



FCND DISCUSSION PAPER NO. 89

THE ROLE OF THE STATE IN PROMOTING MICROFINANCE INSTITUTIONS

Cécile Lapenu

Food Consumption and Nutrition Division

International Food Policy Research Institute 2033 K Street, N.W. Washington, D.C. 20006 U.S.A. (202) 862–5600 Fax: (202) 467–4439

June 2000

FCND Discussion Papers contain preliminary material and research results, and are circulated prior to a full peer review in order to stimulate discussion and critical comment. It is expected that most Discussion Papers will eventually be published in some other form, and that their content may also be revised.



ABSTRACT

In a context of liberalized financial systems, microfinance allows millions of households, usually excluded from classical financial services, to begin or reinforce their own activities and become microentrepreneurs. Yet, in spite of the success of numerous microfinance institutions (MFI), many difficulties remain which must be urgently resolved in view of their ambitious objectives. First, a large number of the rural households still lack access to financial services. Second, most of the existing MFI are not yet financially sustainable. Finally, while funds from governments and donors are rapidly increasing, financial institutions still need solid foundations to avoid management failures. These issues raise questions of the role of the state to promote MFI including (1) which state-owned institutions may be necessary? (2) which level and type of subsidization of the financial institutions can be accepted? (3) what can be the choice for the state between alternative investments in financial institutions or complementary services? (4) what are the necessary conditions for creating a favorable environment?

This paper presents the evolution of views on the role of the state in the financial system including theoretical and empirical points of view from the interventionist period of the 1960s and 1970s to the current period of liberalization. Based on country case studies illustrating the divergent role of the state in the development of the rural financial system, the paper reviews the respective role of the state, the NGO and the private commercial banks in increasing their outreach and in adopting microfinance innovations. It also analyzes different issues regarding regulation of MFI.

iii

The paper concludes with a discussion of the necessary roles of the state to promote MFI. The role of the state encompasses insuring a minimum banking structure in the rural areas, subsidizing microfinance start-up capital and innovations, and investing in complementary services such as infrastructure, health, and education. The state must also develop a clear and flexible regulatory framework for MFI with the means to enforce the rules for the supervisory bodies. The paper also concludes that efficient governance is more of a determinant than the distinction of ownership by the private or the public sector for the performances of the MFI.

CONTENTS

Acknowledgmentsvii
1. Introduction
2. Theoretical Justification of the Role of the State
Distinction Between Public and Private Sector
3. Causes and Consequences of Government Intervention in the 1960s and 1970s
Development of the Public and Private Agricultural Banks
4. Failures and Achievements of the Public Agricultural Banks
5. Current Realities of the Role of the State in the Financial System
The Model of Integration14The Model of Complementarity15The Alternative Model17
6. Place of Institutional Innovations for the Different Models
Adoption of the Innovations19Breadth of Outreach20Existence of a Banking Structure in the Rural Areas20Absence of a Banking Structure in the Rural Areas22Depth of Outreach23
7. The State and the Policy Framework
Different Modes of Regulation
8. Conclusions and Policy Implications
References

TABLES

1.	Functions of the state
2.	Required regulations for microfinance institutions compared to
	commercial banks

ACKNOWLEDGMENTS

The author thanks for their helpful comments Michel Benoit-Cattin and Geneviève Nguyen (CIRAD), Manfred Zeller and Lawrence Haddad (IFPRI), Richard Meyer (OSU), and the participants at the workshop Innovations in Rural Microfinance for the Rural Poor: Exchange of Knowledge and Implications for Policy organized by the German Foundation for International Development (DSE), International Food Policy Research Institute (IFPRI), International Fund for Agricultural Development (IFAD), Bank of Ghana, November 09-13, 1998, Accra, Ghana.

Cécile Lapenu International Food Policy Research Institute

1. INTRODUCTION

Microfinance arouses enthusiasm among donors, practitioners, researchers, and the state. This interest is based on the success of a few famous financial institutions in mobilizing savings and distributing large amounts of credit, with high repayment rates and good outreach on a rather sustainable basis. Microfinance has allowed millions of households usually excluded from classical financial services to begin their own economic activities or to reinforce existing efforts and become microentrepreneurs.

Yet, many difficulties remain that must be resolved in view of the ambitious objectives attached to microfinance programs. Three main issues have to be clarified. First, a large number of the poor households still lack access to financial services. Impact studies show that for the poorest of the poor, the necessary environment is not yet in place for microfinance to realize its full potential. Second, most of the microfinance institutions still have to demonstrate their capacity to reach a break-even point that would allow them to work without being subsidized. The trade-off between becoming financially sustainable or reaching the poor is a frequent debate, which shows that the role of microfinance as a policy instrument is not straightforward. Finally, in support of microfinance, governments and donors are increasing the amount of funds invested in order to develop new institutions rapidly and to reach an increasing number of clients. But financial institutions must be built on solid foundations to avoid a decreasing rate of repayment or risk of mismanagement. Time, good institutional design, and a favorable environment are necessary to build efficient financial institutions. These issues raise questions about what role the state can assume in order to increase outreach, impact, and sustainability of the MFIs: (1) What state-owned institutions are necessary? (2) What level of subsidization of financial institutions is desirable? (3) What are the state's choices among alternative investments in financial institutions or complementary services? (4) How to create and instill confidence in a regulatory framework for microfinance?

This paper focuses on microfinance in the rural financial system, because exclusion from classical financial services is of utmost importance in rural areas. A number of country case studies in Asia and Africa are examined to illustrate the role of the state in the development of the rural financial system. The countries use different modes of government intervention for microfinance innovations: microfinance is sometimes integrated into the public sector (model of integration in India or Viet Nam); it can be complementary to state-owned institutions (model of complementarity in Indonesia or Burkina Faso); or, it can be an alternative to the rather deficient role of the government (model of alternative in Madagascar or West Africa). The structure, conduct, and performance of both the microfinance institutions and the financial systems must be analyzed and compared for the different models. These will help in understanding the complementarities and trade-offs between public institutions and the private sector (forprofit institutions and NGOs) that can lead to an efficient rural financial system for the poor.

This paper presents the evolution of theoretical and empirical points of view on the role of the state in the financial system, from the interventionist period of the 1960s

and 1970s to the current period of liberalization. Then, the respective roles of the state, the NGOs, and the private commercial banks in terms of adoption of innovations and outreach are reviewed to understand when the state can promote, support, develop or on the contrary, impede the development of microfinance. Finally, different issues are analyzed regarding regulation of microfinance institutions, compared with commercial banks.

2. THEORETICAL JUSTIFICATION OF THE ROLE OF THE STATE

DISTINCTION BETWEEN PUBLIC AND PRIVATE SECTOR

State, in its wider sense, refers to a set of institutions that possess the means of legitimate coercion, exercised over a defined territory and its population, referred to as society. The state monopolizes rule-making within its territory through the medium of an organized government. Government is normally regarded as consisting of three distinct sets of powers: one is the legislature, whose role is to make the law; the second is the executive, which is responsible for implementing the law; the third is the judiciary, which is responsible for interpreting and applying the law (World Bank 1997).

Within the private sector, one should distinguish between the for-profit private sector and the not-for-profit private sector, represented by the NGOs. In this paper, NGOs in microfinance will represent both the operators and the member-based organizations such as village banks, solidarity groups, and cooperatives that are implemented by the operators. The role of the donors, as providers of funds, will be included when the role of subsidies in the development of microfinance institutions is analyzed.

JUSTIFICATION OF THE ROLE OF THE STATE

The World Bank (1997) classifies the functions of the state (Table 1).

Neoclassical theory stipulates that individuals are rational and that the free functioning of the market should lead to an optimal allocation of resources. The state must build a conducive environment both for financial markets and for the rest of the economy. Yet, it seems that, as expressed by Krahnen and Schmidt (1994), "there is a need for intervention and technical assistance, even if 'financial repression' has been abolished." The role of the state in the financial system may be justified to cope with market failures and to improve equity.

	Addressing market failures			Improving equity
Minimal functions	Providing pure public goods (Defense, law and order, property rights, macroeconomic management, public health)			Protecting the poor (Antipoverty programs, disaster relief)
Intermediate functions	Addressing externalities (Basic education, environmental protection)	Regulating monopoly (Utility regulation, antitrust policy)	Overcoming imperfect information (Insurance, financial regulation, consumer protection)	Providing social insurance (Redistributive pensions, family allowances, unemployment insurance)
Activist functions	Coordinating private activity (Fostering markets, cluster initiatives)			Redistribution (Asset redistribution)

Table 1—Functions of the state

Source: World Bank 1997.

Addressing Market Failures

The advances in theoretical economics of the past 20 years have provided a specific framework of market failures for addressing the constraints to an efficient role

for financial markets. These market failures are a first rationale for continued state intervention in the financial system (Stiglitz 1992; Besley 1994). However, government may have only limited abilities to intervene to improve matters. Design of appropriate institutions and interventions have then to be balanced and both the capacities of the public and the private sector have to be taken into account.

As a minimal function for macroeconomic management, state intervention in the financial system has always been largely developed to ensure macroeconomic stability and to help the governments in the implementation of their economic policies. The state's macroeconomic role in defining the regulatory framework and fiscal and monetary policy is widely accepted as providing a public good. But questions remain about how this framework should be implemented for microfinance institutions and whether intervention using public funds¹ is justified. Moreover, as expressed by Besley (1994), the government may also be part of the enforcement problem as, for example, forgiving some influent but delinquent borrowers can result in a political gain.

Another public good in the new market of microfinance is represented by institutional innovations. Because pilot projects in microfinance target clients previously excluded from the classical financial system, they might face high risk and high information and start-up costs. The returns are likely to be captured by the rest of the financial system, which may then adopt the successful innovations. As a public good, innovation in microfinance may benefit from donors and state investments that will help

¹ Public funds (from the state or donors) can be distributed (1) through subsidies that do not incur any return to investment, such as subsidization of interest rates, or (2) through public investment in physical or human capital. In this paper, the second option is advocated against the first one.

design services and structures to improve outreach, sustainability, and impact of the MFIs. Once successful, these services and structures can be broadly replicated.

Regulating monopoly and compensating for missing markets have often justified the development of MFIs to fill the gap of the formal financial system and to oppose the monopoly of informal moneylenders. However, as expressed by Besley (1994), it is not clear that market power, e.g., by village moneylenders, is socially inefficient even though its redistributive consequences may be viewed as negative for the poor. Providing credit alternatives may be a reasonable response from the perspectives of distributional concerns but might have little to do with market failures. East Asian governments, for example, have created development banks and used directed credit to fill the gaps in the types of credit private entities provided with a relative success, thanks to their flexibility and a good incentive and monitoring structure (Stiglitz and Uy 1996).

Financial markets are also particularly subject to imperfect information due to the characteristics of exchange: money is given up today in exchange for a promise in the future. Such promises are frequently broken, and the financial institutions have to face problems of imperfect information. MFIs in particular will have to cope with risks of opportunistic behavior of clients (moral hazard), difficulty in the selection of borrowers (adverse selection), problems of lack of collateral and missing insurance markets. Governments can face the same problems of imperfect information as the private sector and may have no better incentives to induce repayment on the financial market (Besley, 1994). However, government intervention may increase efficiency in facilitating the use

of collateral (e.g., through a clear definition of property rights²) and in improving access to insurance markets and other missing markets.

Finally, as the activist functions underscored by the World Bank (1997) and following the new analysis developed by Stiglitz (1998), it can be useful to understand how can government and the private sector act together, as partners. For example, governments can create rents that enhance incentives for prudential behavior in the financial sector. The public policies that led to growth in East Asia sought not to replace markets and market forces, but to use and direct them; government lending programs, employing also commercial standards, complemented private lending (Stiglitz and Uy 1996)

Improving Equity

The need to improve equity may also prompt state intervention even in the absence of market failure. Competitive financial markets may distribute capital in socially unacceptable ways. Government action may be required to protect and assist the vulnerable (World Bank 1997). Microfinance institutions have been developed in this new framework, aimed at reaching the excluded population or, as presented above, aimed at undermining the monopoly power of the local moneylenders.

The role of microfinance in increasing income and smoothing consumption can help providing safety nets. Two elements can justify government intervention to provide

² In this paper, these types of indirect role of the state are not examined.

social insurance: as explained above, government can invest in innovation; moreover, it has the capacity to work at national level so that it can cope with covariant risks.

Innovative arrangements can respond to equity requirements in particular in providing microfinance services in the underserved rural areas and for the poor population. As expressed by Besley (1994), for both political and incentive reasons, credit market intervention to help the poor may make sense as an alternative to attempting any intervention in asset redistribution.

Based on this theoretical framework, the empirical intervention of the state and the private sector in the microfinance system will be analyzed in order to understand better when the state can improve outreach, impact, and sustainability of MFIs.

3. CAUSES AND CONSEQUENCES OF GOVERNMENT INTERVENTION IN THE 1960s AND 1970s

DEVELOPMENT OF THE PUBLIC AND PRIVATE AGRICULTURAL BANKS

One of the main objectives of the developing countries in the 1960s and 1970s was to increase agricultural production by facilitating the adoption of improved technologies by farmers. The rationale for reaching this objective were as follows:

 The main constraint for farmers is access to capital and to new technologies; capital must be injected into the rural areas through in-kind credit packages, including fertilizers, pesticides, improved seeds, or equipment. Public institutions have been developed to channel these packages to the farmers.

- On average, the rural population is poor, and farmers often depend on usurious moneylenders for their access to capital to finance their inputs; to break these links with expensive sources of funds, interest rates must be subsidized.
- 3. The rural population is too poor and subject to too many shocks to save, so no savings schemes are implemented. The objective is to inject funds into the rural areas, not to act as intermediaries between savers and borrowers.

To meet these objectives, there was little concern for building an efficient rural financial market. Economic policies focused on the direct intervention of the state, rather than on developing a conducive economic environment.

Based on these principles, most of the developing countries created agricultural development banks or implemented credit programs within agricultural development projects. A few examples from the countries examined in this paper illustrate this development. Following independence in 1948, the government of India pioneered the practice of state-sponsored rural development banking. Acting through the Reserve Bank of India, the government wanted to provide "social banking" in competition with the private moneylenders, with affordable loans for the rural producer. The land development banks for long-term finance and cooperative banks for short-term finance were created, and 20 major commercial banks were nationalized in 1969 and in 1980. Twenty-five poverty-alleviation schemes were implemented, including the Integrated Rural

Development Program (IRDP), which was initiated in 1979; at present it serves some 20 millions rural families (Hulme and Mosley 1996).

Thanks to oil income, the Indonesian government was able to build two networks to implement its Green Revolution program: 3,600 "village units" of the Bank Rakyat Indonesia (BRI) were in charge of channeling subsidized loans and more than 6,000 "village cooperatives" (Koperasi Unit Desa [KUD]) provided the technical support for improved technology on rice production.

In francophone West Africa, public agricultural development banks (Banque Nationale de Développement Agricole [BNDA]) were implemented to provide financing to producer organizations for the technical support of agricultural projects or development companies. The system of financing was slightly different from one country to another and changed over time. In general, it consisted of loans given in-kind to the producers (seeds, fertilizers, pesticides, equipment), which were reimbursed at harvest time thanks to the commercialization monopoly of the development companies. Inputs and loans were subsidized through external funds from donors and through the reuse of export taxes. This system was implemented for cash crops. Food crops only indirectly benefited from it through reallocation of the inputs.

4. FAILURES AND ACHIEVEMENTS OF THE PUBLIC AGRICULTURAL BANKS

Most of these institutions rapidly faced problems. The low repayment rate was one of the most visible failures of the state-owned development banks. These institutions

were not sustainable and relied more and more on subsidies. A closer look at the impact of the development banks also revealed that they generally did not reach small farmers (Adams and Vogel 1986).

Several points explain these failures. Political interference and lack of responsibility among bank staff led to biased selection of borrowers and arbitrary loan waivers, which led to decreasing repayment rates. In India, for example, appraisals of some loans were made by nonbank staff, namely local government officials entrusted with the allocation of Integrated Rural Development Program (IRDP) loans. As a consequence, the banks did not regard the IRDP as their program and were only involved in it in a mechanical manner (Hulme and Mosley 1996).

Moreover, there were no rewards for the employees when repayment was good. When some type of performance appraisal existed, it was only based on the volume of loans distributed or the rate of adoption of new technologies among the borrowers. In fact, there was little incentive for the bank staff to make the borrowers repay. From the point of view of the borrowers, the lack of flexibility, due to in-kind loans and loan size rigidly dictated by the nature of the borrower's enterprise, decreased their interest for these types of services and as a consequence decreased also their incentive to repay.

The ceilings on the interest rate, the low repayment rates, the absence of savings mobilization, and sometimes mismanagement of the institution led to a low or negative financial profitability for the state-owned institutions. In the case of the West African BNDA, the system did not take into account ways to cope with covariant risks, so that climatic shocks, combined with political intrusions, led to the failure of most of the

BNDA. Some of them have been transformed following the French model of the Caisse Nationale de Credit Agricole (CNCA). Two of them (CNCA Burkina Faso and Mali) still operate, as they continue to support the cotton sector.

In facing all of the problems of the state-owned institutions, the most important catalyst for change occurs when governments are financially constrained: for example, in 1983–84 in Indonesia with the drop in the oil income. India, by virtue of its large home market and diversified export base, was not hit by macroeconomic and debt crisis until 1991, when inflation rose and foreign exchange reserves decreased. India was forced into accepting a structural adjustment program that led to restructuring of the financial system. In another example, most of the West African banks were dismantled or transformed as part of the structural adjustment programs of the 1990s. In Madagascar, a long trend toward reform and liberalization was implemented in the 1980s; as a result the BTM, the public rural bank created in 1975, is now undergoing privatization.

Nevertheless, in spite of the crisis and the adjustments that became necessary for most of the financial systems in the developing countries, the development banks have had some positive impact, which should not be ignored. Networks of financial branches have been built in the rural areas. In Indonesia, more than 9,000 village units of the BRI and villages cooperatives (KUD) are spread throughout rural areas, while branches of 126,000 financial institutions cover rural India.³ Even if some networks may have to be

³ These include 94,000 primary Agriculture Cooperative Societies, 890 Primary Land Development Banks, 18,300 rural branches for the 20 nationalized commercial banks, and 12,800 branches of the Regional Rural Banks.

closed, other may be able to support large development of the rural financial services once liberalization is complete.

Moreover, these policies, aimed at improving agricultural production, have led to the adoption of new technologies, such as use of animal traction in West Africa⁴ and improved seeds and fertilizers for rice in India and Indonesia. As a consequence, agricultural production has increased. Indonesia, for example, became self-sufficient in rice in 1984, after being the world's largest importer in 1970. Production results like these were the main objectives of the governments in directly intervening in rural financial policy.

5. CURRENT REALITIES OF THE ROLE OF THE STATE IN THE FINANCIAL SYSTEM

Owing to the failure of the state-owned financial institutions, the financial markets in developing countries have been oriented toward more liberalization since the 1980s. However, divergent measures and reactions have been observed in different countries, leading to different equilibria between the roles of the state, the private for-profit institutions, and the NGOs. The development of microfinance institutions in the

⁴ In Senegal, in the area of the peanut plantations, for example, the shift from manual work in the field to mechanization has been observed as well as adoption of fertilizer and improved seeds for corn. This was partly due to access to subsidized in-kind loans. Now, owing in particular to the failure of the state-financed program (1981), the equipment has not been repaired, the corn area is decreasing, and soil fertility is declining with the drop in the use of fertilizer. The question still remains of how to maintain a high level of technical efficiency.

developing countries has been more or less linked to state intervention, described through three types of models: integration, complementarity, and alternative.

THE MODEL OF INTEGRATION

In countries such as India and Viet Nam, the state maintains a strong presence and microfinance innovations are integrated within the public sector. In India, programs to promote assured access to banking services for the rural poor have been on the development agenda since the early 1950s. A major justification for the nationalization of banks in 1969 was to force them to extend their lending to the rural areas in general and to the rural poor in particular (Kabeer and Murthy 1996). Currently there are approximately 126,000 public financial institutions or branches spread over India, implementing 25 poverty alleviation schemes. In order to compensate for the failure of the previous programs, new ones are developed such as the pilot project to link banks with self-help groups initiated by the National Bank for Reconstruction and Development (NABARD), the apex agricultural credit bank (Srinivasan and Rao 1996). Only a few reorganizations have been implemented for the old state-owned institutions: as the government's halting progress in the matter of the Regional Rural Banks' reorganization indicates, pressures from trade unions and possibly from political lobbies of the landowning borrowers (who benefit most from subsidized interest and loan and interest waivers) would have to be overcome before restructuring of the rural credit system is attempted (Mahajan and Ramola 1996).

As Viet Nam evolves toward a market economy, state intervention still continues in the rural financial system (Creusot et al. 1997; Colliot and Ngan 1997; Johnson 1996). The Viet Nam Bank for Agriculture was created by the state in 1990; it is a commercial bank using the classical banking criteria to distribute loans (such as physical guarantees and analysis of risks). By 1996, it had a substantial nationwide outreach with more than 1,800 branches spread over the country. In order to reach the poor, the state created in 1995 a nonprofit branch of the bank, the Viet Nam Bank for the Poor. Relying on subsidized credit and founded on political preoccupations, its capacity to reach financial sustainability is questionable. In spite of the 60 or so microfinance programs recently implemented by NGOs, the formal rural financial system in Viet Nam is still mainly driven by the state. Indeed, the new microfinance programs face financial and legal constraints such as an interest rate ceiling that impedes their development.

THE MODEL OF COMPLEMENTARITY

In some countries, the state and the private sector are complementary and do not exclude each other. Either the private or the public sector may adopt microfinance innovations. One of the most interesting examples comes from Indonesia.

In Indonesia, the village units of the public bank BRI have been successfully restructured, spurred by an alarming decline in loan repayment in 1983–84. BRI is a public bank, but the principles of the transformation of the village units consisted of "privatization" of their internal operations (decentralized decision-making, a profit orientation, giving employees a stake in performance and incentives), improved

professionalism of the staff, and increased flexibility. The government assumed the full costs of the transformation by covering the losses incurred under the Green Revolution program (Bimas), capitalizing the village units, and establishing training programs for the staff. Savings from public banks are guaranteed by the state, which generates an incentive to save. The transformation of the BRI village units took place within the context of an overall deregulation of the financial sector (Mukherjee 1997). A regulatory framework has been progressively defined since 1983. It offers in particular a clear and flexible status for the small banks named Bank Perkreditan Rakyat (BPRs).⁵ In June 1993, around 900 new BPRs were operating, 95 percent of them private. This large system of private financial institutions adopts and develops innovations to reach rural areas, such as linkages, incentives to mobilize savings, Islamic principles of profit-sharing, and interregional network building (Lapenu 1996, 1998). Before the current financial crisis in Indonesia,⁶ the rural financial system was characterized by its strong public banking system supporting various microfinance programs, cooperatives, and a diversified competing network of numerous small private banks, BPR. In this model of

⁵ Bank Perkreditan Rakyat means people's credit bank or rural bank. These banks are required to provide a minimum capital of \$25,000 (Rp 50 million 1995), compared with \$5 million (Rp 10 billion) for the commercial banks.

⁶ Nowhere in the Asian region has the impact of the crisis been more severe than in Indonesia. In order to protect the financial system, the central bank (Bank Indonesia) declared a guarantee on bank deposists and pumped liquidity into the banking system in January 1998. But neither the guarantee nor the liquidity support were extended to the BPRs, which now face liquidity constraints. Because the BRI village units are not engaged in foreign exchange, they are partly protected from the crisis, and the volume of savings increased in the village unit network. The value of loans outstanding by BRI village units and the BPR has fallen 25 to 50 percent in constant prices since the beginning of the crisis. Most if not all microfinance programs have experienced lower repayment rates. For more details, see McGuire and Conroy 1998.

complementarity, competition and technical and financial links between the institutions can strengthen the whole financial system.

THE ALTERNATIVE MODEL

In some developing countries, market and state failures to reach the poor and rural areas are manifold, and microfinance institutions developed as an alternative to the deficient role of the state and the market.

In Madagascar, the agricultural public bank BTM has never really managed to reach rural households and to offer microfinance services. In view of these deficiencies, five main networks largely based on mutualist principles have been developed with the support of foreign associations and international donors. However, their outreach is still quite low, reaching only about 25,000 households. At the national level, the structure of the rural financial system remains segmented. In some regions, virtually no formal financial services are accessible to the rural households. If the BTM is privatized, a large part of the 73 rural branches could be closed, which would further weaken the rural financial system.

In West Africa, the failure of most of the agricultural development banks led either to the dismantling of the public-sector institutions (Benin, Côte d'Ivoire, Niger, and Togo) or a fallback toward specialized lending for cash crops, as can be seen with cotton (Burkina Faso and Mali). Due to the success stories of microfinance, particularly in Asia, donors and the state have hoped that NGOs would be able to fill the gaps and respond to the needs of the rural population. The multiplication of microfinance projects that collect savings led the Central Bank of West African States to define a regulatory framework (called PARMEC law⁷). While the Parmec law has made important headway toward regulating informal finance, it still raises some issues regarding the treatment of nonmutualist institutions, the capacity of authorities to implement the law, as well as some regulatory aspects (such as the ceilings on interest rates), which may affect the performance of credit unions (Berenbach and Churchill 1998; Lelart 1996).

These divergent roles of the state are essentially the result of different financial capacities and political will dedicated to the development of the financial system. Nevertheless, it remains important to analyze when the state can promote, develop directly, or impede microfinance innovations in order to understand how these innovations may be broadly implemented.

6. PLACE OF INSTITUTIONAL INNOVATIONS FOR THE DIFFERENT MODELS

The three models presented above differ on the respective role of the state, NGOs, and private commercial banks. The impact of the inner circle of institutional innovation, mainly analyzed here in terms of outreach, depend in part on the model. The analysis of the different country case studies draws some insights on the conditions that can enhance the impact of institutional innovations.

⁷ PARMEC stands for Projet d'Appui à la Réglementation des Mutuelles d' Epargne et de Crédit (Project of support for the regulation of the savings and credit cooperatives).

ADOPTION OF THE INNOVATIONS

The models have different contribution in adoption of innovation. The example of the BRI village units shows that this public institution adopted a large range of innovations in order to cope with market failures (information system through local supervision and responsibilities; incentives for employees, borrowers, and savers; market rules; cost management). These innovations to credit and saving services have been implemented successfully and then disseminated in Indonesia: they include microfinance programs (PHBK, P4K), the regional state-owned banks (KURK, BKK), and the rural private banks (BPR). Indonesian innovations can also be replicated abroad, and BRI serves as an example of best practices. In this case, the Indonesian state has supported innovation then provided as a public good for the rest of the financial system (Yaron 1992).

Because NGOs receive some grants from donors, and because they have a deep knowledge of the local characteristics and constraints, they may also be the ones to test new niches such as poorer strata of the population or poorer areas or to test new methodologies (Gulli 1998).

The model of integration that includes microfinance within the public sector may help support innovations due to their characteristic of public good. Nowadays, the state may still have to invest in the implementation of innovations such as microfinance services to agriculture or insurance services. Many studies underscore the urgent need for rural household insurance to cope with individual and covariant risks (Nguyen 1998; Zeller et al. 1997). Insurance may also help microfinance transactions in securing

repayment. Because state-owned institutions have large networks, they can fulfill the conditions required for insurance systems, that is, large and diversified participation that allows risk pooling. Some NGOs and local organizations, aware of the needs, have already attempted to find some type of insurance scheme, but they are often limited by the narrow range of their client portfolio.

On the other hand, the model of integration may slow down innovation. In India, the slow pace of transformation of the Regional Rural Banks (Mahajan and Ramola 1996) brings out constraints to change that can also exist within public financial institutions. As expressed by North (in Harriss, Hunter, and Lewis 1995), "the individuals and organizations with bargaining power as a result of the institutional framework have a crucial stake in perpetuating the system." A balance of power must be created between the state, the local politicians (modern and traditional authorities), and the financial institutions through external control to avoid political intrusion, while ensuring a dynamic adoption of innovation and sound financial practices. The model of integration may lack this balance of power and external control as seen in the Indian case.

BREADTH OF OUTREACH

Existence of a Banking Structure in the Rural Areas

The presence of a banking structure that may be publicly-owned, can enhance the breadth of outreach for microfinance. The model of integration or complementarity of microfinance within the public sector allows high coverage of the rural population. The case of the state-owned Bank for Agriculture and Agricultural Cooperatives in Thailand,

which reaches 80 percent of the 5.6 million families, is impressive and unprecedented in developing countries (Yaron, Benjamin, and Piprek 1997). The success of the BRI village unit network in Indonesia underscores the role of a large initial financial investment from the state. In 1996, 95 percent of the units were profitable; they reached 16 million savers and 2.5 million borrowers. However, it should be noted that the BRI borrowers are not the poorest of the rural population in Indonesia. Nevertheless, thanks to its large and powerful network, BRI can support microfinance programs that reach around 200,000 poor families⁸. In countries such as India where 15,000-20,000 NGOs operate (Robinson cited in Kabeer and Murthy 1996), most NGOs work with hundreds, occasionally thousands, of members. These numbers represent minuscule coverage in light of the extent of poverty in the country and actual government coverage.

The microfinance institutions, in a model of complementarity, use the banking structure to secure their activities and lower their transaction costs. Yet, to deal with the difficulties characterizing the public banking system (low efficiency and bad repayment rates), policymakers (government or donor) have three options to consider: liquidation, privatization, or restructuring. The first two options often weaken the structure of the rural banking system and may endanger further development of microfinance institutions that use the banking structure to back-up their activities. The successful transformation of the village unit of the BRI should be more widely disseminated. Moreover, how a state-owned bank was successfully transformed and how this process could be replicated in other contexts to maintain a banking structure in rural areas should be carefully analyzed.

⁸ BRI supports the network of village units and a program of solidarity groups by supplying technical assistance (Lapenu 1996, 1998; Ravicz 1998).

According to Hulme and Mosley (1996), "while prescribing the closure of nonprofitable institutions is relatively easy and facilitates the achievement of short-term public expenditure targets, the opportunity costs of not pursuing the "restructure" option may be very high."

Absence of a Banking Structure in the Rural Areas

The model of alternative makes the development of microfinance institutions more difficult. The example of Madagascar, where microfinance institutions try to fill the gap of the deficient banking structure, shows that in spite of the interesting and innovative experiences of the microfinance network, the total number of members reached is around 25,000. After 5 to 10 years of operation, this corresponds to a national rural outreach of less than 2 percent of rural households.⁹

The development of microfinance institutions as an alternative to the deficiencies of the state and the market comprises constraints that may limit their outreach. In spite of their growing importance in the field of microfinance, NGOs cannot be the only vehicle for microfinance services. Not all of the NGOs that have been or will be involved in microfinance projects will be efficiently and sustainably transformed into regulated formal institutions, following the example of Bancosol and FIE in Bolivia or K-Rep in Kenya. This is not the objective for most of them, and they cannot have enough capacity in terms of banking skills, security, or human resources.

⁹ With the optimistic hypothesis that all the members of the networks can have access to a loan.

In the long term, commercial banks should be more involved. They can offer physical infrastructure, well-established information systems, sound governance, important resources for funds and strong ability to offer financial services, but their role and capacities for microfinance should be strengthened in terms of organizational structure, financial methodology, human resources, and cost effectiveness (Baydas, Graham, and Valenzuela 1997). The state and the donors could play a role in capacity building for the commercial banks in order to reinforce the complementarity models.

The role of the state could be to invest in network building and compensating for a missing financial market: a minimum banking structure could facilitate the development of a rural financial system where complementarity between the institutions increases the outreach and sustainability of microfinance.

DEPTH OF OUTREACH

Nowadays, the three models still face a trade-off between reaching the poorest and becoming financially sustainable. In spite of the general objective of microfinance institutions to alleviate poverty, and even if some NGOs clearly adopt the philosophy to fill the gap in the formal banking system, microfinance institutions are mostly located in wealthier areas. In India, Gupta (cited in Kabeer and Murthy 1996) argues that NGOs tend to follow the logic of the market and are concentrated in areas where the market is well-developed and people have started to articulate their needs as effective demand. The same observations have been made in Madagascar and Bangladesh (Zeller 1993; Zeller and Sharma 1996). This could be aggravated by competition among the networks and the geographical areas; there are strong incentives for the networks to be located in the wealthier areas to obtain better performances. The BRI village units are more concentrated in Java and Bali (60 percent). But this corresponds to 60 percent of the population, and the BRI units are also present in the other islands. For the whole rural financial system, there is a strong orientation to the central bank, which provides incentive to develop institutions in the other islands by giving easier access to the licenses of operation for the rural banks (BPR).

Most of the impact analysis (for example, Hulme and Mosley 1996; Wampfler, Prifti, and Brajha 1996; Sharma and Schrieder 1998) shows that neither NGOs, private commercial banks, nor state institutions seem to reach the poorest of the poor. Poverty is not only a problem of access to financial services but also a problem of access to other markets and services (such as labor, health, and education). Moreover, the very principles of some of the institutions are based on a sharing of the financial burden and the risks between members, leading most of the time to an exclusion of the poorest of the poor.

In order to improve equity, reaching poor households through financial services is likely to require start-up subsidization depending on the expected social benefits compared to the costs (Zeller et al. 1997). It is widely recognized that achieving financial sustainability requires that the subsidies should not be provided directly to interest rates, but should support institutional building and training. Moreover, the incentive structure that can lead to an efficient use of subsidies must be elaborated through contracts between donors or state and the MFI that set-up the objectives and the use of subsidies. Government institutions are often limited in the use of incentives (Stiglitz 1992): they are

subject to rent-seeking pressure, and they are reluctant to enforce repayment as they can use it to strengthen some politically influential borrowers. The costs of mistakes made by one administration may be borne by later administrations. However, Stiglitz and Uy (1996) have underscored the use by the public development banks in East Asia of commercial- and performance-based criteria for allocating credit. These are replicable practices that enhance the likelihood that funds will be allocated to good ventures and reduce the likelihood of political abuse.

This type of support can help microfinance reach poorer clients and serve more remote areas. But neither the integrated, complementary, or alternative models of microfinance vis-à-vis the public sector adequately reach the poorest of the poor. This may arise from inherent limitations of microfinance as a tool to alleviate extreme poverty, in which case, financial interventions are just part of a range of choices for development assistance programs seeking to reduce poverty (Gulli 1998).

In fact, the analysis of the failures and success stories of public and private institutions underscore the importance of the governance structure of the institutions, which is beyond the distinction between private and public sectors. The relative success of development banks and directed credit in East Asia has been analyzed by Stiglitz and Uy (1996) as a result of different factors such as the ability to change credit policies rapidly when they were not functioning, the targeting of credit mainly to private enterprises, and based on performance measures, the limitation of subsidies and directed credit, and finally an effective monitoring.

Having clear rules in terms of responsibilities, power, control, and protection from political interference allows smooth functioning of the institutions, trust, rapid resolution of conflicts, and better enforcement of the rules (Clarkson and Deck 1997). The right to manage can vary within the public sector, even if ownership remains public. The evolution of this right can lead to large differences in performances. The socioeconomic environment seems also to be more important than whether the MFI is publicly or privately owned, and fair competition in particular can play a stimulating role (Sen, Stern, and Stiglitz 1990; Lapenu 1998)

7. THE STATE AND THE POLICY FRAMEWORK

The three models defining the place of microfinance in the financial system cover a diverse and multifaceted development of rural financial services in the developing countries. As microfinance institutions grow, the question of their regulation has become an increasingly important issue. The state has in theory a major role to play in providing and instilling confidence in a regulatory framework, but governments have to know whether microfinance threaten macroeconomic stability and whether regulators can have the capacities to regulate all these new mushrooming institutions.

DIFFERENT MODES OF REGULATION

The necessity for regulation of microfinance is based on different arguments. The protection of savers is generally the first argument, and examples such as the collapse of

the Albanian "pyramids" in 1996 have underscored the risks of unregulated mobilization of savings. In order to implement efficient intermediation, microfinance institutions will have to leverage capital and mobilize external resources. This also requires to formalize the activities and to follow the financial rules to gain the confidence of other financial institutions. Finally, microfinance institutions may find that their official recognition gives them a competitive edge over informal competitors (confidence from the clients and barriers to entry against informal institutions that cannot meet the regulatory requirements). However, in most of the cases, because of the limited volume of transactions of microfinance, the threat for macro-economic stability is limited.

The regulation of microfinance institutions by external bodies requires specific skills and increased means to enforce the rules. Often, the traditional supervisory agencies in developing countries already face difficulties in regulating a small number of big banks. Moreover, they are unfamiliar with concepts and technologies related to microfinance and may also lack the training necessary to effectively supervise these new types of institutions that come in large number, dealing with unconventional guarantees and decentralized operations (Jansson and Wenner 1997, Berenbach and Churchill 1998). On the other hand, NGOs want to acquire the authority and license to collect deposits, but they may not want to put up with the costs and restrictions imposed by the regulation. Effective regulations are useless unless the superintendencies have the authority and capacity to supervise and enforce, which represents a major challenge.

The apex institutions have been usually justified as a substitute mechanism in the absence of a formal regulatory framework and bodies. However, as expressed by Chaves

and Gonzalez-Vega (1994), even if apex institutions may perform important monitoring functions, they are not ideal frameworks for prudential regulation. In particular, the expertise of apex institution may remain limited, supervision must remain neutral, and supervisory activities and management tasks should be kept separate in order for supervision to deal only with a small number of clear rules.

Supervision may be contracted-out to a third party. In Indonesia, because of the volume of institutions to supervise, the central bank relies on the BRI and on the provincial development banks (BPD¹⁰) to supervise respectively more than 5,000 village banks (BKD¹¹) and around 6,000 provincial village banking networks (LDKP¹²). The central bank in this case is fortunate to have appropriately qualified institutions to perform these functions (Berenbach and Churchill 1998).

Each institution involved in microfinance should define from its inception a proper governance and supervision system based on clear rules and sharing of responsibilities. Donors, governments, and operators should follow a professional code of ethics. For example, a clear distinction appears to be necessary between (1) microfinance activities that involve strict enforcement of the contract loans with payment of commercial interest and reimbursement of capital and (2) subsidies to the rural areas that can be given through health services, food supply, education, and technical support for microenterprises.

¹⁰ BPD: *Bank Penbangunan Daerah*, provincial development bank owned by the provincial government.

¹¹ BKD: *Badan Kredit Desa*, village credit institution, owned by the village.

¹² LDKP: *Lembaga Dana dan Kredit Pedesaan*, rural fund and credit institution, sponsored by provincial and local government.

When regulation is enforced, it must strengthen the microfinance movement and should not impede its development with rigid rules or with narrow definitions of microfinance institutions that can block innovation. In the models of integration such as in China, India, Viet Nam and West Africa¹³ where the state wants to control microfinance development, usury ceilings on interest rates for example can impede the financial viability of the institutions and the future access to financial services by the rural poor. In Madagascar, Viet Nam, or West Africa, clear orientation toward mutualist principles has been chosen. Even if these principles conform to the socioeconomic conditions in the rural areas, they can fix barriers to entry for innovative new comers. They can also restrain the capacities of development of the existing networks that do not fulfill all the mutualist requirements (for example, local saving mobilization, ownership of the structure by the members). A system of regulation should be developed with the strong involvement of the microfinance institutions in order to fit their needs, but it should not be applicable to them alone.

THE SPECIFICITY OF MICROFINANCE

Beyond the necessary internal control, external regulation must be defined, taking into account the risks and constraints in microfinance that differ from those of the commercial banks. Specific characteristics of microfinance institutions are presented in Table 2.

¹³ In India, until recently, the interest rates have been kept low and even now are capped for loans up to Rs 25,000 (around \$1,000) (Mahajan and Ramola 1996).

	Compared to commercial banks, regulation for MFI should be		
	More flexible	More strict	The same
Institutional form	History of microfinance is rather new, regulation should encourage innovation ^a		
Ownership	Regulation should encourage investor motivated by social objectives, from diverse background and perspectives, or local private investors (local governance)	Because investor may have limited capacities to provide capital, stricter rules for reserve and capital	Transparency, operational independence, clarification of ownership
Documents from clients	Due to illiterate clients and to lower transaction costs, regulation should limit procedures for clients		
Financial services	Regulation should encourage cost-saving services (e.g. mobile banking)	MFI provide new services on the market, require more testing & prudent introduction In general, no demand deposit, no business in foreign exchange	
Financial accounting			Transparency necessary
Limits on interest rates	Higher transaction costs for MFI: reg. should allow interest rate that tend to cover the costs		
Minimum capital requirement	Dues to social importance of encouraging MFI, regulation should limit the impact of this rationing device		
Capital adequacy		Dues to less diversified portfolio and risks of capital shortage in case of emergency, need for stricter ratio	
Provisioning	Most of the loans uncollateralized, repayment incentives & non traditional collateral (e.g. solidarity group) should be recognized; no need for specific provisions	Delinquency often more volatile, MFI more subject to covariant risks, need for stricter rules on provisioning	
Liquidity requirement	Small size of transaction, less concentration of risks on a small number of big borrowers	High level of risks: seasonality of demand, dependency on donors funds, short-term liabilities	
Financial performance	Subsidies could be justified for (1)initial stage of formation of the institutions, (2) innovation to reach the poorest people or remote areas	07. D. J	In general, necessity to reach financial sustainability

Table 2—Required regulations for microfinance institutions compared to commercial banks

Source: Lapenu 1996; Jansson and Wenner 1997; Rock and Otero 1997; Berenbach and Churchill, 1998. ^a In Latin America, new types of financial institutions have been created by law to facilitate the development of microfinance such as the Bolivian Private Financial Funds (FFP) and the Peruvian Entities for the Development of Small and Microenterprises (EDPYME) (Jansson and Wenner 1997). Even if some general prudential rules remain the same for commercial banks and MFIs, such as the transparency in ownership and financial accounting and the necessity to tend towards financial sustainability, some rules must be softened and other must be stricter for MFI compared to commercial banks.

Because the history of microfinance is rather new, this imposes more flexibility to encourage innovation in institutional form, to motivate investors with diverse background and perspectives, to allow new types of collateral that do not require specific provisioning, or to accept some forms of subsidization for start-up capital or innovations. On the other hand, due to this young history, the sources of capital are less secured, and this requires stricter rules in terms of ownership, provisioning and capital adequacy. Moreover, MFIs provide new services on the market that require more testing and prudent introduction.

In addition to the novelty of MFIs, their differences with commercial banks come from the specificity of the services they provide. Dealing with poor or illiterate clients, they should have more flexibility in terms of documents required from the clients, costsaving services offered, type of collateral accepted. On the other hand, they may have a less diversified portfolio and they can be subject to more volatile delinquency that may require stricter rules for capital adequacy, provisioning, and liquidity requirement.

From Table 2, it follows that microfinance institutions need to be governed under specific regulations and not directly by the classical banking laws. The case of the Indonesian banking law (McLeod 1992; Lapenu 1996) could be underscored in this context. The law has only defined two types of institutions, the commercial banks and the

31

BPR ("people credit banks" or rural banks). The BPR are much smaller than the commercial banks, and they have to follow specific prudential rules that offer a flexible frame for rural banking. This frame has been implemented step by step, through different decrees. The 1992 banking law was set nearly 10 years after the first decree initializing financial liberalization in 1983. In 1998, new decrees were adopted to face the financial crisis that struck Indonesia, endangering its rural system.

8. CONCLUSIONS AND POLICY IMPLICATIONS

In spite of, and because of the enthusiasm for microfinance, urgent questions need to be addressed. The comparative analysis of microfinance institutions in different developing countries brings out the following points concerning an active role of the state.

As pointed out by Stiglitz (1998), lending should clearly be primarily the responsibility of the private sector. However, the countries examined in this paper have also shown that in the rural financial system, state-owned institutions may achieve considerable outreach, compared with most NGOs and with the private commercial banks, which are not really involved in microfinance at this time. The existence of a banking sector in the rural areas can help microfinance institutions develop by reducing their transaction costs as a result of the financial and technical links they can establish with the banking system.

Where an extensive network of financial institutions already exists, the responsibility of the state may be to transform and restructure the public institutions to

strengthen the structure of the financial system, as has been the case with BRI in 1983– 86. The state must also offer a conducive regulatory and economic framework to allow private institutions, particularly microfinance institutions, to develop without constraint. "Partnership" should be established between the public and the private sector (Stiglitz 1998). The government can change the "game" that the private participants are playing in ways that are welfare enhancing.

Where no rural banking network exists, there is a large public role in creating a minimum banking structure where the private sector fails to adequately address the demands of specific poorer segments of the population. The state can develop public branches or provide incentive for commercial banks, through performance-based subsidies, or through investment in innovations. This minimum banking structure may be a precondition for microfinance institutions to move in.

Few microfinance institutions are currently sustainable, and they continue to rely on subsidies. MFIs that are now sustainable have previously benefited from large amounts of subsidies. The success stories in microfinance show that subsidies are necessary for (1) start-up investment and network building and (2) development of innovations as a public good, in particular to define insurance schemes or to fill the gap of missing financial markets.

Most of the impact analysis has shown that microfinance services do not reach or do not have a clear impact on the poorest of the poor: it is certainly an illusion to think that microfinance alone will draw this part of the population out of poverty. Extreme poverty requires complementary services (infrastructure, education, and health services)

33

that can be offered, for example, through NGOs or state services, but independently from the financial services. If a clear orientation is taken toward alleviation of poverty for the poorest households and remote areas, the public sector must invest in these operations, since sustainable microfinance institutions will not be able to fulfill this role. Where no banking structure exists, this may also mean that the necessary conditions for the development of the rural financial system are not yet fulfilled, and in this case, the state must primarily invest in roads and market infrastructures, for example.

To protect the clients and to strengthen the institutions, microfinance must have a clear juridical and regulatory framework. Microfinance institutions are rather new, but they are rapidly increasing. Monitoring them represents a huge challenge. The framework should be defined decree by decree in order to remain flexible and adaptable to changes and failures. Incentive structures should be established so that all the actors have a stake in the well functioning of the microfinance system. The superintendencies need increasing human and financial resources that could be provided with the support of the donors and the state.

Because of the complexity of regulating microfinance institutions, some "rules of the game" should be disseminated and implemented beyond the strict enforcement of the regulatory frame. At the level of the financial institutions, efficiency in outreach and sustainability depends, above all, on a practical and professional governance with clear definition of the responsibilities, strict enforcement of the rules, and circulation of the information. Efficient governance is the best determinant of the performance of the microfinance institutions, whether it is owned by the public or by the private sector.

34

At the level of the financial market, a clear sharing of responsibilities among the state and the profit and not-for-profit private sectors could certainly enhance the efficiency of the system. The state must foster a conducive environment. External controls should be enforced to avoid political intrusion, which continues to endanger some microfinance institutions. Thanks to the public support to innovation, and to incentive structures implemented by the state or the donors, the public and private commercial banks should develop microfinance programs and linkages to strengthen local organizations. The NGOs should either respect the financial rules (such as non subsidized interest rates, strict enforcement of repayment) or choose to focus more on complementary services (training, group formation, screening, local supervision, and supply of health or education services) necessary to enhance the impact of microfinance for the poorest.

Microfinance can be a powerful tool for economic development of rural areas in developing countries, but the rules must be clear and the objectives must remain realistic.



REFERENCES

- Adams, D., and R. Vogel. 1986. Rural financial markets in developing countries: Recent controversies and lessons. *World Development* 14: 477-487.
- Baydas, M., D. H. Graham, and L. Valenzuela. 1997. Commercial banks in microfinance: New actors in the microfinance world. Ohio State University, Columbus, Ohio, USA. Photocopy.
- Berenbach, S., and C. Churchill. 1998. Regulation and supervision of microfinance institutions: Experience from Latin America, Asia, and Africa. Occasional Paper No 1. The Microfinance Network, Washington, D.C., USA.
- Besley, T. 1994. How do market failures justify interventions in rural credit markets? *The World Bank Research Observer* 9 (1): 27–47.
- Chavez, R., and C. Gonzalez-Vega. 1994. Principles of regulation and prudential supervision and their relevance for microenterprise finance organization. In *New world of microenterprise finance*, ed. M. Otero and E. Rhyne. West Hartford, Conn. USA: Kumarian Press.
- Clarkson, M., and M. Deck. 1997. Effective governance for microfinance institutions. *Focus*, Note 7. Washington, D.C., U.S.A.: Consultative Group to Assist the Poorest.
- Colliot, E., and H. V. Ngan. 1997. Le marché financier: Complémentarité entre une banque d'état et un projet de crédit décentralisé (Plaine des Joncs, Viet Nam).
 Agriculture et développement (15): 59–65.

- Creusot, A-C., C. Klébert, L. Q. Tuan, and N. T. Bich Van. 1997. Le crédit rural décentralisé au Viet-Nam: Perspectives d'institutionnalisation. Agriculture et Développement (15): 53–58.
- Gulli, H. 1998. Microfinance and poverty, questioning the conventional wisdom.Washington, D.C.: Inter-American Development Bank.
- Harriss, J., J. Hunter, and C. M. Lewis. 1995. *The new institutional economics and Third World development*. London: Routledge.
- Hulme, D., and P. Mosley. 1996. *Finance against poverty*, Vol. 1-2. London: Routledge.
- Jansson, T., and M. Wenner. 1997. Financial regulation and its significance for microfinance in Latin America and the Caribbean. Washington, D.C.: Inter-American Development Bank.
- Johnson, A. 1996. Microfinance in Viet Nam: A collaborative study based upon the experiences of NGOs, UN agencies and bilateral donors. Hanoi: Consultative Group to assist the Poorest and United Nations Development Programme.
- Kabeer, N., and R. K. Murthy. 1996. Compensating for institutional exclusion? Lessons from Indian government and non-government credit interventions for the poor.
 IDS Discussion Paper 356. Brighton, UK.: Institute of Development Studies, University of Sussex, Brighton.
- Krahnen, J. P., R. H. Schmidt. 1994. *Development finance as institution building. A new approach to poverty oriented banking*. Boulder, Colo., USA: Westview Press.

- Lapenu, C. 1996. Vers un nouveau rôle pour l'Etat et les institutions privées dans le développement du système financier rural indonésien. PhD diss., CIRAD, ENSA, Montpellier, France.
- Lapenu, C. 1998. Indonesia's rural financial system: The role of the state and the private institutions. Asia Series on Sustainable Banking with the Poor.Washington, D.C.: World Bank.
- Lelart, M. 1996. La loi Parmec sur les Mutuelles d'épargne et de crédit dans les pays de l'UEMOA. Document de recherche, No. 17–96. Orléans, France: Institut Orléanais de Finance.
- Mahajan, V., and B. G. Ramola. 1996. Financial services for the rural poor and women in India: Access and sustainability. *Journal of International Development* 8 (2): 211–224.
- McGuire P., and J. Conroy. 1998. Effects on microfinance of the 1997–1998 Asian financial crisis. Paper presented at the Second Annual Seminar on New Development Finance, September 21–25, Goethe University, Frankfurt, Germany.
- McLeod, R. H. 1992. Indonesia's new banking law. Bulletin of Indonesian Economic Studies (28) 3: 107–129.
- Mukherjee, J. 1997. State-owned development bank in microfinance (the BRI). Focus, Note No. 10. Washington, D.C., U.S.A.: Consultative Group to Assist the Poorest.
- Nguyen, T. D. P. 1998. Food insecurity and the evolution of the endogenous risksharing in the Sahel. PhD diss., Ohio State University, Columbus, Ohio, U.S.A.

- Ravicz, R. M. 1998. Searching for sustainable microfinance: A review of five Indonesian initiatives. Policy Research Working Paper 1878. Washington, D.C.: World Bank.
- Rock, R., and M. Otero. 1997. From margin to mainstream: The regulation and supervision of microfinance. Accion International Monograph Series No. 11.
 Somerville, N.J: Accion International
- Sen, A., N. Stern, and J. Stiglitz. 1990. Round table discussion: The role of the state and the private sector. In *Proceedings of the World Bank Annual Conference on Development Economics 1990.* Washington, D.C.: World Bank.
- Sharma, M., and G. Schrieder. 1998. Impact of access to credit on household income, food security and nutrition. Paper prepared for IFPRI-DSE-IFAD-Bank of Ghana Workshop, November 9–13, 1998, Accra, Ghana.
- Srinivasan, G., and D. S. K. Rao. 1996. Financing of self-help groups by banks: Some issues. Working Paper No. 8. Lucknow, India: Bankers Institute of Rural Development.
- Stiglitz, J. E. 1992. *The role of the state in financial markets*. Washington, D.C.: Institute for Policy Reform.
- Stiglitz, J. E. 1998. Redefining the role of the state, what should it do? How should it do it? And how should these decisions be made? Paper prepared for the Tenth Anniversary of MITI Research Institute, March 17, Tokyo, Japan. (http://www.worldbank.org/html/extdr/extme/jssp0.31798.htm)

- Stiglitz, J. E., and M. Uy. 1996. Financial Markets, Public Policy, and the East Asian Miracle. *The World Bank Research Observer* 11 (2): 249-276.
- Wampfler, B., L. Prifti, and M. Brajha. 1996. *Etude des stratégies des ménages ruraux, de leurs activités et de la place du crédit ADF (Albanian Development Fund).*Montpellier, France: Centre de Coopération Internationale en Recherche Agronomique pour le Développement.
- World Bank. 1997. World development report 1997, The state in a changing world.New York: Oxford University Press.
- Yaron, J. 1992. Successful rural finance institutions. World Bank Discussion Paper150. Washington, D.C.: World Bank.
- Yaron, J., M. P. Benjamin, Jr., and G. L. Piprek. 1997. Rural finance: Issues, design, and best practices. Washington, D.C.: World Bank.
- Zeller, M. 1993. Credit policies for food security in Sub-Saharian Africa: The case of Madagascar. Final report to GTZ by the International Food Policy Research Institute. IFPRI, Washington, D.C.
- Zeller, M., and M. Sharma. 1996. Placement and outreach of group-based financial institutions for the poor: The case of ASA, BRAC, and PROSHIKA in Bangladesh. Paper prepared for the Conference on Emerging Financial Markets: Implications for Economic Development, May 17, American University, Washington, D.C. Photocopy.

Zeller, M., G. Schrieder, J. von Braun, and F. Heidhues. 1997. Rural finance for food security for the poor. Food Policy Review 4. Washington, D.C.: International Food Policy Research Institute.

- 01 *Agricultural Technology and Food Policy to Combat Iron Deficiency in Developing Countries*, Howarth E. Bouis, August 1994
- 02 Determinants of Credit Rationing: A Study of Informal Lenders and Formal Credit Groups in Madagascar, Manfred Zeller, October 1994
- 03 *The Extended Family and Intrahousehold Allocation: Inheritance and Investments in Children in the Rural Philippines*, Agnes R. Quisumbing, March 1995
- 04 Market Development and Food Demand in Rural China, Jikun Huang and Scott Rozelle, June 1995
- 05 *Gender Differences in Agricultural Productivity: A Survey of Empirical Evidence*, Agnes R. Quisumbing, July 1995
- 06 *Gender Differentials in Farm Productivity: Implications for Household Efficiency and Agricultural Policy*, Harold Alderman, John Hoddinott, Lawrence Haddad, and Christopher Udry, August 1995
- 07 A Food Demand System Based on Demand for Characteristics: If There Is "Curvature" in the Slutsky Matrix, What Do the Curves Look Like and Why?, Howarth E. Bouis, December 1995
- 08 *Measuring Food Insecurity: The Frequency and Severity of "Coping Strategies,"* Daniel G. Maxwell, December 1995
- 09 *Gender and Poverty: New Evidence from 10 Developing Countries*, Agnes R. Quisumbing, Lawrence Haddad, and Christine Peña, December 1995
- 10 *Women's Economic Advancement Through Agricultural Change: A Review of Donor Experience,* Christine Peña, Patrick Webb, and Lawrence Haddad, February 1996
- 11 Rural Financial Policies for Food Security of the Poor: Methodologies for a Multicountry Research Project, Manfred Zeller, Akhter Ahmed, Suresh Babu, Sumiter Broca, Aliou Diagne, and Manohar Sharma, April 1996
- 12 *Child Development: Vulnerability and Resilience*, Patrice L. Engle, Sarah Castle, and Purnima Menon, April 1996
- 13 Determinants of Repayment Performance in Credit Groups: The Role of Program Design, Intra-Group Risk Pooling, and Social Cohesion in Madagascar, Manfred Zeller, May 1996
- 14 Demand for High-Value Secondary Crops in Developing Countries: The Case of Potatoes in Bangladesh and Pakistan, Howarth E. Bouis and Gregory Scott, May 1996
- 15 *Repayment Performance in Group-Based credit Programs in Bangladesh: An Empirical Analysis,* Manohar Sharma and Manfred Zeller, July 1996
- 16 How Can Safety Nets Do More with Less? General Issues with Some Evidence from Southern Africa, Lawrence Haddad and Manfred Zeller, July 1996
- 17 Remittances, Income Distribution, and Rural Asset Accumulation, Richard H. Adams, Jr., August 1996
- 18 *Care and Nutrition: Concepts and Measurement*, Patrice L. Engle, Purnima Menon, and Lawrence Haddad, August 1996

- 19 *Food Security and Nutrition Implications of Intrahousehold Bias: A Review of Literature*, Lawrence Haddad, Christine Peña, Chizuru Nishida, Agnes Quisumbing, and Alison Slack, September 1996
- 20 *Macroeconomic Crises and Poverty Monitoring: A Case Study for India*, Gaurav Datt and Martin Ravallion, November 1996
- 21 *Livestock Income, Male/Female Animals, and Inequality in Rural Pakistan*, Richard H. Adams, Jr., November 1996
- 22 Alternative Approaches to Locating the Food Insecure: Qualitative and Quantitative Evidence from South India, Kimberly Chung, Lawrence Haddad, Jayashree Ramakrishna, and Frank Riely, January 1997
- 23 Better Rich, or Better There? Grandparent Wealth, Coresidence, and Intrahousehold Allocation, Agnes R. Quisumbing, January 1997
- 24 Child Care Practices Associated with Positive and Negative Nutritional Outcomes for Children in Bangladesh: A Descriptive Analysis, Shubh K. Kumar Range, Ruchira Naved, and Saroj Bhattarai, February 1997
- 25 Water, Health, and Income: A Review, John Hoddinott, February 1997
- 26 Why Have Some Indian States Performed Better Than Others at Reducing Rural Poverty?, Gaurav Datt and Martin Ravallion, March 1997
- 27 "Bargaining" and Gender Relations: Within and Beyond the Household, Bina Agarwal, March 1997
- 28 Developing a Research and Action Agenda for Examining Urbanization and Caregiving: Examples from Southern and Eastern Africa, Patrice L. Engle, Purnima Menon, James L. Garrett, and Alison Slack, April 1997
- 29 *Gender, Property Rights, and Natural Resources*, Ruth Meinzen-Dick, Lynn R. Brown, Hilary Sims Feldstein, and Agnes R. Quisumbing, May 1997
- 30 *Plant Breeding: A Long-Term Strategy for the Control of Zinc Deficiency in Vulnerable Populations,* Marie T. Ruel and Howarth E. Bouis, July 1997
- 31 Is There an Intrahousehold 'Flypaper Effect'? Evidence from a School Feeding Program, Hanan Jacoby, August 1997
- 32 *The Determinants of Demand for Micronutrients: An Analysis of Rural Households in Bangladesh*, Howarth E. Bouis and Mary Jane G. Novenario-Reese, August 1997
- 33 Human Milk—An Invisible Food Resource, Anne Hatløy and Arne Oshaug, August 1997
- 34 *The Impact of Changes in Common Property Resource Management on Intrahousehold Allocation*, Philip Maggs and John Hoddinott, September 1997
- 35 *Market Access by Smallholder Farmers in Malawi: Implications for Technology Adoption, Agricultural Productivity, and Crop Income, Manfred Zeller, Aliou Diagne, and Charles Mataya, September 1997*
- 36 *The GAPVU Cash Transfer Program in Mozambique: An assessment*, Gaurav Datt, Ellen Payongayong, James L. Garrett, and Marie Ruel, October 1997

- 37 *Why Do Migrants Remit? An Analysis for the Dominican Sierra*, Bénédicte de la Brière, Alain de Janvry, Sylvie Lambert, and Elisabeth Sadoulet, October 1997
- 38 Systematic Client Consultation in Development: The Case of Food Policy Research in Ghana, India, Kenya, and Mali, Suresh Chandra Babu, Lynn R. Brown, and Bonnie McClafferty, November 1997
- 39 Whose Education Matters in the Determination of Household Income: Evidence from a Developing Country, Dean Jolliffe, November 1997
- 40 Can Qualitative and Quantitative Methods Serve Complementary Purposes for Policy Research? Evidence from Accra, Dan Maxwell, January 1998
- 41 The Political Economy of Urban Food Security in Sub-Saharan Africa, Dan Maxwell, February 1998
- 42 Farm Productivity and Rural Poverty in India, Gaurav Datt and Martin Ravallion, March 1998
- 43 *How Reliable Are Group Informant Ratings? A Test of Food Security Rating in Honduras*, Gilles Bergeron, Saul Sutkover Morris, and Juan Manuel Medina Banegas, April 1998
- 44 *Can FAO's Measure of Chronic Undernourishment Be Strengthened?*, Lisa C. Smith, with a *Response* by Logan Naiken, May 1998
- 45 *Does Urban Agriculture Help Prevent Malnutrition? Evidence from Kampala*, Daniel Maxwell, Carol Levin, and Joanne Csete, June 1998
- 46 Impact of Access to Credit on Income and Food Security in Malawi, Aliou Diagne, July 1998
- 47 Poverty in India and Indian States: An Update, Gaurav Datt, July 1998
- 48 *Human Capital, Productivity, and Labor Allocation in Rural Pakistan*, Marcel Fafchamps and Agnes R. Quisumbing, July 1998
- 49 A Profile of Poverty in Egypt: 1997, Gaurav Datt, Dean Jolliffe, and Manohar Sharma, August 1998.
- 50 Computational Tools for Poverty Measurement and Analysis, Gaurav Datt, October 1998
- 51 Urban Challenges to Food and Nutrition Security: A Review of Food Security, Health, and Caregiving in the Cities, Marie T. Ruel, James L. Garrett, Saul S. Morris, Daniel Maxwell, Arne Oshaug, Patrice Engle, Purnima Menon, Alison Slack, and Lawrence Haddad, October 1998
- 52 *Testing Nash Bargaining Household Models With Time-Series Data*, John Hoddinott and Christopher Adam, November 1998
- 53 Agricultural Wages and Food Prices in Egypt: A Governorate-Level Analysis for 1976-1993, Gaurav Datt and Jennifer Olmsted, November 1998
- 54 *Endogeneity of Schooling in the Wage Function: Evidence from the Rural Philippines*, John Maluccio, November 1998
- 55 Efficiency in Intrahousehold Resource Allocation, Marcel Fafchamps, December 1998
- 56 *How Does the Human Rights Perspective Help to Shape the Food and Nutrition Policy Research Agenda?*, Lawrence Haddad and Arne Oshaug, February 1999

- 57 *The Structure of Wages During the Economic Transition in Romania*, Emmanuel Skoufias, February 1999
- 58 Women's Land Rights in the Transition to Individualized Ownership: Implications for the Management of Tree Resources in Western Ghana, Agnes Quisumbing, Ellen Payongayong, J. B. Aidoo, and Keijiro Otsuka, February 1999
- 59 Placement and Outreach of Group-Based Credit Organizations: The Cases of ASA, BRAC, and PROSHIKA in Bangladesh, Manohar Sharma and Manfred Zeller, March 1999
- 60 *Explaining Child Malnutrition in Developing Countries: A Cross-Country Analysis*, Lisa C. Smith and Lawrence Haddad, April 1999
- 61 *Does Geographic Targeting of Nutrition Interventions Make Sense in Cities? Evidence from Abidjan and Accra*, Saul S. Morris, Carol Levin, Margaret Armar-Klemesu, Daniel Maxwell, and Marie T. Ruel, April 1999
- 62 Good Care Practices Can Mitigate the Negative Effects of Poverty and Low Maternal Schooling on Children's Nutritional Status: Evidence from Accra, Marie T. Ruel, Carol E. Levin, Margaret Armar-Klemesu, Daniel Maxwell, and Saul S. Morris, April 1999
- 63 *Are Urban Poverty and Undernutrition Growing? Some Newly Assembled Evidence*, Lawrence Haddad, Marie T. Ruel, and James L. Garrett, April 1999
- 64 Some Urban Facts of Life: Implications for Research and Policy, Marie T. Ruel, Lawrence Haddad, and James L. Garrett, April 1999
- 65 Are Determinants of Rural and Urban Food Security and Nutritional Status Different? Some Insights from Mozambique, James L. Garrett and Marie T. Ruel, April 1999
- 66 Working Women in an Urban Setting: Traders, Vendors, and Food Security in Accra, Carol E. Levin, Daniel G. Maxwell, Margaret Armar-Klemesu, Marie T. Ruel, Saul S. Morris, and Clement Ahiadeke, April 1999
- 67 Determinants of Household Access to and Participation in Formal and Informal Credit Markets in Malawi, Aliou Diagne, April 1999
- 68 *Early Childhood Nutrition and Academic Achievement: A Longitudinal Analysis*, Paul Glewwe, Hanan Jacoby, and Elizabeth King, May 1999
- 69 Supply Response of West African Agricultural Households: Implications of Intrahousehold Preference Heterogeneity, Lisa C. Smith and Jean-Paul Chavas, July 1999
- 70 *Child Health Care Demand in a Developing Country: Unconditional Estimates from the Philippines,* Kelly Hallman, August 1999
- 71 Social Capital and Income Generation in South Africa, 1993-98, John Maluccio, Lawrence Haddad, and Julian May, September 1999
- 72 Validity of Rapid Estimates of Household Wealth and Income for Health Surveys in Rural Africa, Saul S. Morris, Calogero Carletto, John Hoddinott, and Luc J. M. Christiaensen, October 1999

- 73 Social Roles, Human Capital, and the Intrahousehold Division of Labor: Evidence from Pakistan, Marcel Fafchamps and Agnes R. Quisumbing, October 1999
- 74 *Can Cash Transfer Programs Work in Resource-Poor Countries? The Experience in Mozambique*, Jan W. Low, James L. Garrett, and Vitória Ginja, October 1999
- 75 Determinants of Poverty in Egypt, 1997, Gaurav Datt and Dean Jolliffe, October 1999
- 76 Raising Primary School Enrolment in Developing Countries: The Relative Importance of Supply and Demand, Sudhanshu Handa, November 1999
- 77 The Political Economy of Food Subsidy Reform in Egypt, Tammi Gutner, November 1999.
- 78 *Determinants of Poverty in Mozambique: 1996-97*, Gaurav Datt, Kenneth Simler, Sanjukta Mukherjee, and Gabriel Dava, January 2000
- 79 Adult Health in the Time of Drought, John Hoddinott and Bill Kinsey, January 2000
- 80 Nontraditional Crops and Land Accumulation Among Guatemalan Smallholders: Is the Impact Sustainable? Calogero Carletto, February 2000
- 81 *The Constraints to Good Child Care Practices in Accra: Implications for Programs*, Margaret Armar-Klemesu, Marie T. Ruel, Daniel G. Maxwell, Carol E. Levin, and Saul S. Morris, February 2000
- 82 Pathways of Rural Development in Madagascar: An Empirical Investigation of the Critical Triangle of Environmental Sustainability, Economic Growth, and Poverty Alleviation, Manfred Zeller, Cécile Lapenu, Bart Minten, Eliane Ralison, Désiré Randrianaivo, and Claude Randrianarisoa, March 2000
- 83 *Quality or Quantity? The Supply-Side Determinants of Primary Schooling in Rural Mozambique*, Sudhanshu Handa and Kenneth R. Simler, March 2000
- 84 Intrahousehold Allocation and Gender Relations: New Empirical Evidence from Four Developing Countries, Agnes R. Quisumbing and John A. Maluccio, April 2000
- 85 Intrahousehold Impact of Transfer of Modern Agricultural Technology: A Gender Perspective, Ruchira Tabassum Naved, April 2000
- 86 *Women's Assets and Intrahousehold Allocation in Rural Bangladesh: Testing Measures of Bargaining Power*, Agnes R. Quisumbing and Bénédicte de la Brière, April 2000
- 87 Changes in Intrahousehold Labor Allocation to Environmental Goods Collection: A Case Study from Rural Nepal, Priscilla A. Cooke, May 2000
- 88 *The Determinants of Employment Status in Egypt*, Ragui Assaad, Fatma El-Hamidi, and Akhter U. Ahmed, June 2000