambia, have recorded a similar history, but with a difference. Whereas these countries also followed a supply-leading strategy of credit allocation to targeted farm clientele, they also cultivated a more diversified portfolio of rural and urban non-farm enterprises, covering a wide spectrum of micro and small business activities and personal loans to salaried employees in the public and private sectors. For the most part, these clients were responsible borrowers. These banks became increasingly unviable, not because of these clients, who constituted the majority in number, but due to the large volume in default from a small number of large borrowers with sufficient political influence to engage in rampant rent-seeking behavior.

It is clear that the weak and dysfunctional governance structures and internal control schemes of these banks were unable to prevent this political intrusion and to discipline delinquent clients. Thus, whereas the Francophone institutions were never considered viable candidates for privatization through foreign buyouts, the franchise for The Gambia Commercial and Development Bank was purchased by Meridien International in 1992 and several development banks in Ghana are currently being prepared for privatization, with several bids expected for the state-owned Ghana Commercial Bank (Baydas and Graham; Graham, Meyer, and Cuevas).

The Banco Popular de Desenvolvimento (BPD) in Mozambique represents yet another case of incomplete development bank restructuring. Until the early 1990s the bank was little more than a channel for fiscal transfers for the FRELIMO government's rural development projects. Here there was little chance for privatization, given the weak state of the economy, the lending risks associated with a continuing guerrilla war in the countryside, and the burdensome administrative legacy of a 15-year self-proclaimed Marxist-Leninist regime. Following attempts at financial liberalization in the late 1980s and early 1990s, the BPD quickly raised interest rates when controls were relaxed, and efforts were made to reduce its risky agricultural portfolio. Attempts were made to grant loans to newly opened but allegedly less-risky private sector activity in urban commerce and service sectors.

While its performance improved, the heavy hand of a top-down administrative style inherited from a corporatist Portuguese colonial tradition, and the centralizing style of its former socialist regime prevented any meaningful decentralization or branch level autonomy. A civil servant tradition predominates over banking practices, making it difficult to delegate decision making or introduce financial innovations. Given lack of competition, the BPD is able to survive in its

present truncated form, earning no better than a zero net return on its assets (Graham and Francisco, 1993). No change has occurred in the governance structure of the institution.

Although it accepts deposits, it avoided paying interest until 1993, when interest-bearing time deposits began to play a more important role among its liabilities. The bank has not been recapitalized, due to fiscal limitations, and deposits are becoming its principal source of funding by default. Preliminary evidence suggests that this is inducing second-generation pressures to lend more carefully.

South Africa represents a final illustration of development bank restructuring. Three features of South African development have shaped its development banking community:

(a) its late entrance into serious structural adjustment efforts (early 1990s);

(b) its statist and protectionist rather than competitive private enterprise tradition; and

(c) the legacy of apartheid and its artificial homelands.

These features have led to a centralized, paternalistic civil servant tradition in its agricultural finance corporations, which issue subsidized credit to unviable agricultural activities in artificial jurisdictions (i.e., homelands). Clearly, these organizations were not meant to be viable. They were serving a political apartheid agenda. However, in the present circumstances of political opening, increased structural adjustment pressures, and inability to continue subsidizing unviable institutions, most of these organizations will have to be closed or radically downscaled, to serve a new constituency of black South African farm and non-farm enterprises.

It is interesting to note that the one South African institution to buck this trend, the Kwa Zulu Finance Corporation in Natal, achieved progressive growth by diversifying its portfolio beyond agriculture, beginning to charge market rates on loans and, most importantly, launching a deposit mobilization initiative. The latter is beginning to create healthy second-generation pressures for managerial accountability in loan screening and recovery (Aling and Pringle). Domestic deposits now account for more than one-third of its funding sources. Defaulted loans represent only five percent of the KFC portfolio, while temporary arrears reach 25 percent.

The reasons for this behavior grow out of the fact that Natal is a province with deep roots of separatism embedded in its Zulu culture. This led to a strong desire for self-sufficiency, autonomy, and survival in its development bank operation. This independence in turn led to steps toward institutional viability. This organization does have a strong base for continued reform and growth, which is largely absent in the other South African homeland institutions.

V. Concluding Speculations

This paper has explored opportunities, costs, and benefits for (partially) reorienting (restructured) state-owned agricultural development banks to microfinance. This would be potentially beneficial. On the one hand, a neglected clientele would be incorporated inside the frontier of formal finance. On the other hand, the new microfinance dimension would strengthen the bank as a financial intermediary.

This would be an attractive proposition only in those few cases where the bank possesses valuable information and human capital and an extensive network of branches, which reach into sufficiently dense rural areas with an existing well-behaved clientele, and if the transformation takes place in a hospitable macroeconomic, policy, and regulatory environment. The checkered experience of state-owned agricultural development banking generates several important lessons, however, not to be forgotten in the transformation.

These lessons can be summarized as follows:

(a) Successful restructuring of development banks can only occur in an environment of structural adjustment, in which policymakers emphasize serious macroeconomic stabilization and financial liberalization measures.

(b) A healthy and dynamic agricultural sector, with strong non-financial support services, greatly facilitates the emergence of a reformed rural development bank, with a more diversified portfolio and tighter administration.

(c) Among the long list of "how" measures, a crucial first step may be to change the source of funding. Most successful development bank reforms have begun with the shift from outside (donor) to internal (deposit-based) funding. This, in turn, is responsible for generating second-generation pressures for more disciplined loan evaluation and recovery practices.

(d) Following the shift in funding sources, decision-making should be decentralized to the branch level, to take advantage of local information for screening and monitoring. To provide adequate incentives, the bank should adopt performance-based remuneration schemes at the branch level, in which loan recovery is rewarded along with profits and the number of loans and deposits. Although the design of performance-based remunerations is not an easy task, it seems to have been attempted with considerable success in Indonesia (Chaves and Gonzalez-Vega, 1995).

(e) Portfolio diversification should naturally follow from decentralization and deposit mobilization.

(f) An important legal change required to implement delegated decision-making and performance-based remuneration for branch managers and loan officers is the ability to hire, promote, and fire staff free from civil service regulations. The bank should be allowed to adopt the same legal framework for personnel decisions as private banks.

(g) Transparency and accountability then become more feasible. On the one hand, the bank should be more than pleased to publicize the results of its successful reforms. On the other hand, a laggard reform effort must be expected to "face the music" fairly soon after launching it. Potential embarrassment through transparent reports could prove to be a powerful incentive to ensure commitment to disciplined reform.

(h) The two most contentious and critical issues are reform of the governance structure and recapitalization. Effective reform can occasionally occur without dramatic governance changes, as seen in Indonesia, where the strong commitment of key powerful managers substituted for this. In Africa and Latin America, however, weak governance structures facilitated the rent-seeking behavior that destroyed most development banks in the past. Agency problems are always serious in any state-owned bank, as there are no identifiable owners with sufficient interest to monitor performance and guarantee solvency.

(i) Eliminating the role of any non-financial ministry (e.g., Agriculture) on the board appears to be a necessary though not a sufficient condition to avoid strategic (i.e., opportunistic) behavior at the board level. The spirit of reform at the board level is to appoint a majority of respected private citizens who would lose substantial reputation capital if the bank failed (Schmidt and Zeitinger).[16] To date there have been no commonly recognized board reforms of state-owned financial institutions.

(j) Recapitalization should be considered following partial or complete cleaning up of the balance sheet, for those development banks meriting restructuring. First comes write offs, then recapitalization. One should design this in such a way as not to discourage the shift to deposit-financed lending, but sufficient in size to signal depositors that the institution is safe. This is clearly a judgment call, which would be influenced by the availability of fiscal resources and the degree of commitment towards the potential role of a restructured development bank within the country's economic and financial reform plan.

Strategic implementation issues would have to reflect initial conditions in each country. Of particular importance is understanding of the political economy context of the transformation. Unless a strong coalition favors the restructuring, very little can be

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[16] Political capital (a type of reputation) was actually enhanced in many countries by giving away a development bank. One reason why reputations were not lost was that depositors did not suffer as a result of the bank's failure. Von Pischke has suggested that it may be difficult to define reputations based on a bank's performance in countries where local values expect anyone in control over resources to use them "to help friends and those in need."

accomplished. An important task for donors is to promote and nurture such coalitions. Once agreement has been reached, the donor's most important contribution would be technical assistance for the upgrading of policies, technologies, and organizational designs.

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