Maximizing the Outreach of Microenterprise Finance
An Analysis of Successful Microfinance Programs
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Maximizing the Outreach of Microenterprise Finance

An Analysis of Successful Microfinance Programs

by

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July 1995
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This report was made possible through the work of a team of consultants and the cooperation of the organizations whose programs were reviewed. The consulting team included Mario Davalos, Dan Heldridge, Rodrigo López, and James MacDade, whose competent analysis laid the groundwork for the findings. Among the institutions studied, the staffs of ACEP (Agence de Credit pour l’Entreprise Privée) ADOPEM (La Asociacion Dominicana para el Desarrollo de la Mujer), BRI (Bank Rakyat Indonesia), BRK/Niger (Bankin Raya Karara), FINCA/Costa Rica (Fundación Integral Campesina), K-REP (Kenya Rural Enterprise Programme) and LPD/Bali (Lembagan Perkreditan Desas) were generous enough to bear with our visits and detailed questions. BancoSol, CorpoSol (formerly Actuar Bogotá), and the Grameen Bank were kindly willing to allow data from earlier visits to be used in the study. Rich Rosenberg provided important insights, particularly regarding leverage, that figure importantly in the study. Mike Calavan and John Eriksson of CDIE gave useful comments on the draft. Phil Fritz at Interamerican Management Consulting Corporation provided indispensable logistical backup. Finally, Cressida McKean, the assessment manager of this study for USAID, worked very closely with the team from the early conceptual stages and provided support, sound thinking, guidance, and high standards. The authors are grateful to all these participants.
Outreach and Sustainability

This synthesis study examines the performance of microenterprise finance programs through two concepts: outreach and financial sustainability. Outreach is shorthand for the basic purpose of microenterprise finance—to provide large numbers of poor people (including the very poor and women) access to quality financial services. Financial sustainability refers to the creation of institutions that become independent of continuing inputs from governments, international agencies, or charitable organizations. Both these concepts are important organizing principles for participants in the microenterprise finance field.

A growing body of literature on microenterprise finance has noted recent gains in outreach and financial sustainability among certain well-performing institutions (see, for example, Krahnen and Schmidt 1994; Otero and Rhyne 1994). For example, individuals associated with the Bank Rakyat Indonesia (SRI) have long asserted that SRI has demonstrated both outreach and financial viability (Patten and Rosengard 1991; Robinson 1992a, 1992b, 1994). The present study examines whether strong performance along both dimensions applies broadly across institutions in a variety of settings. Despite the growing number of studies on individual institutions, the type of analysis applied here (comparative analysis of actual program and financial results) has rarely been carried out. One study, Yaron's (1992a) comparison of four apparently successful financial institutions, is an important precursor to this study. In fact, the focus on outreach and self-sufficiency is taken from the framework he articulated.

This synthesis examines 11 microenterprise finance institutions generally perceived to be successful (see box 1). These institutions operate in a range of geographical, cultural, and economic settings and use a variety of methodologies. However, all focus primarily on the provision of credit and savings services to previously excluded groups, and all have achieved some measure of success, as defined by number of clients served and financial performance.

By analyzing these institutions, important questions confronting the microenterprise finance field can be explored:

- How are outreach and financial viability related? Does serving the poor preclude achieving financial self-sufficiency, or can institutions achieve both?

- How financially viable can microenterprise finance institutions be? Can they reach commercial standards? Can they do so consistently or only in limited settings?

- If we wish to ensure that microenterprise finance reaches even the very poor, must we expect to work with institutions that are permanently dependent on donor subsidies?

- What factors are necessary for achieving strong outreach and financial viability?

- What are the challenges facing "frontier" institutions, as well as the challenges facing institutions that have not yet reached the frontier?

In addition, this synthesis explores the general settings in which these programs operate, seeking to draw conclusions about the relationship between successful microenterprise finance experiences and the local policy environment.

The remainder of this chapter defines outreach and financial viability in greater detail, laying out what is meant by reaching the poor in substantial numbers and providing a framework for measuring the value and quality of financial services. It defines various levels of financial viability and describes why donors and implementors should be concerned with reaching viability.
Box 1. Institutions Analyzed

ACEP, in Senegal, is an NGO that grew out of a USAID-funded project. Starting in a provincial town, it now also operates in urban settings. ACEP is in the process of becoming a credit union in order to be able to raise funds through depositors.

ADOPEM, in the Dominican Republic, an affiliate of Women’s World Banking, is an NGO serving exclusively female entrepreneurs. USAID has supported ADOPEM for several years through a microfinance wholesaler. ADOPEM also obtains loans from local commercial banks.

Banco Solidario, S.A. (BancoSol), in Bolivia, is a licensed commercial bank devoted solely to microenterprise and operating in major cities throughout the country. BancoSol grew out of an NGO affiliated with Acción International, which received major startup financing from USAID.

Bank Rakyat Indonesia (BRI) is a government-owned bank oriented toward rural areas. BRI’s Unit Desa system, an extensive network of small profit centers, is the portion of the institution analyzed here. USAID assisted BRI extensively in transforming the Unit Desa system into its current form.

The BKD is a system of small banks in towns throughout Indonesia that emerged during the Dutch colonial period. The banks have been gradually modernized, though they have received little external assistance in recent times.

The BRK, in Maradi, Niger, is a relatively young program operated by CARE. Begun in 1991 with USAID funding, it quickly surpassed expectations regarding outreach in sparsely populated areas in a country where widespread lending would appear to be difficult to achieve.

CorpoSol, formerly Actuar Bogotá, is an NGO affiliated with ACCION International and operating in the greater Bogotá, Colombia, area. It has recently opened a finance company, which will allow its transformation into a financial intermediary.

FINCA/Costa Rica is one of the earliest programs using the village banking methodology FINCA developed. It differs from newer FINCA programs in that it serves both men and women, makes somewhat larger loans, and targets agriculture.

The Grameen Bank, in Bangladesh, is probably the best-known microfinance institution in the world, begun as an experimental project in 1976 and given a special banking charter in 1983. It serves mainly women and operates throughout rural Bangladesh. The Grameen Bank has received funds from many donor organizations but not, until very recently, from USAID.

Kenya Rural Enterprise Programme (K-REP) is a local NGO that works in both rural and urban Kenya. K-REP began as a USAID project in 1983 and has since become an independent Kenyan organization. It adopted its current methodology, analyzed here, in 1990.

LPD, in Bali, Indonesia, is a network of village-owned institutions supervised by the provincial government. The LPD system has received extensive technical support from USAID to improve its staff training, operational methods, and information management.
Chapter 1 offers a conceptual framework for the study and describes the methodology used to select and examine the institutions. Chapter 2 discusses the results obtained from reviewing successful institutions, and chapter 3 points to future challenges for the microenterprise finance field. Finally, chapter 4 summarizes the main findings and makes recommendations for donors.

Effective Outreach: Reaching Large Numbers of Poor People

Outreach is examined along three dimensions: quality of service, level of poverty of clients, and scale. For an institution to have good outreach, some success must be achieved along all three dimensions. Because these three dimensions are so different, it is not easy to measure outreach using a single numerical index. A qualitative picture must suffice. Before discussing these three dimensions more fully, however, we will define the populations that microenterprise finance institutions serve.

Expanding Boundaries

Microenterprise finance generally targets poor people with enterprises of their own, including those who are self-employed. This definition encompasses startup enterprises, even the smallest, as well as seasonal or part-time income-generating activities. Microenterprise finance has generally excluded small farmers, who have been the target of agricultural credit programs, and households, except those linked to enterprises. There has also been a cutoff in size of enterprise; a threshold of 5 or 10 employees has been used to distinguish microenterprise from small business. The term “poverty lending” has emerged as a subset of microenterprise finance, denoting credit to the very poor, including those who have not previously carried out income-generating activities.

One explanation for this focus is that building financial services for poor people who operate enterprises may offer greater promise of financial viability than concentrating on other populations, even those with substantial overlap (e.g., small farmers or small exporters). The risks in lending to microenterprises are easier to diversify than the risks in agricultural lending. Patten and Rosengard (1991, chp. 2) discuss how the shift from small farmers to microenterprises allowed for successful development of rural financial institutions in Indonesia.

As microenterprise finance programs have grown, their boundaries have widened. Successful institutions have built on core financial activities and enterprises, adding new services and reaching increasing numbers of those lacking access to quality financial services. This expansion takes three main directions. First and most important, institutions offering voluntary savings services have expanded to include as deposit clients most households in the area they serve, even households that do not operate enterprises. Second, institutions in rural areas have begun to include loans for livestock and crop cultivation. Third, some institutions have added small-business lending so they can continue to serve their most successful clients whose enterprises have grown significantly. Successful microenterprise finance institutions may be able to broaden services at a low marginal cost, building on their substantial investment in reaching out to the poor. As microenterprise finance matures, it expands to a broader spectrum of the population, going beyond microenterprise finance to become simply "microfinance."

The institutions reviewed here are microenterprise finance institutions in the traditional sense, serving primarily poor people who operate, or who are starting to operate, very small enterprises. At the same time, several of these institutions are adding services to become broader microfinance institutions.

Program and Operations Assessment No. 10
Value of Financial Services

Microenterprise finance is important because access to credit and savings services affects the economic circumstances and quality of life of poor people. Such services enable microentrepreneurs to increase the already substantial contributions they make to the economy. The primary motivations for development of the microfinance field are improvements in the quality of life and economic contributions of poor people. A complete understanding of outreach, therefore, requires an explanation of how financial services can make a difference for poor people.

Financial services help people meet their household and business goals. Despite the apparent simplicity of their activities, microentrepreneurs and self-employed people make a complex, ongoing series of financial decisions and must be sophisticated managers of their financial affairs. Their many financial decisions include how to allocate income from a business between household and business expenses; how much to save, when, and in what form; how much and when to invest and in what; how to balance between short-term consumption and long-term goals; how to protect themselves against the many risks they face; and how to position themselves to take advantage of business opportunities.

These decisions are crucial and are more likely to lead to success if supported by good financial services. Access to financial services gives people the ability to expand their options and thereby increase the productivity of their resources. Savings services allow depositors to store income as assets for future use, while credit services allow clients to invest or consume now, drawing on expected future income. Without access to financial services, individuals face more limited options.

The use of financial services as part of an ongoing household strategic planning process has been explored from the point of view of household risk management. Rashid and Townsend (1993) focus on finance as enabling "consumption smoothing" over time as people hedge against periods of inadequate income. Consumption smoothing enhances welfare as people are less likely to suffer when inevitable external shocks such as drought and illness hit them. Some researchers have also shown that efficient forms of risk protection free people to make higher-return investments. In a study of poor farmers in India, Binswanger and Rosenweig (1990) have shown this to be the case.

In short, access of microenterprises and poor households to financial services is important because such services give people an important tool for improving their efficiency, productivity, and welfare while reducing risk.

Informal financial services—money lenders, revolving-credit funds, informal credit groups—are widely available in developing countries. Such services have the advantage of being appropriate to the local area, and many have characteristics that make them useful to poor clients (Adams and Fitchett 1992). Informal financial systems often have significant limitations, however, such as limited ability to diversify risk or limited ability to raise funds for lending (Robinson 1992a). Microfinance programs make sense relative to informal finance when they are able to offer better services at lower cost (including both monetary and transaction costs).

The foregoing observations define the characteristics of good financial services and hence what the study must consider in assessing service quality of microfinance programs. First, financial services should include not only credit but also savings services. One important trend in microenterprise finance is increasing recognition of the importance of savings services for clients. Savings enable people to prepare for contingencies in advance.

Savings services provide exactly the kind of flexibility to respond to circumstances that the ongoing financial management process requires. They perform many of the same functions as credit, as both a short-term source of
liquidity and a long-term reserve for emergencies (Gadway et al. 1991). For savings to perform these functions well, savers must have ready access to their funds when contingencies arise. Therefore, savings services should feature liquidity. However, compulsory savings requirements of many microenterprise credit programs fall short in this respect.

Second, since financial management is a continuing process, financial services should be available on an ongoing basis. A one-time injection of funds does not provide the continuing liquidity needed for microenterprise operations. Some observers have shown that enhanced liquidity management opportunities increase the productivity of the fixed capital used by microenterprises (Vogel and Burkett 1992). Liquidity management requires readily available funds. Thus, liquidity, convenience, and ongoing availability are characteristics this study looks for in assessing outreach effectiveness.

Finally, supportive financial services allow for the fact that microentrepreneurs have a variety of uses for funds, not only the activity for which a loan is formally given but also for household operations and other family enterprises. Therefore, quality financial services are given with relatively few restrictions on use. The enterprise is the basis for the cash flow that will be applied to debt service, even if the borrower does not use the funds for business purposes.

These characteristics are used here as indicators of good outreach. However, the strongest indicator of good financial services comes not from outside observations but from client demand. If clients repay their loans, pay full-cost interest rates, and remain in a program as borrowers or savers, it is clear that microfinance services are accomplishing their objectives. Similarly, if a program posts rapid growth rates while maintaining low defaults, evidence strongly suggests that the services the program provides are valuable and relevant to clients.

Emphasizing the value of microfinance services in supporting financial management processes may seem a limited view. However, these financial processes contain potentially far-reaching consequences. The study has already alluded to the economic benefits that can arise from more productive use of resources and protection from risk. These benefits include both poverty alleviation and contributions to broader economic growth.

Many microenterprise programs state their goals in broader terms, moving beyond economic indicators to quality-of-life and social aims. What is known about the uses of income by the poor indicates that increased income will be translated directly into improved quality of life—better nutrition, health, shelter, education, and the like.

Many microenterprise programs, especially those working with marginal populations, enable individuals to enter the broader society, a process called “social intermediation” (Bennett and Goldberg 1993). Microenterprise finance institutions, particularly those that work through groups, provide a way for severely restricted people, such as women in rural Bangladesh, to begin making contact with formal institutions that manage society’s resources.

At a societal level, microenterprise programs are predicated on the belief that access to financial services and the ability to pursue self-employment or microenterprise activities are an important means of gaining access to the broader economic life of a country. This “economic democracy” provides citizens with an

2 However, if clients are paying below-market interest rates on loans, good repayment may indicate merely a desire for continuing access to subsidies.
economic stake in their nation and contributes to democracy and political stability. At this level, microenterprise finance enhances the contribution of microentrepreneurs to the economy. Microenterprises support employment (for the entrepreneur and workers), supply goods and services to the low-income population, and act as safety valves for rural–urban migration and economic contractions.

These effects of microenterprise finance are associated with provision of financial services and do not imply the presence of additional, nonfinancial services. Thus, this study does not include organizations whose main goal is entrepreneurial training or that combine microenterprise credit with additional sectoral programs in health or nutrition. However, several programs do offer limited accompanying services, usually either closely connected to the provision of credit or available on a voluntary basis.

**Depth of Outreach: How Poor Are the Poor?**

For many practitioners and donors, microenterprise finance is all about reaching the poor. However, it is difficult to come up with a definition for poverty that everyone can agree on. And it is nearly impossible to apply any such definition systematically to clients of microenterprise finance institutions in different countries. Nevertheless, a few global statistics can help establish a general context. The World Bank has collected information about poverty that defines people living on less than $1 per day (in 1985 dollars) as truly poor. The bank adopted this definition after concluding that people with incomes below this level would have difficulty obtaining adequate nutrition and other necessities of life (World Bank 1990, 1993). According to this definition, nearly one third of the population of developing countries are poor, including 48 percent of people in sub-Saharan Africa, 49 percent in South Asia, 33 percent in the Middle East and North Africa, and 25 percent in Latin America and the Caribbean.

Moderate increases in the income cutoff level dramatically increase the percentage of the poor population. Thus, at a level of $1.50 per day (in 1985 dollars), half of all people in developing countries would be considered poor. This figure indicates that there are substantial numbers of people living just above the World Bank–defined poverty level who would be counted as poor by the standards of high- or even middle-income countries. If this reasoning is applied to microenterprise finance, approximately half of the people in countries in which microenterprise finance programs operate would be considered poor, somewhat more in Africa and South Asia, somewhat fewer in Latin America and the Middle East.

At the lower end of the spectrum, the World Bank defines “extreme poverty” as those living on less than 75 cents per day and notes that about two-thirds of all people who qualify as poor by the dollar-a-day standard are poor enough to be classified extremely poor. Several microenterprise finance programs studied here concentrate on this group. An implicit outreach index would give greater weight to reaching such groups.

A number of other factors affect how seriously deficient in access to financial services certain populations are. In fact, these factors can serve as proxies for income indicators, which are not readily available for many populations. For example, in many countries ethnic minorities are discriminated against in various ways, including lack of access to services of formal institutions. In countries with norms of female seclusion, women may have little access to financial services. Refugee and immigrant populations are especially needy and increasing in numbers. In some settings, lack of land ownership may be a proxy for low income.

Similarly, there are factors that make certain populations particularly difficult to reach with financial services. For example, people living in sparsely populated rural areas or regions...
with poor roads and communication infrastructure are costly to reach. Services to illiterate people require special effort to find delivery methods not requiring reading ability. In some cases, language differences present a hurdle. And again, institutions in countries with female seclusion must make special provisions if they are to reach women.

All these factors can increase the costs of serving such groups. Thus, in considering outreach indicators for microenterprise finance institutions, it should be noted both how poor clients are and whether they belong to specifically disadvantaged or difficult-to-reach groups. Those reaching very poor or hard-to-reach clients can be said to have “deep” outreach.

In this study, loan size is used as the primary indicator of depth of outreach for several reasons. It is exceedingly difficult to measure income levels of microenterprise finance clients and impractical to require microenterprise finance institutions to apply means tests. In the absence of more direct indicators, loan size is the most readily available proxy for income level. It is reasonable to assume that programs offering small loans serve very poor clients and those offering larger loans serve clients who are better off. People with small incomes have sufficient cash flow to make only very small debt service payments. Therefore, if loan size is determined by cash flow, as it should be, small loans will be closely tied to low incomes. The advantage of using loan size as an indicator is clear: information on loan size is easy to obtain for every institution and can be compared directly from one institution to another.

However, there are caveats. First, loan size may reflect the status of the lender rather than its clients. When nongovernmental organizations (NGOs) face funding constraints, they often restrict the amount of money they lend to each client. Similarly, programs in the initial phases with high percentages of new clients will show small loan sizes. Second, while the correlation between loan size and income level is believed to be strong, there is little empirical research establishing such a correlation. Third, differences across countries in costs of living and doing business make direct international comparisons difficult. Finally, average loan size tends to be skewed upward. A few large loans can pull the mean up quickly. In statistical terms, this occurs because the distribution of loan sizes is truncated at zero. In such a distribution, the bulk of the observations fall below the mean.

**Extent of Outreach: The Scale of Programs**

This study defines organizations reaching large numbers of clients as having “extensive” outreach. Most microenterprise practitioners seek a significant scale of outreach. As the World Bank’s numbers show, large portions of the world’s population fit the definitions of poverty and then qualify as potential clients of microenterprise finance. A total of 1.1 billion people now live below the dollar-a-day level (World Bank 1990). Of course, not all these people are potential clients of microenterprise finance programs; half are probably too young or unable to work owing to sickness or old age (although members of this group who are dependents of clients form part of an indirect client population).

Among working people with poverty-level incomes, not all are engaged in microenterprise activities. Many are either wage-laborers or small farmers, although it may be impossible to establish exactly what proportion. Even so, on the basis of these numbers, potential clients for microenterprise finance institutions may
number between 100 and 200 million. This crude calculation makes scale a relevant indicator. Programs or networks of programs that do not attempt to achieve large-scale outreach are simply not making a dent in the global problem.

Another way to view the importance of scale is to consider the aim of microenterprise finance to substantially increase the access of poor people to financial services. Such access may ultimately be provided by a variety of institutions, from specialized financial institutions to NGOs to formal banks. While the institutional mix may vary, the ultimate aim is clear—many well-functioning institutions in competition serving the entire spectrum of the population. This aim of broad access is relevant even for middle and higher income countries where absolute poverty is less common but where there is commitment to reduce relative deprivation.

In judging whether a given institution has achieved extensive outreach, comparisons must be made with the achievements of other institutions, keeping in mind the program's age and the size of the poverty-level population in its country. Common sense must be used in assessing whether an institution has achieved significant scale in its setting.

This study examines institutions that excel in depth or extent of outreach and particularly institutions that excel in both.

Financial Viability: The Key to Sustained Outreach

Practitioners of microenterprise finance are concerned with financial viability because it is a precondition for reaching large numbers of microenterprises with financial services over a sustained time period. Viability allows a microfinance program to maintain its operations indefinitely, independent of concessional funding. This alone is an important goal for donors and practitioners. However, a second function of financial viability is at least as important: strong financial performance allows institutions to access far more abundant sources of funds (i.e., client savings and financial markets in general). Viable institutions can leverage their initial investments (or those of donors) in microenterprise finance into increasing levels of outreach with small additions of capital. Leverage brings the potential of microfinance to a level in keeping with the scale of the problem it addresses and warrants placing these types of programs prominently within overall economic development strategies.

The situation can be summarized as follows:

- Successful microenterprise finance programs in widely differing countries demonstrate that we now have at our disposal financial technologies capable of efficiently bringing quality financial services within the reach of very large numbers of poor households
- In most countries (possible exceptions include Bangladesh and Indonesia) programs have not yet succeeded in reaching the majority of poor households; market penetration by microfinance programs seldom exceeds 5 percent; most countries have yet to reach 1 percent
- Even rough calculations of potential market size reveal a scope for microfinance funding far in excess of donor capabilities; in Bolivia, for example, with an estimated 600,000 potential microenterprises, it would take $90 million to sup-

4 This section draws heavily from Rosenberg 1994.
level II
full self-sufficiency
level II
operational efficiency
level I

Box 2. Hurdles to Self-Sufficiency

ply half of potential demand at an average loan size of $300

Approaches are needed that tap commercial financial markets or the national savings pool for needed funds. However, the ability to attract sufficient funds depends on demonstrable financial viability by microfinance lenders.

Levels of Financial Self-Sufficiency

Microfinance programs can be placed at various points along a range of financial self-sufficiency marked by two hurdles that separate programs into three levels (see box 2).

The first hurdle is operational efficiency. This is the ability of a program to cover all nonfinancial expenses out of program fees and interest charges. Level I programs have not achieved this level of efficiency; level II programs have. Nonfinancial expenses include salaries and administrative costs, depreciation of fixed assets, and the cost of loan principal lost to default. These are the elements that define the minimum spread institutions must attain. Although financial costs (i.e., the cost of loanable funds) are not covered, operational efficiency is a significant step for a microenterprise program. Reaching level II indicates that operations are generally efficient, with high client-to-staff ratios and good control of delinquency and default.

Level I programs, which have not yet jumped over this hurdle, are heavily subsidy-dependent. They require frequent injections of fresh funds. If these injections are not forthcoming, the program will quickly consume its capital in financing routine operational costs. Other studies indicate this has happened hundreds, perhaps thousands, of times (Buttari 1995). Only one of the programs examined is still at level I—BRK in Niger—and it is expected to reach level II in the near future.

Level II, which includes programs that have achieved operational efficiency but not full self-sufficiency, is a heterogeneous level, including programs that still rely extensively on soft money, as well as programs that are on the verge of unsubsidized profitability. Thus, it is crucial to recognize there is a range of programs in this level, rather than assuming that all programs at the same level are essentially similar. Programs in level II include ADOPEM, FINCA/Costa Rica, the Grameen Bank, and K-REP. A final program in level II, ACEP, is on the verge of vaulting the second hurdle into level III.

The second hurdle is full self-sufficiency. In level III programs, revenues cover both nonfinancial and financial costs, calculated on a commercial basis. Subsidies in the form of concessional funds are no longer needed, and investors can expect a return on equity equiva-
lent to returns that can be obtained elsewhere in the private sector. This is quite a high standard—profitability without subsidy. It is the same hurdle that private enterprises face. Relatively few microenterprise finance programs have achieved it so far. Level III programs examined in this study include BancoSol, the BKD network, BRI, CorpoSol, and the LPD system. Sustained profits have three effects: (1) they directly increase the program's equity base, (2) they can attract additional outside equity participation, and (3) they encourage others to replicate the experience in hopes of attaining the same levels of profitability.

Inflation and expansion are two factors that complicate the assessment of viability at any point in time. Inflation erodes the value of a program's loan capital. In a high-inflation environment, a 100-peso loan may finance a client's inventory in 1994, but in 1995 the lender would need to supply, for example, 150 pesos to provide the same level of support to the client. Financial institutions usually cope with inflation by including inflation premiums in the interest rates they charge. They usually face a cost of funds that reflects a similar inflation premium. However, if interest rates are not fully adjusted for inflation and the return on capital falls below the inflation rate, the program will fail to make the leap over the full profitability hurdle and the real value of its capital will dwindle. In evaluating particular programs, it is important to consider whether such a situation is temporary or chronic.

Programs that are expanding rapidly also face reduced profitability. Expansion requires investment in staff and facilities that may not be recovered from a revenue-producing loan portfolio for some years. This has the effect of lowering measures of operational efficiency until expansion levels off. Many of the programs in this study have been expanding throughout their lifetimes, as shown in chapter 2. Just as private firms may not be profitable every year, a snapshot of a microfinance program may catch a potentially profitable program temporarily below the threshold.

**Leverage**

As programs increase their financial viability, their opportunities for leverage increase. "Leverage" can be defined as a program's ability to use its capital (whether supplied by donors or private investors) as a lever to obtain additional funds through borrowing or taking deposits. Leverage is particularly important for donors as they seek to maximize the outreach generated with their resources. In principle, donors should adopt a view similar to that of private investors who wish to generate high returns on their investments, with the difference that donors measure their returns in outreach achieved rather than profit. Thus, a central question for donors is: If a donor puts one dollar into a microenterprise finance program today, how many dollars of microfinance loans will be in clients' hands several years hence? This is the challenge of leverage.

Opportunities for leverage exist across the range of programs but remain quite limited until full self-sufficiency is approached. Level I programs can leverage funds through required savings, but with few exceptions compulsory savings generate only a small fraction of associated loans, generally less than one third. Moreover, because revenues do not cover operating costs, a donor that invests one dollar in a level I institution will find that less than a dollar's worth of loan funds has been generated. And each year the amount remaining will decrease.

Level II programs are better able to leverage, mainly through borrowing. They can usually obtain limited commercial or donor loans on the strength of their ability to break even operationally and maintain a sound loan portfolio. Sustained solid financial performance allows for deeper commercial relationships with banks. At first, such loans have typically been backed by guarantees (from donor or technical support agencies), but after a time they have often been offered without a guarantee. For level II programs, a donor dollar will yield about a dollar in future loans. Experience

*Maximizing the Outreach of Microenterprise Finance*
suggests the limits of leverage are two to three times the value of donor contributions. Greater leverage, however, may be possible as new ways are found for microenterprise finance programs to tap capital markets.

The greatest leverage occurs when programs become secure, profitable financial intermediaries, as in the case of several institutions reviewed below. Once an institution demonstrates that it is secure and profitable, whatever its type, it can gain wider access to commercial funding sources. Such institutions can fund their loan portfolios fully in commercial financial markets, either by capturing individual savings deposits or by attracting investors through the issuance of debt securities. In level III programs, a dollar of donor investment can really pay off, leveraging up to $12 of microfinance assets after a few years. Furthermore, if donor funds help establish a commercially successful program that motivates private entrepreneurs to offer similar services, the leverage effect of a dollar invested can far exceed even $12 in microfinance assets.

Leverage is important even when the concern is for reaching the very poor. There has been a tendency to focus exclusively on loan size as an indicator of institutional commitment to poor clients: average loan size under $300 has been used to demonstrate that donor investments reach genuinely needy microentrepreneurs. But the reality is that effective financial leveraging may be more important for donors seeking to reach clients. Consider the following two hypothetical cases:

- Case A is a level II NGO microfinance program that makes only small loans. Donor funds are unlikely to be diverted to more affluent members of the clientele. Since the program has managed the difficult task of reaching operational efficiency, each dollar of donor funds produces slightly more than a dollar of sustained poverty lending.

- Case B is a level III licensed microfinance bank, where one-third of the loan portfolio goes for poverty lending. This bank can leverage every dollar of its equity with an additional $11 of loans and deposits from the general public. Each donor dollar contributed as equity to such a bank will thus generate $4 of sustained poverty lending.

There are institutions in this study that fit both profiles. They serve to illustrate the importance for donors of encouraging organizations they support to surmount the hurdles that limit their leverage.

Importance of the Policy Environment

A favorable policy environment is widely believed to be important in enabling microenterprise finance institutions to achieve substantial outreach and to attain financial viability. Four aspects of the policy environment are generally assumed to affect microenterprise finance performance in particular. First, the overall level of development of a country, especially its recent growth, is important in creating a general climate in which microenterprise finance programs operate. Successful government policies reflected in high rates of economic growth, and ultimately in high levels of GDP per capita, may affect the ability of microenterprise finance programs to achieve substantial outreach and to attain financial viability.

Second, governments can be judged on how effectively their monetary and fiscal policies

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5 This leverage factor is drawn from the international standard (Basel Standard) for capital adequacy among commercial banks, established under the auspices of the Bank for International Settlements in Basel, Switzerland.
help achieve macrofinancial stability; that is, low rates of inflation and stability in foreign exchange rates. Any financial institution, including a microenterprise finance program, will have greater difficulty achieving financial viability and a widespread client base if it has to cope with the risks and uncertainties of macrofinancial instability. This study examines the effect of the rate of inflation and variability in the exchange rate on the success of microenterprise finance programs in achieving their twin goals of viability and outreach.

Third, the extent of financial repression (that is, the extent of government controls over interest rates and the existence of widespread directed credit programs) may affect the ability of microenterprise finance institutions to achieve substantial outreach and to attain viability. Government controls that limit the interest rates microenterprise finance programs can charge their clients (who, in general, are likely to be especially costly to serve) make it difficult for the programs to succeed. (However, interest-rate controls affecting other lending institutions may in fact benefit microenterprise finance programs if the programs are not so constrained.)

Furthermore, directed-credit programs that target microenterprises with subsidized, low-interest loans may make it more difficult for microenterprise finance programs to reach these same clients on a sustainable basis. This study examines the impact of these two key aspects of financial repression on the success of microenterprise finance programs in achieving viability and outreach.

Fourth, the regulatory environment can affect the success of microenterprise finance programs. Rules and regulations with which deposit-taking institutions must comply can be especially limiting if microfinance institutions are looking toward deposit mobilization to expand their leverage and range of financial services. In addition, the overall legal environment can affect the ability of lenders in general, and microenterprise finance programs in particular, to enforce loan contracts. A key element of success is the ability of microenterprise finance programs to develop techniques appropriate to their particular policy environments. In some cases they must overcome substantial barriers raised by the policy framework, just as they must become expert in dealing with their particular market niches of potential clients.

**Study Methodology**

**Program Selection**

In the past 15 years, USAID has supported a large number of private voluntary organizations (PVOs), NGOs, and other lenders to the poor or very small businesses. A small minority (no more than a few dozen) have been able to achieve both solid outreach and financial viability. This synthesis study is based on a nonrandom sample of 11 of these best institutions, a conscious effort to learn from success (see table 1). Selection criteria included loan size, number of borrowers, and a reputation for financial strength. In addition, attention was paid to geographical spread, diversity of financial technologies, and institutional types. Some good programs were eliminated from consideration because they could not provide high-quality financial and performance data. Others were eliminated simply because there were already similar programs in the study.

The sample does not include any credit unions, largely for practical reasons. Credit unions differ from microenterprise finance programs in ways that make direct comparisons difficult. For example, the proper point of comparison is not a single credit union (generally very small). National credit union systems, however, generally lack information that would allow comparative analysis. Nonetheless, credit unions do provide financial services to microenterprises, and many conclusions of this study would apply equally to credit unions. They should be considered an important part of the broader microfinance field.

**Outreach.** Special emphasis was placed on selecting at least one institution that focuses
Table 1. Age and Type of Selected Institutions

<table>
<thead>
<tr>
<th>Name (country)</th>
<th>Age</th>
<th>Type of Institution</th>
<th>Urban/Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEP (Senegal)</td>
<td>8</td>
<td>NGO/credit union</td>
<td>Both</td>
</tr>
<tr>
<td>ADOPEM (Dominican Republic)</td>
<td>12</td>
<td>NGO</td>
<td>Both</td>
</tr>
<tr>
<td>BancoSol (Bolivia)</td>
<td>7</td>
<td>Private commercial bank</td>
<td>Urban</td>
</tr>
<tr>
<td>BKD (Indonesia)*</td>
<td>40+</td>
<td>Village-owned financial institution</td>
<td>Rural</td>
</tr>
<tr>
<td>BRI Unit Desa System (Indonesia)</td>
<td>10</td>
<td>Division of gov’t commercial bank</td>
<td>Both</td>
</tr>
<tr>
<td>BRK (Niger)</td>
<td>3</td>
<td>NGO</td>
<td>Rural</td>
</tr>
<tr>
<td>CorpoSol (Colombia)</td>
<td>6</td>
<td>NGO/finance company</td>
<td>Urban</td>
</tr>
<tr>
<td>FINCA (Costa Rica)</td>
<td>10</td>
<td>NGO</td>
<td>Rural</td>
</tr>
<tr>
<td>Grameen Bank (Bangladesh)</td>
<td>18</td>
<td>Gov’t/member-owned bank</td>
<td>Rural</td>
</tr>
<tr>
<td>K-REP (Kenya)</td>
<td>4</td>
<td>NGO</td>
<td>Both</td>
</tr>
<tr>
<td>LPD (Indonesia)</td>
<td>10</td>
<td>Village/government-owned bank</td>
<td>Both</td>
</tr>
</tbody>
</table>

*First established in 1898, BKD has existed in its present form since 1952.

exclusively on the very poor in each of the three major geographical regions. In Indonesia, two village-level programs, the Lembagan Perkreditan Desas (LPDs) of Bali and the Badan Kredit Des (BKDs) of western and central Java, were selected. In Bangladesh, the Grameen Bank; in Latin America, the Fundación Integral Campesina (FINCA) program in Costa Rica; and in Africa, Kenya Rural Enterprise Programme (K-REP) and Bankin Raya Karara (BRK) of Niger were chosen. Several of these programs finance the startup of small enterprise activities, besides lending to those who have already started.

In addition to those six programs, five others were chosen: Agence de Credit pour l’Entreprise Privée (ACEP) of Senegal, La Asociación Dominicana para el Desarrollo de la Mujer (ADOPEM) of the Dominican Republic, Banco Solidario (BancoSol) of Bolivia, Bank Rakyat of Indonesia (BRI), and CorpoSol (formerly Actuar/Bogotá) of Colombia. These programs have traditionally reached a broader range of poor clients. Although they have by no means neglected the very poor, most have also reached microenterprises that are somewhat better off. They have average loan sizes about twice those of the village banking programs. In all cases, the programs’ clients would not have been served by mainstream financial institutions.

Most of these programs encourage the poor to save. However, only the Indonesian programs offer deposit services to nonborrowers in the fashion of true banks or other financial intermediaries. One other program (BancoSol) is on the verge of doing so on a broad scale.
Finally, each program has either reached substantial market coverage or demonstrated its ability to do so in the near future.

Financial viability. The second major selection criterion was financial viability. Programs selected were considered to have superior financial performance over time, according to data available before the study. The study explores the financial potential of the best service technologies available today for reaching the poorest microentrepreneurs in diverse local contexts.

Data Gathering and Analysis

Data were gathered through visits by analysts to most of the programs selected. However, special visits were not made to ADOPEM, BancoSol, CorpoSol, or the Grameen Bank, since adequate data were available from prior visits, public documents, and information available to the authors. For the other programs, analysts collected data on outreach and financial performance over the previous 5 years following detailed instructions designed to ensure data consistency across programs. Financial analysis was carried out according to a framework commonly used by financial institution examiners to assess overall financial performance. It looks at capital adequacy, asset quality, management, earnings, and liquidity.

The analysts had considerable difficulty collecting standard outreach and financial data from most programs. In many cases the data available were prepared primarily to suit donor requirements rather than internal management needs, particularly with respect to outreach information. There was little consistency in the type and frequency of information available on outreach, making the generation of comparative tables difficult.

On the financial side, information available from most programs was highly aggregated, with little detail on the nature of accounting adjustments employed or policies underlying key accounts such as loan-loss provisions. While larger, more formal institutions produce audited financial statements using a chart of accounts, several other institutions report in other formats. Even where audited financial statements were available, information was often highly aggregated, or nonstandard accounting practices were not fully explained. In most cases, analysts were able to flesh out information deficiencies through intensive discussions with financial managers in the programs.

The general approach was to develop balance sheets and profit-and-loss statements according to a standard format, so that institutions could be compared. The analysts did not audit the institutions, but rather sought greater clarity and detail in the information. For example, the analysts reviewed internal management reports when audited financial statements presented information too aggregated for the study. In some cases, analysts had to make reasonable assumptions or classify accounts in somewhat less exact ways to fit them into the general framework developed for the study.

Financial Data Adjustments

Once financial data were standardized by format and definition, further adjustments were applied to all institutions, making it possible to compare financial performance across all institutions.

6 The resulting program descriptions and analyses are on file with CDIE, but as many contain confidential information, they are not for general circulation.
This study focuses on one of the most commonly applied measures of financial performance: return on assets, a measure of profitability. However, as Yaron (1992a) describes, standard accounting measures of profitability are not valid for analyzing the performance of institutions receiving subsidies. Accounting profits are simply a residual of true profits (or losses) and subsidies received. Thus, a highly subsidized program will appear more profitable than a better performing, subsidy-free program. Yaron addresses this problem by proposing the use of a subsidy dependence index. The index relates the value of subsidies to the value of program revenue.

This study, however, takes a different, though compatible, approach. Adjustments are made in the financial statements so they can be presented as if the institution were not subsidized. Conceptually, the two approaches are entirely compatible: they compensate for the same shortcomings in standard financial statements. The approach used here in effect places the statements on a fully commercial basis, as if the institutions were not subsidized, thus making the standard return-on-assets measure a valid reference for comparing the institutions against each other and against private sector standards.

The adjustments made are as follows:7

1. **Arrears and loan losses.** This adjustment separates the loan portfolio into on-time and overdue loans, using the same definition of these terms for each institution, as available. The estimated cost of loan defaults is reflected in the provisions in the profit-and-loss statement. Provisions for losses, based on historical experience, appear in the balance sheet as a liability or subtraction from assets.

2. **Inflation.** All programs, especially those operating in high-inflation environments, must take into account the effect of inflation on the value of their assets and liabilities. The adjustment taken to compensate for inflation affects primarily the stated value of nonmonetary assets (generally fixed assets) and the real value of equity.

3. **Subsidized funds.** These adjustments apply a commercial cost of funds to all subsidized fund sources, notably soft loans and grants. These funds are priced as if they were raised on local financial markets, as an independent financial institution would have to do.

Finally, all data were converted from nominal to real terms in local currencies and then into 1993 U.S. dollar terms, so that programs could be compared.

It is not appropriate to use the financial information presented here to make direct judgments about whether one program is better than another, for two reasons. First, the results presented represent financial performance for 1993 only. Performance may vary significantly from year to year as a consequence of management decisions, such as adjustments in salary levels, hiring of new staff before expansion, interest rate policy changes, institutional changes, and as a consequence of external factors. Virtually none of the programs operates in a steady state; all are characterized by high rates of growth. Thus, it is critical for the reader to focus on the collective outreach and financial performance of the group of institutions selected rather than make individual comparisons. Second, programs operate in widely different cultural, economic, and demographic contexts. Results that seem better (for example, a higher rate of return on assets) may not be replicable in a different context.

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7 Appendix A contains the detailed instructions for data collection and adjustment used by the analysts.
In the past 5 years, good microenterprise finance programs have made large advances in outreach and financial viability. Many of the best programs have sustained strong growth rates and, in some cases, have started to achieve significant market penetration. The programs studied grew an average of 200 percent in the past 3 years, although some of the smaller and newer programs grew as much as 100 percent annually, in both total assets and number of clients reached. Five years ago, few of the selected programs were self-sufficient. Today 10 of the 11 are operationally efficient and 5 have overcome the hurdle to full self-sufficiency, now generating returns on assets that would be considered adequate by private banking standards.

**Outreach**

**Service Quality**

These 11 institutions have successfully adapted their services and service delivery methods to fit their client groups. Service quality is generally high and evidence of client acceptance is strong.

**Lending.** The programs can be categorized according to their lending methodologies: individual lending, solidarity group lending, and village banking. The three Indonesian programs rely exclusively on individual loans, as does ACEP in Senegal. BRK in Niger and CorpoSol in Colombia place a minority of their funds in individual loans. In these programs, individuals typically need some type of collateral and a credit reference from someone whom the program trusts. The types of collateral and the legal means of securing it generally fall below the level a commercial bank would require. In most instances, individual loans are larger than loans under group-based methods. The LPD and BKD systems in Indonesia, which make extraordinarily small loans on an individual basis, are exceptions.

The Latin American programs (except FINCA), the Grameen Bank, and K-REP use a solidarity group method. A small group of clients (generally four to seven) provides crossed guarantees, obviating the need for real collateral. Finally, FINCA/Costa Rica, the one village banking program, makes loans to groups of 30 or more people, who then administer loans to individual group members.

K-REP also has a pilot program based on preexisting groups. This program and the LPD system, a network of small, village-based institutions, bear some resemblance to the village banking model. The BRK program of Niger, which uses somewhat larger groups, includes an eclectic blend of features from the individual, solidarity, and village banking models. In
general, the solidarity group and village banking programs have smaller average loan sizes than individual loan programs.

The main loan product of these institutions is a short-term working-capital loan, usually of 12 months or less and carrying an interest rate somewhat higher than standard commercial bank loans in the same locale. Terms applied to loans vary by institution, albeit within a fairly narrow range. Repayment frequency varies from weekly to monthly, with shorter loan terms generally requiring more frequent payments. A wide range of fees and specific conditions for loans are applied, such as BRI's prompt payment incentive that gives on-time repayers a lower interest rate.

Despite superficial differences, there are striking similarities in the underlying principles of the programs, such as use of groups, social pressure, and unconventional collateral for motivating repayment; emphasis on short-term working-capital loans; and relatively high interest rates. Another underlying principle of most programs is graduated lending; the borrower's capacity and willingness to repay are determined through a series of increasingly larger short-term loans renewed on the basis of the borrower's repayment record. Programs expect borrowers to remain clients for an extended period. Although client graduation to more formal financial institutions is generally not a goal, some programs (Grameen and FINCA) have a maximum loan size that eventually forces their more successful borrowers to seek financing elsewhere.

Most programs recognize that the vast majority of their clients, even clients that grow substantially, will remain too small and informal to be picked up by the banking sector as commercial clients. Several institutions offer larger and longer-term loans to proven customers. Grameen offers housing loans, BRI and BancoSol offer fixed-asset loans, and CorpoSol offers agricultural loans. To obtain these loans, most institutions require borrowers to have participated in a series of shorter-term loans to qualify or to have saved over a substantial period.

These lending methodologies result in high-quality credit services compared with services offered by more traditional institutions. Through these lending methodologies, the loan product is brought physically closer to the borrower and is tailored to the borrower's opportunities and abilities, thereby lowering transaction costs to a level that makes them attractive to borrowers. Turnaround on new loans and renewal applications is consistently less than 2 weeks, in most cases a few days, as opposed to weeks or months at most commercial banks or traditional credit programs. In virtually all cases, the loan amount received is close to the amount expected, as loan officers have developed the art of client-lender communication. Most institutions carry out a significant part of the loan application process at the borrower's place of work.

Savings. Of the institutions reviewed, only the Indonesian banks offer widespread voluntary deposit services to the general public in the communities where they operate. Their most successful savings instrument is a highly liquid passbook account that pays a somewhat lower rate of interest than do time deposits or other less liquid savings accounts. As much as 75 percent of funds mobilized are generated through these liquid instruments, demonstrating that new savers generally prefer liquidity over returns when choosing deposit options. BancoSol embarked on a program to implement similar voluntary savings services in Bolivia in 1994, but early results were too preliminary to include in this review.

A second group of programs—the BKDs, FINCA, Grameen, and K-REP—incorporate compulsory savings requirements in their loan methods. However, these savings services do not reach beyond the borrowing clientele, and the use of savings is determined by the group, not by individual savers. Funds are often not readily accessible and interest rates are often below market. Thus, these programs cannot be judged to provide high-quality savings serv-
ices, although savings may play an important role in the overall service methodology. For example, these savings act as default guarantees and provide institutions with sources of loan funds.

Two other programs, ACEP and CorpoSol, cannot offer savings deposits in the manner of a commercial bank and do not have compulsory savings requirements. However, CorpoSol has just purchased a finance-company license to allow it to take voluntary deposits in the future, and ACEP is taking steps to incorporate as a credit union.

Other services. Finally, some NGOs offer other financial and nonfinancial services. Two that are particularly active are CorpoSol and Grameen. CorpoSol operates a wholesale depot for raw materials, construction materials, and other inputs microenterprises use. CorpoSol receives a margin of 6 percent on average on sales, while microenterprises realize savings of up to 15 percent. Ultimately, this activity may generate substantial income for CorpoSol. The Grameen Bank also carries out a variety of nonfinancial activities, mostly built on its social agenda, the Sixteen Decisions. These include distribution of seeds, organization of village schools, and promotion of practices such as family planning, girls’ education, and marriage without dowry. Grameen also invests in its own for-profit ventures, including fish hatching, tube wells, and textiles.

For the most part the other institutions studied did not engage in significant nonfinancial service activities, preferring instead to concentrate on achieving high levels of credit and savings outreach through market penetration and financial viability. The nonfinancial activities of Grameen and CorpoSol are accounted for separately from the financial services and do not affect the analysis or the comparisons among institutions.

Evidence of client acceptance. As a group, the institutions studied have met the most important test of service quality: client acceptance. While for each measure in table 2 there is generally one institution that does not perform well, the averages for the group as a

<table>
<thead>
<tr>
<th>Measure (in percent; n is number of institutions for which the variable was observed)</th>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual growth in number of borrowers (n = 11)</td>
<td>-10 to 120</td>
<td>40 (approx.)</td>
</tr>
<tr>
<td>Annual growth in loan portfolio (n = 10)</td>
<td>0 to 245</td>
<td>76*</td>
</tr>
<tr>
<td>Annual growth in savings (n = 4)</td>
<td>5 to 38</td>
<td>27</td>
</tr>
<tr>
<td>Percent of portfolio overdue more than 90 days (n = 11)</td>
<td>0 to 20</td>
<td>5</td>
</tr>
<tr>
<td>Real effective interest rate (n = 10)</td>
<td>-11 to 51</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Locally available data gathered by field team members.

*Median is 58 percent.
whole are quite impressive. Most of the institutions score well on several of these measures.

High and sustained growth in all measures of scale provide evidence of strong client demand. The growth figures do not stand alone, however. They are validated as indicators of service quality by low delinquency (averaging 5 percent, with average loan loss rates significantly less) and client willingness to pay interest rates significantly above the inflation rate (with an average premium above inflation of 13 percent). The effective real interest rate will be discussed as a crucial determinant of financial viability. Another indicator, dropout rates, was not widely available. However, the Grameen Bank maintains information showing low client turnover from year to year. Many clients in Grameen's older offices have been with the program from 5 to 10 years. These indicators give indirect evidence that the institutions offer something of value at lower total transaction costs to clients than do either other formal financial institutions or informal sector alternatives.

### Depth of Outreach: Reaching the Very Poor

All selected programs reach small businesses that would otherwise be excluded from formal financial services. Most reach the smallest economic activities in their local environments. This chapter reviews loan size information (the only outreach indicator available for all programs) and also looks at qualitative indicators of ability to reach the very poor.

**Loan size.** Average loan balances at the selected institutions ranged from $38 at the BKDs of Indonesia to $1,016 at ACEP in Senegal (see table 3). However, most of the programs (6 of 11) cluster in the range of $200 to $400. In part, this range of loan sizes results from a decision to select institutions working

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8 Loan sizes discussed here are obtained by dividing the amount of the loan portfolio by the number of active borrowers. This yields the average balance of loans outstanding, which is a standard way of measuring loan size and the only measure available consistently across programs. Initial loan size may be significantly higher.
across the spectrum of microenterprise finance. It is not particularly useful to compare loan sizes in the absence of contextual information, as country circumstances differ greatly. However, context can be inferred by comparing average loan size at a given institution with per capita GNP in that country.

Programs in Bangladesh, Kenya, and Niger operate in extremely poor countries where GNP per capita is less than $358. In Bolivia, the Dominican Republic, Indonesia, and Senegal per capita GNP falls between $600 and $1,000, and Colombia and Costa Rica have per capita GNP exceeding $1,000. Programs in the poorer countries tend to serve a more mainstream clientele, while programs in countries that are better off tend to target more exclusively the poorer segments of the population.

The Grameen Bank’s average outstanding loan size of $101 represents 48 percent of GNP per capita in Bangladesh, whereas FINCA’s average loan size of $310 represents only 16 percent of GNP per capita in Costa Rica. We can infer that loans in Costa Rica reach a relatively poorer population than those in Bangladesh, although, in absolute terms, clients in Bangladesh are almost certainly poorer. ADOPEM, BKD, CorpoSol, FINCA, and LPD target their services more specifically to the poorest clients in their service areas than do BancoSol, BRI, or Grameen. In the case of the BKD, outstanding loan balances are extremely small, only $38 on average in East Java where GNP per capita is $610 a year (6 percent). The small size of loans in these systems ensures that they go only to the poorest residents since more affluent residents would not find such loans worthwhile.

This range of results suggests that in poorer countries microenterprise finance programs tend to serve a broad sector of the population. In more affluent countries, microenterprise finance reaches a relatively smaller segment. Thus in poorer countries, donors may find it appropriate to support programs that are developing an effective financial system for the bulk of the population. In more affluent countries, development of a specialty institution catering to a sector of the population may be more appropriate.

The three African programs show average loan sizes ranging from 64 to 136 percent of GNP per capita, surprisingly high compared with programs in other regions and seemingly not in line with the conclusion just stated. ACEP consciously targets the upper end of the microenterprise spectrum. However, both BRK, with average outstanding loans of $221, and K-REP, with average outstanding loans of $217, make larger loans than might be expected. One conjecture is that the programs choose not to serve the subsistence farmers who are the poorest inhabitants of Kenya and Niger.

For a more complete picture of the depth of outreach, loan size distributions are needed. Unfortunately, few institutions studied were able to provide such information. Distributions are relevant for determining whether programs with relatively high average loan sizes serve significant numbers of very poor clients. Even for a program at the median loan size, say ADOPEM at $308, a substantial majority of its clients receive loans well below this amount. The median and the mode are generally well below the average. Thus, in a typical institution with one-half of its loan funds invested in loans above the average, well over one-half of the clients have loans below the average.

To determine just how deep outreach is at programs like BancoSol or BRI, it is essential to have information on median and modal loan sizes. Lacking that information, we must rely on general reports that BancoSol serves a large number of very poor clients with very small loans, while BRI allows other Indonesian institutions to focus on the poorest clientele. BRI’s strong claim to depth of outreach lies mainly in its savings services, which reach deep into rural communities. Its savings services are estimated to serve one-third of all households, including those of the very poor. BRI has five times as many savings accounts as loans, with average savings size of $164.

Maximizing the Outreach of Microenterprise Finance
All programs, with the exception of ACEP, have deep outreach, and while the depth varies somewhat, the main difference is between programs that exclusively serve the very poor and those that serve a mixture of the very poor and those who are somewhat better off.

Qualitative Indicators. The 11 programs reach large numbers of women. ADOPEM and Grameen reach women because of specific policy decisions; 94 and 100 percent of their clients, respectively, are women. K-REP recently decided to attend more to women because of their stronger repayment performance and willingness to form groups. FINCA International has also decided to target women, although the country program studied, FINCA/Costa Rica, has remained nontargeted and serves relatively few women.

Among programs concentrating on women, motivations generally include the belief or experience that women are good credit risks and are more likely to have poor access to resources and services. Female participation rates in programs without gender preference are determined by the prevalence of women in client groups served and by features not studied here that may impede or facilitate women’s access. Some correlation exists between programs offering smaller loans and programs serving more women; but the correlation is far from perfect. For example, BancoSol has a relatively high average outstanding loan size, yet 71 percent of its clients are women.

The programs studied show that microenterprise finance can be successful in rural and urban areas. CorpoSol, BancoSol, ADOPEM, and K-REP Juhudi (a Grameen-type program) programs are primarily urban or began as urban programs. ACEP, BKD, BRI, BRK, FINCA, and LPD are primarily rural or began as rural programs. However, several rural programs have moved into urban areas and vice versa. Only BRK, FINCA, and the Grameen Bank remain exclusively rural. Successful methodologies transcend the rural–urban divide.

Among rural programs, however, key determinants of success are believed to be reasonably high population density and adequate access to communications, whereas among urban programs a key determinant is social cohesion. Extremely high population densities in Bangladesh and Indonesia have often been regarded as important in explaining the large scale achieved by institutions in those countries (see next chapter). However, other institutions operating among sparser populations demonstrate that density, by itself, does not explain financial viability, as subsequent discussions will show.

Qualitative client descriptions demonstrate that many clients are genuinely poor and often severely limited in life choices. For example, the Grameen Bank serves largely rural landless women (undoubtedly among the poorest people in the world) who face severe culturally imposed restrictions on their behavior. Most clients are illiterate and many have not previously engaged in an income-generating activity. Many have never handled money or traveled alone outside their villages. Economic activities of typical Grameen clients are raising a dairy cow or other livestock, rice husking, or other rice-related activities. These account for two-thirds of Grameen client activities.

BRK’s clients live in one of the world’s poorest countries, Niger, which has a life expectancy of 46 years, the highest child mortality rate in the world, and 9 percent literacy. Typical BRK borrowers are small traders in agricultural products and consumer goods, artisans, and miscellaneous service providers. Given Niger’s harsh physical environment, most engage in a variety of productive activities to diversify their risks and take advantage of seasonal or occasional opportunities as appropriate.
FINCA, a rural program in Costa Rica, has traditionally supported business startups by poor clients. It is the only program of its type in the country. CorpoSol concentrates most of its effort in the poorest areas of Bogotá, squatter settlements of recent immigrants from rural areas.

These client characteristics pose significant challenges. Illiteracy, lack of mobility, lack of social cohesion, and geographical inaccessibility all affect one or more of the programs, making the populations strikingly difficult to serve. Nonetheless, these programs are serving them without incurring insupportable costs (see subsequent chapters on financial performance).

Extensive Outreach: Scale of Coverage

Several programs studied are already making contributions on a national scale, and most of the others are growing so quickly they can be expected to achieve national importance soon. Seven of the 11 programs grew at impressive rates recently, averaging from 18 to 107 percent annually measured in total number of borrowers. Table 4 shows that small and recently established NGOs have been able to sustain very high growth rates, while the older programs tended to grow more slowly, although still at impressive rates (e.g., 23 percent by the Grameen Bank).

<table>
<thead>
<tr>
<th>Program</th>
<th>No. of Borrowers, 1990 (000)</th>
<th>No. of Borrowers, 1993 (000)</th>
<th>Average % Annual Growth/No. of Borrowers (1990–93)</th>
<th>No. of Savers, 1993 (000)</th>
<th>Average % Growth/No. of Savings Accounts</th>
<th>Total Assets, 1993 (US$million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BancoSol</td>
<td>15</td>
<td>46</td>
<td>47</td>
<td>N/A</td>
<td>N/A</td>
<td>34.1</td>
</tr>
<tr>
<td>BKD</td>
<td>621</td>
<td>907</td>
<td>18</td>
<td>817</td>
<td>3</td>
<td>62.6</td>
</tr>
<tr>
<td>BRI</td>
<td>1,893</td>
<td>1,897</td>
<td>0</td>
<td>11,325</td>
<td>17</td>
<td>2,288</td>
</tr>
<tr>
<td>CorpoSol</td>
<td>6</td>
<td>32</td>
<td>78</td>
<td>N/A</td>
<td>N/A</td>
<td>15.7</td>
</tr>
<tr>
<td>FINCA</td>
<td>2</td>
<td>5</td>
<td>57</td>
<td>5</td>
<td>N/A</td>
<td>1.7</td>
</tr>
<tr>
<td>Grameen</td>
<td>853</td>
<td>1,587</td>
<td>23</td>
<td>1,587</td>
<td>N/A</td>
<td>238.7</td>
</tr>
<tr>
<td>K-REP</td>
<td>0</td>
<td>5</td>
<td>107</td>
<td>5</td>
<td>N/A</td>
<td>1.9</td>
</tr>
<tr>
<td>LPD</td>
<td>64</td>
<td>145</td>
<td>32</td>
<td>379</td>
<td>49</td>
<td>25.6</td>
</tr>
</tbody>
</table>

Note: Programs with compulsory savings generally have the same number of borrowers and savers.

Source: Locally available data gathered by field team members.
The largest programs, in Bangladesh and Indonesia, have already achieved significant coverage. For example, the LPD system in Bali is active in fully one half of the 1,300 villages on the island. In the villages that LPD reaches, any resident in good standing who is approved by the community’s representative (village chief) has access to a loan. Virtually all residents open savings accounts. Since local units are owned by their communities and 20 percent of net profits at the end of the year are distributed to community projects, residents have an important additional incentive to save. The Grameen Bank has similar market outreach, covering nearly one half of the villages in Bangladesh as of 1992. LPD and the Grameen Bank probably have the deepest market penetration. The LPD system reaches 145,000 borrowers and 379,000 savers, whereas Grameen, with its mandatory savings program, reaches 1.6 million borrowers–savers.

Both the BKD and BRI networks in Indonesia are large in absolute terms as well. The BKD system has nearly 1 million borrowers, and the BRI Unit Desa system has nearly 2 million. The BRI Unit Desas have reached more than 11 million savers, 6.5 percent of the entire country’s population. With its 3,267 branch offices, BRI has possibly the largest branch network of any bank in the world. BKDs, independent municipal level microbanks supervised by BRI, number 5,345. Established in 1898, BKDs have achieved impressive market penetration in eastern Java and the island of Madura (20 percent of the villages each).

No other program studied even approaches these levels of nationwide coverage or penetration. However, two have achieved a scale unprecedented for their countries and for microenterprise finance in Latin America. BancoSol has reached nearly 50,000 microenterprises throughout the country (in addition to the 10,000 that its NGO mother still administers). An estimated 600,000 families operate in the informal sector that can be considered the target population of microenterprise finance in Bolivia, although not all will want loans. Under these assumptions, BancoSol has already covered 10 percent of the potential market with loans. CorpoSol, with approximately 32,000 clients, has probably reached 5 to 8 percent of potential Bogotá-based microenterprises. Growth prospects for these two institutions are strong.

Compared with the Asian programs, BancoSol and CorpoSol began quite recently, in 1987 and 1989, respectively. The Grameen Bank in Bangladesh took more than a decade to reach national scale. The BRI Unit Desa system was in existence nationwide for more than a decade before it became an enterprise-oriented system in 1983. The BKD and LPD systems are built on long existing institutional bases (and were initially government subsidized).

The remaining programs operate on a smaller scale. Although data are not available to estimate the degree of market penetration in these cases, these programs would not show more than 3 percent coverage. Nevertheless, most of these institutions are the largest in their countries. Some programs, such as BRK and K-REP, are still new. FINCA in Costa Rica concentrates on a niche (poor farmers) of relatively limited size, as does ACEP with its emphasis on upper-end microenterprises. ADOPEM is growing rapidly and is likely to achieve significant scale in the coming years.

These programs show that there is no clear trade-off between reaching the very poor and reaching large numbers of people. In fact, some of the largest programs (BKD, Grameen) have some of the smallest outstanding loan sizes. Some observers have argued for an exclusive focus on the poorest clients, with the objective of poverty alleviation. The data assembled here, and arguments for financial leverage, suggest that mixed programs serving a range of clients can also be highly effective in reaching the poorest. It is scale, not exclusive focus, that determines whether significant outreach to the poor is achieved.
Financial Viability

Chapter I describes financial efficiency as a challenge of surmounting two hurdles. First is operational self-sufficiency, the point at which program revenues cover all administrative costs. Second is full self-sufficiency, achieved when revenues also cover the costs of raising funds on a commercial basis without subsidy. Through the adjustments described in chapter I and elaborated in appendix A, each program's financial statements have been standardized, which allows their self-sufficiency to be measured using standard tools of financial analysis.

Traditionally, the primary indicators of overall financial performance of banks are "return on assets" and "return on equity" ratios. Both measure net income generated by a bank's activities. The first measures income generated as a percentage of the assets used to generate it; in other words, the productivity of the bank's loans and investments. The second measures net income as a percentage of the owners' capital investment, or the productivity of that capital invested in the enterprise.

For a microenterprise finance program to be free of subsidy, return on equity should at least equal the return available on alternative investment opportunities. If not, the owners are subsidizing the institution. Positive returns on assets and equity ratios commensurate with those obtained by commercial banking establishments in the same economies provide the criteria for classifying a program as fully self-sufficient. Because the equity structures of these programs differ so greatly, however, return on equity is not as revealing as it would be for a commercial bank. The focus of analysis here is thus return on assets. In addition, the analysis looks at operational efficiency, defined as revenue from clients as a percentage of operating expenses. Programs that have reached level II have revenues that exceed their operating costs.

Table 5 shows the financial results obtained by the selected programs during 1993. Results are expressed in inflation-adjusted (real) terms, reflecting adjustments described above.

All but the BRK program in Niger have overcome the initial hurdle of operational efficiency. The newest program in the sample, BRK, is still perfecting its promising service delivery methodology and has not yet mastered the management challenges required for efficient operations.

The 10 remaining programs cover the cost of day-to-day operations from income on assets. Five fall within level II. Among level II programs, the range of performance is broad. Some programs are barely operationally efficient and have a negative return on assets. Others are near full self-sufficiency. Moreover, the factors keeping institutions at level II differ greatly. For example, ADOPEM, Grameen, and K-REP are all expanding rapidly; their costs reflect investments in capacity that have not yet generated the full returns they are capable of. However, some programs have reached operational efficiency at a relatively small scale—as low as 2,000 borrowers. Apparently, many of the economies of scale in delivery of services can be achieved in the early stages of expansion. Some programs remain in level II largely as a result of their interest rate policy relative to inflation, as will be discussed.

Among level II programs, differences persist in the amount of leverage used. FINCA and K-REP have only the leverage of compulsory

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9 Data are based on 1993 results to reflect recent performance given the relative youth of some of the programs studied. Five-year data were analyzed to verify that 1993 results were neither extraordinarily positive nor extraordinarily negative. In the case of BRI, 1992 and 1993 data were averaged, since both years were atypical.
Table 5. Financial Viability of Microenterprise Programs, 1993

<table>
<thead>
<tr>
<th>Program</th>
<th>Operational Efficiency</th>
<th>Return on Average Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level I. Subsidy Dependent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRK</td>
<td>44</td>
<td>-11.5</td>
</tr>
<tr>
<td><strong>Level II. Operationally Efficient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K-REP</td>
<td>106</td>
<td>-18.5</td>
</tr>
<tr>
<td>FINCA</td>
<td>98</td>
<td>-6.3</td>
</tr>
<tr>
<td>Grameen</td>
<td>105</td>
<td>-3.3</td>
</tr>
<tr>
<td>ADOPEM</td>
<td>94</td>
<td>-0.8</td>
</tr>
<tr>
<td>ACEP</td>
<td>142</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Level III. Profitable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BancoSol</td>
<td>107</td>
<td>1.0</td>
</tr>
<tr>
<td>BRI</td>
<td>113</td>
<td>1.6</td>
</tr>
<tr>
<td>BKD</td>
<td>197</td>
<td>3.2</td>
</tr>
<tr>
<td>CorpoSol</td>
<td>124</td>
<td>4.9</td>
</tr>
<tr>
<td>LPD</td>
<td>148</td>
<td>7.4</td>
</tr>
</tbody>
</table>

*Note:* Locally available data gathered by field team members.

Savings requirements, relying on grants for all their loan capital. ADOPEM and the Grameen Bank obtain funds through both soft loans and commercial loans from banks. The Grameen Bank's worldwide fame brings it extensive access to such sources. The five other institutions (BancoSol in Bolivia, CorpoSol in Colombia, and three in Indonesia,) generate (fully adjusted) positive returns on assets, are profitable without subsidy, and are thus classified in level III. However, none of these programs should yet be considered financially stable, since they all face serious fluctuations in their cost structures. Nevertheless, in any given year several microenterprise programs generate returns that are competitive in their local banking sectors.

A strong connection exists between leverage and achieving level III. The three Indonesian programs and BancoSol are all licensed financial intermediaries, and CorpoSol, also at level III, is beginning to operate through a licensed financial institution.
Not all are equally leveraged, however. BKD relies almost entirely on retained earnings to fund its loan portfolio. As a result, its 3.2 percent rate of return on assets gives rise to only a 3.8 percent return on equity. By contrast, CorpoSol is a highly leveraged NGO (through loans from banks) whose slightly higher (4.9 percent) return on assets equals a 22 percent return on equity. Therefore, a dollar invested in BKD equity would yield less income than a dollar in a liquid savings account, whereas a dollar invested in CorpoSol would double every 3 years. BancoSol raises most funds from local capital markets and is developing the capacity to raise funds by offering deposit services. It should shortly reach standard commercial bank leverage ratios.

These results offer a resoundingly positive answer to one of the initial questions posed in this assessment: Can financial services be provided to the poor on a financially viable basis? A limited form of financial viability, defined as operational efficiency, can be achieved in a range of settings and client populations by institutions of varying origins. At a minimum, donors should expect microenterprise lenders they support to achieve this level within several years of initiating a program.

The results regarding full self-sufficiency are less conclusive. Microfinance organizations can reach full self-sufficiency in certain settings. Moreover, full self-sufficiency can be achieved by institutions serving the very poor as well as those aiming at slightly higher income clientele. Because three of the five fully self-sufficient institutions are in Indonesia, this assessment cannot state conclusively that full profitability is routinely possible. The rapid development of BancoSol and CorpoSol and trends at other institutions, however, suggest that in several years this level may be consistently achieved in a range of settings.

Outreach and Financial Viability: Trade-offs or Complements?

This assessment has sought to examine whether there is a complementary or negative relationship between outreach and financial viability. Table 5 in fact shows a positive connection between scale of outreach and financial self-sufficiency. All the profitable (level III) institutions have also achieved significant scale. The smallest, CorpoSol with 32,000 clients, is larger than all the level II and I programs combined, other than the Grameen Bank.

The table also shows that programs offering small loans, such as BKD, CorpoSol, and LPD, can be financially viable. To explore this relationship further, figure 1 compares average loan balance (indicating depth of outreach or poverty level of clients) and return on assets (representing financial viability). Figure 2 depicts the relationship between average loan balance as a percent of GNP per capita (a proxy for the relative poverty level of borrowers) and return on assets.

The striking feature of these figures is the lack of a clear pattern. No consistent relationship appears among the variables. Regressions were run to examine more precisely the statistical relationship between these and other indicators for outreach and financial performance. The result was the same. No outreach variables, either individually or combined, proved significant as a predictor of rates of return.

These results show no evidence of a direct trade-off between outreach, either deep or extensive, and financial viability. The two goals are clearly not in opposition.
Figure 1

![Graph showing return on assets vs. average loan balance](image)

**Note:** From locally available data gathered by field team members.

Figure 2

![Graph showing return on assets vs. average loan balance/GNP per capita](image)

**Note:** From locally available data gathered by field team members.
What Is the Key to Financial Performance?

If financial performance by the best programs is not a function of outreach, then what are the key determinants of financial viability? Many variables have been suggested—density of the target population (along with ease of access), credit methodology used, relationship of local staff salaries to local GNP per capita, and interest rate policies in relation to the macrofinancial environment. In particular, variables relating to productivity of staff and the cost structure of the institution might be expected to determine differences in profitability.

Cost and productivity variables, such as number and amount of loans per staff member, salaries as a percentage of assets, and administrative costs as a percentage of assets, were tested as predictors of return on assets. For each regression, there were 11 observations for the year 1993, one for each program studied.

The relationship was statistically significant for only three independent variables: the country's rate of inflation, the program's effective real rate of interest charged on loans, and the program's average employee salary relative to the country's GNP per capita. Since the effective real interest rate was more significant than inflation, and since it measures not only the effect of inflation but also the program's interest rate response to inflation, a final multiple regression was run using salary/GNP per capita and real interest rate as the independent variables. In this regression, both variables were statistically significant, and the regression explained 81 percent of the differences between successful programs in return on assets.

The study results support a counterintuitive conclusion: none of the direct unit-cost-related variables explained program return on assets in a statistically significant manner. Not even the cost of administration as a percent of the loan portfolio is significant. This is counterintuitive because one would expect inefficient programs (that is, those with high operating costs) to be less viable than efficient programs. The only cost-based variable that is statistically significant (average salary relative to GNP per capita) is not one of the standard unit cost or productivity variables normally examined.

These results can be explained largely by the sample of institutions analyzed. All selected institutions are frontier programs that have achieved a strong measure of success in outreach and financial viability. They have reduced their unit costs to levels that, when added together and expressed as a percentage of total assets, fall within ranges that can be sustained by financial market spreads. They have found ways to meet the challenge of operational efficiency by adjusting their methodologies to fit their contexts. At these institutions, annual administrative costs as a percentage of average loan portfolios outstanding ranged from a low of 8 percent to a high of 35 percent (see table 6). Local financial markets can sustain spreads of this magnitude to operate loans of this size with informal clients.

Personnel expenses as a percentage of average loan portfolios ran from 4 to 16 percent. Personnel expenses are clearly the principal administrative expense and also a function of the credit methodology chosen, density of the target population, and general level of salaries. While these expenses are from three to five times the levels found in banks, they are only double those found in finance companies that make small installment loans to salaried em-

10 A random sample of microenterprise programs, covering both strong and weak institutions, would almost certainly find cost and productivity factors significant in predicting levels of financial viability.
Table 6. Cost and Productivity Measures

<table>
<thead>
<tr>
<th>Program</th>
<th>Nonfinancial Costs as Percentage of Loan Portfolio</th>
<th>Salary Costs as Percentage of Loan Portfolio</th>
<th>Average Salary as Multiple of GNP Per Capita</th>
<th>Loans Per Staff Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEP</td>
<td>19</td>
<td>11</td>
<td>6</td>
<td>88</td>
</tr>
<tr>
<td>ADOPEM</td>
<td>22</td>
<td>16</td>
<td>6</td>
<td>90</td>
</tr>
<tr>
<td>BancoSol</td>
<td>35</td>
<td>17</td>
<td>6</td>
<td>74</td>
</tr>
<tr>
<td>BKD</td>
<td>21</td>
<td>12</td>
<td>5</td>
<td>139</td>
</tr>
<tr>
<td>BRI</td>
<td>17</td>
<td>12</td>
<td>2</td>
<td>57</td>
</tr>
<tr>
<td>BRK Niger</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>118</td>
</tr>
<tr>
<td>CorpoSol</td>
<td>15</td>
<td>10</td>
<td>21</td>
<td>200</td>
</tr>
<tr>
<td>FINCA/CR</td>
<td>13</td>
<td>9</td>
<td>3</td>
<td>270</td>
</tr>
<tr>
<td>Grameen Bank</td>
<td>14</td>
<td>9</td>
<td>3</td>
<td>152</td>
</tr>
<tr>
<td>K-REP</td>
<td>19</td>
<td>13</td>
<td>18</td>
<td>88</td>
</tr>
<tr>
<td>LPD</td>
<td>10</td>
<td>7</td>
<td>1</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Locally available data gathered by field team members.

*Nonfinancial costs include all administrative costs plus depreciation and loan loss provisions.

Employees. Moreover, they result in charges to clients well below informal sector alternatives.

The observations on spreads confirm that operational efficiency can be achieved in a variety of settings around the globe and with varied loan sizes. Methodologies are available to make operational efficiency a reality for institutions willing to work toward that goal. Programs on the frontier have decided to bring their cost structures in line with spreads acceptable to clients in local financial markets. Regardless of their salary structure or the population density of local target populations, these programs adapted their credit technologies to reach their financial objectives as a means of achieving their outreach objectives.

The only cost-related variable that proved statistically significant is the relationship of the program’s average annual salary per employee to GNP per capita, expressed as a multiple of GNP per capita. Programs that paid relatively less were more profitable than those that paid more. Programs that paid relatively low salaries (from one to three times GNP) were the BKDs, FINCA, Grameen, and the LPDs. These programs tend to hire field staff directly from communities they serve, or from similar communities, on the basis of character.
and skills necessary to undertake the program's tasks. Programs with the highest multiples (18 and 21 times GNP), BRK and K-REP, are emerging or have recently emerged from donor and project-based NGO structures and tend to hire more educated workers.

Two observations can be made. First, if programs arise from donor projects that stress outreach and ignore financial viability, then implementers may tend to hire highly educated, relatively expensive individuals. This happens despite the fact that basic operations of most programs can be carried out by people with less formal training. Second, programs committed from the outset to operational technologies based on locally hired staff have a significant advantage in cost, allowing them to provide small loans or take small deposits in a financially viable manner.

However, this must be related to specific national settings. In some countries, existing pay levels may dictate that programs pay high salaries. Every program must balance the need to control costs with the need to hire sufficiently skilled staff.

**Interest Rates and Inflation**

Among sample programs, the effective real rate of interest on loans proved to be the single most important variable for explaining financial performance. Effective real rates of interest among these institutions ranged from -9 to 67 percent (see table 7). The program with the lowest rate, K-REP, was also the program with the lowest return on assets (despite having reached operational efficiency). At the other extreme, CorpoSol is the second most profitable institution in the sample and has the second highest effective interest rate.

These results suggest that once operational efficiency is achieved through an appropriate methodology, reaching full financial self-sufficiency is largely a choice made by the institution, particularly through its pricing policy. Despite difficulties raised by context, culture, or the nature of the target group, programs in a variety of settings can choose to be viable.

Setting appropriate interest rates and fees requires consideration of several factors: inflation, assessment of client demand, operating and funding costs, and maintaining low loan delinquency to keep yields on the portfolio high. For these frontier programs, pricing decisions appear to have been made with cost and client demand clearly in mind. However, some programs have had difficulty responding to high inflation.

This is particularly true for Kenya's K-REP. K-REP's operations are as efficient as several other programs examined in this study. Its ratio of administrative expenses to total assets is 10 percent, slightly better than the overall average of 12 percent. Its client-to-staff ratio is 88, a productivity indicator that also falls close to the overall average of 117. Nonetheless, K-REP's current financial performance is poorer than that of any other program; its inflation-adjusted return on assets is -18.5 percent.

The reason for K-REP's weak financial performance is its inability in 1993, the year of comparison, to adjust its interest-rate policies to an unfavorable inflationary environment. K-REP is the only institution selected for the study that charged a negative real interest rate. In recent years, inflation in Kenya has increased dramatically while interest rates in the formal financial sector have not. K-REP managers felt they would face serious political difficulties by charging positive real rates since government programs make microenterprise loans at interest rates of 6 to 8 percent, strongly negative (in real terms). K-REP's rate of 38 percent was, at least, reasonably close to the prevailing interest rate of 47 percent.

Donors inadvertently contribute to this problem. K-REP holds a large share of its assets in bank savings accounts yielding only 8 percent. These deposits result from large disbursements from donor agencies that are converted to local currency to be on-lent in new branches. A suspicious donor official viewing
In such a situation, a fully leveraged bank would perform far better since the loss of value would be passed on largely to depositors and other providers of low-interest funds. The bank would probably place most of its equity in fixed assets, such as buildings, that are steadily revalued during rapid inflation. Many banks can remain quite profitable in an inflationary environment, even as their financial assets shrink in real terms.

Latin American institutions have long managed in an inflationary environment (although not always successfully), perhaps engendering greater general awareness of how to adjust than in Africa.

Many programs in Latin America have learned to deal successfully with inflation by introducing creative fee structures, such as charges for client-orientation services. It is useful to contrast K-REP with CorpoSol in Colombia where inflation was 19 percent at the time of the study and bank interest rates have been somewhat repressed for many years.
Through a creative fee structure, CorpoSol charges an effective real rate of interest of 52 percent, allowing it to generate a 4.9 percent rate of return on assets. CorpoSol works with borrowed funds that it on-lends, leveraging its equity. Its net income converts to a 22.5 percent return on equity—a return that compares favorably with many private banks in Colombia. Yet CorpoSol operates no more efficiently than K-REP. In fact, K-REP spends less on administration (19 percent) as a percentage of the total loan portfolio than does CorpoSol (22 percent).

Whether individual programs facing unstable inflationary environments can indeed charge positive real rates of interest varies from situation to situation. However, program experiences in numerous countries have demonstrated that microentrepreneurs can and will pay positive, real rates of interest on their loans, even in highly inflationary environments (see Christen, Stearns, and Castello 1991). Programs may have to alter their credit delivery techniques somewhat—for example, by shortening loan terms and increasing the frequency of repayments—but positive real rates of interest can be charged.

These findings have direct implications for practitioners and funders. A key element in the success of microenterprise finance institutions is their ability to develop techniques that are appropriate to their macrofinancial environ-

<table>
<thead>
<tr>
<th>Institution (Country)</th>
<th>GDP Per Capita, 1992 (US$)</th>
<th>Rate of GDP Growth a (%)</th>
<th>Inflation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEP (Senegal)</td>
<td>780</td>
<td>N/A</td>
<td>8</td>
</tr>
<tr>
<td>ADOPEM (Dominican Republic)</td>
<td>940</td>
<td>7.9</td>
<td>5</td>
</tr>
<tr>
<td>BancoSol (Bolivia)</td>
<td>680</td>
<td>3.4</td>
<td>9</td>
</tr>
<tr>
<td>BKD (Indonesia)</td>
<td>670</td>
<td>6.3</td>
<td>10</td>
</tr>
<tr>
<td>BRI (Indonesia)</td>
<td>670</td>
<td>6.3</td>
<td>10</td>
</tr>
<tr>
<td>BRK (Niger)</td>
<td>280</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>CorpoSol</td>
<td>1,330</td>
<td>3.0</td>
<td>19</td>
</tr>
<tr>
<td>FINCA (Costa Rica)</td>
<td>1,960</td>
<td>6.1</td>
<td>9</td>
</tr>
<tr>
<td>Grameen Bank (Bangladesh)</td>
<td>220</td>
<td>4.3</td>
<td>8</td>
</tr>
<tr>
<td>K-REP (Kenya)</td>
<td>310</td>
<td>0.4</td>
<td>47</td>
</tr>
<tr>
<td>LPD (Indonesia)</td>
<td>670</td>
<td>6.3</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Locally available data gathered by field team members.
ments (inflation in this case), just as they must become expert in dealing with the particular market niches of potential clients.

**Importance of the Policy Environment**

Table 8 provides data on two basic aspects of the policy environment: (1) the overall level of development of a country and its recent growth as reflected in GDP per capita and the growth rate, and (2) the ability of a country to achieve macrofinancial stability as reflected in the rate of inflation and changes in the foreign exchange rate. The level of a country’s economic development, especially its recent growth rate, reflects the overall performance of its economic policies.

Successful microenterprise finance programs exist in a variety of policy settings. Colombia, Costa Rica, and the Dominican Republic enjoy relatively high levels of economic development and reasonably good recent growth records, whereas Bolivia shows somewhat lower income levels and less consistent growth performance. Indonesia has achieved a moderate level of economic development based on good growth performance in recent years, but Bangladesh is among the poorest countries in the world, showing little growth. None of the African countries has achieved good growth performance in recent years, but Bangladesh is among the poorest countries in the world, showing little growth. None of the African countries has achieved good growth performance in recent years.

Among these countries there has been a variety of inflationary experiences. Both Indonesia and Bangladesh have managed to avoid serious inflation and major exchange rate changes, making pricing decisions there simpler for microfinance institutions.

Another relevant component of the policy environment is the extent of financial repression. The focus here is on a subset of policies—interest rate controls and directed credit programs—that might directly affect the outreach and viability of microenterprise finance institutions.

Several countries in the study (Bolivia, Costa Rica, the Dominican Republic, and Indonesia) have decontrolled interest rates; others have not. Both the Grameen Bank and K-REP face informal controls; they feel compelled to hold down interest rates although not officially subject to interest rate controls. Anxieties about possible Kenyan Government and donor reactions, and the possibility of negative reactions from microenterprise clients, kept K-REP from raising its rates. Bangladesh retains interest rate ceilings, and although the Grameen Bank operates under a waiver, it feels compelled to keep rates as near those ceilings as possible. Thus, financial repression may linger even after policies are officially reformed.

However, interest rate controls are not always a serious barrier. Many microenterprise finance institutions are not in the regulated part of the financial sector; among those that are, however, even law-abiding commercial banks have found myriad ways to charge whatever interest rates they wish.

Most countries still have some directed and subsidized credit programs. Although microenterprise finance institutions may complain about unfair competition, generally such programs do not constitute major threats, because, as is well documented, they rarely have strong outreach, particularly to the poor. Thus, frontier institutions in Bangladesh, Bolivia, Indonesia, and Kenya exist side by side with traditional directed credit programs and outperform them in both outreach and viability.

The adequacy of a country’s overall legal infrastructure—for example, in enforcing loan agreements—has been a largely unrecognized element in the success or failure of financial liberalization programs (see Wellons, Vogel, and Shipton 1994). Brief reflection also sug-
gests that the closer microenterprise lenders approximate formal financial institutions, the more important the legal infrastructure becomes for them, as informal techniques to promote loan payment give way to formal ones. In any case, the more the legal infrastructure promotes a free flow of information about borrower reliability (e.g., through facilitating the creation of credit bureaus), the greater the potential for all types of microenterprise lenders to attain viability.

In countries where severe financial repression has retarded development of the overall financial sector, the growth strategies of microenterprise finance institutions must be changed accordingly. In Bolivia and Colombia, with relatively active financial sectors, it is attractive for institutions to mature to the point where they can access financial markets for funding. However, in Bangladesh, and perhaps in Senegal and Niger, the formal financial sector has relatively little to offer. In such cases, institutions are well advised to adopt a strategy more independent of formal institutions. Interaction with the financial system is discussed in chapter 3.

In conclusion, the most important things government can do to support the growth of microfinance are (1) maintain low inflation, or at least stable inflation, and (2) allow programs to charge interest rates and fees needed to cover costs and accommodate inflation. Donors and governments should understand that microenterprise finance can operate successfully in a wide range of conditions (hyperinflation is probably an exception) and that the status of financial-sector development can affect the growth path of microfinance institutions.
Issues Facing Microenterprise Finance Programs

In the past several years, a major change has occurred in how microenterprise finance programs envision their institutional evolution. Virtually all of the more effective programs worldwide are accessing local (and sometimes international) financial markets directly or becoming formal financial intermediaries. Increasingly, fledgling programs have clear examples of the path open to them once they become more efficient. Prospects are strong for the bulk of programs, which operate well behind the frontier, to reach levels of performance like those reviewed here.

One of the major challenges in the microfinance field, both for organizations at the frontier and those behind it, is the need to expand outreach. Ultimately this implies achieving leverage or raising funds through private sector sources. The nonfrontier programs must mature to the point where they qualify to borrow commercially, whereas frontier programs are already making needed transformations, such as becoming deposit-taking intermediaries. This chapter discusses the transformation process, often going beyond analysis of data on the sample programs to explore implications for the future.

Reporting and Performance Standards

Accurate and appropriate financial information generated through monitoring and information systems strengthens management decision-making. It is essential for achieving efficient operations. Equally important is the ability to provide financial information, according to recognized standards, to donors, commercial lenders, depositors, and supervisory authorities. This determines whether an institution can gain access to sources of funds needed for expansion. Without such information, banks will not consider an institution creditworthy nor will regulators consider it sufficiently sound for deposit-taking. Good financial reporting is therefore essential for leverage and outreach.

Better reporting about outreach is also desirable. It reflects an institution's understanding of its clients, demonstrates effective monitoring of activities, and contributes to documenting the achievements of microfinance programs in general. The difficulties this study experienced in obtaining consistent informa-
tion across institutions demonstrate how far the microfinance field is from meeting this challenge, even among frontier programs. Donors have a special responsibility to ensure that institutions they support produce information that will contribute to viability. They must then base funding decisions on accurate information about institutional achievements. Donors have tended to require information of particular types not necessarily useful to internal managers or other commercial providers of funds. This must change. Donors and practitioners may now be at a point where greater agreement on standard reporting principles is possible.

**Standards for Financial Reporting**

For financial institutions, standards in reporting (generally accepted accounting principles, or GAAP) already exist, and standard tools of assessment are widely applied (e.g., CAMEL—capital adequacy, asset quality, management earnings, and liquidity). Microfinance programs should begin conforming to these principles as quickly as possible. The area of greatest weakness is measurement of portfolio quality: treatment of arrears, defaults, and loan loss provisions. Nonstandard reporting on portfolio quality can seriously distort any picture of financial viability. Donors should insist that recipients track delinquency to show the portions of the portfolio at risk (not just late payments), aging of arrears, timely write-offs, and annual provisioning. Given the interest in moving programs to higher levels of self-sufficiency, donors should also require detailed breakdowns of sources of funds and costs associated with those funds. Donors should also ask institutions to account for subsidies received and adjust for the effect of inflation on their balance sheets.

**Standards for Outreach Reporting**

For most institutions, reporting on outreach is based on stated goals and objectives. Given that institutions' goals differ widely, there is little consistency in indicators used by various institutions. This is not surprising. What is surprising is a general lack of information on outreach.

The most important outreach indicator is the number of active clients (that is, the number of people who owe money to the program). Surprisingly, some of the institutions studied were unable to supply that information. Many frequently reported indicators—number of loans disbursed or cumulative numbers of clients—are virtually worthless for evaluative and comparative purposes. However, the number of active borrowers, together with portfolio size, allows institutions to calculate average loan size, probably the second most important indicator of outreach. As noted above, the size distribution, not just the average, is needed for a more accurate picture.

Analogous measures are also required for savings: number of accounts, amount of savings on deposit, and average account balance. Beyond these simple indicators, little additional information should be required. More detailed information, such as employment or enterprise income, is best collected through periodic surveys rather than from routine management information. However, programs should develop stronger measures of client response, such as dropouts, delinquency, and market penetration.

**Achieving Operational Efficiency**

The study suggests that efficiency is within the reach of virtually any competent institution that sets out to provide microenterprise finance. All but one of the 11 organizations surveyed have achieved operational efficiency. They come from a variety of backgrounds, serve a range of clients, and operate under differing conditions, making it clear that the techniques involved in providing microenterprise finance are widely applicable and available. Further, they define what operational efficiency looks like: administrative costs in
the range of 10 to 21 percent of the loan portfolio (with the exception of ADOPEM’s 36 percent). These results constitute a challenge to all programs to reach operational efficiency within a reasonable time frame.

Although this study concentrates on successful programs, it does not suggest that becoming efficient is easy. Two steps are involved. The first is developing an effective service delivery methodology. The institutions reviewed use a range of techniques that can be built on in suitable settings. In every case, however, institutions must adopt those proven techniques to specific situations and clients through field testing and refinement. The second step in reaching efficiency is developing institutional competence in governance, organizational structure, information management, and staff development (see Rhyne and Rotblatt 1994) for further discussion of institutional competence). Once these steps are accomplished, institutions will be poised to enter a phase of significant growth and leverage.

What constitutes a reasonable time frame? The programs studied range in age from over 40 to just 3 years (see table 1). The youngest, BRK in Niger, is the only one that has not achieved operational self-sufficiency. Thus, a 3-year horizon may be somewhat short, at least in a start-up or experimental setting, such as CARE faces in Niger.

Some of the newer programs that have achieved efficiency quickly have long antecedents to draw on. For example, BancoSol and CorpoSol have built on the experiences of other ACCION affiliates that predate them, such as ADEMI in the Dominican Republic. Pioneering institutions like the Grameen Bank, which took many years to achieve its current national level of outreach, have by their experience shortened the time required for other institutions to develop. In other cases, new microfinance techniques have been adopted by institutions that already had matured using other methodologies (ACEP, BRI, K-REP). While the task of reconfiguring an institution’s basic methodology should not be underestimated, a preexisting institutional structure may shorten the time required to achieve self-sufficiency.

In determining expectations about achieving operational efficiency, a reasonable range for a new program appears to be 3 to 7 years, with longer time required only for experimental programs with few direct precursors. Programs that have existed longer than 7 years without covering all their operating costs out of revenues may be considered as lacking in either competence or the intent to become viable. When assessing programs that are seeking funding but have not yet attained operational efficiency, donors must select those that are clearly committed to and have concrete plans for reaching efficiency.

### Increasing Access to Financial Markets

Many microenterprise finance programs have begun to fund their lending portfolios through bank loans guaranteed initially by standby letters of credit, but eventually unsecured, as programs demonstrate their capacity to perform at high-quality levels. Some programs, given their success with local banks, are exploring the possibility of accessing local capital markets by issuing bonds and eventually “securitizing” their loan portfolios.

The advantage of such options is that they increase credit outreach dramatically without incurring administrative costs associated with mobilizing savings deposits. That many microfinance programs are moving in this direction is a highly positive development. Links to capital markets also provide an important quality-control mechanism. To the extent that an unregulated credit program finances its operations in local capital and credit markets, it subjects itself to market-based quality control by its creditors and investors. Creditors and investors—unlike most donors—require convincing, reliable financial statements in addition to cer-
tifications by auditors of portfolio quality demonstrated over a sustained period of time.

**Becoming Financial Institutions**

Most frontier programs wish not only to expand their outreach far beyond what is possible with limited donor funds, but also to provide more complete financial services to their clients. To do this, they must transform themselves from donor-driven programs into full-fledged financial intermediaries based on locally mobilized savings. This transformation will change virtually every aspect of the institutions involved.

Most programs analyzed here are either contemplating such a transformation or have recently been transformed. In Latin America, BancoSol in Bolivia grew out of a successful NGO, while CorpoSol in Colombia recently bought a finance company license and is transferring its financial operations to this new legal structure. FINCA in Costa Rica and ADOPEM in the Dominican Republic, although not fully engaged in institutional transformation, have long considered the possibility of capturing client savings on a large scale and have already accessed local bank loans.

In Africa, ACEP recently received authorization from the Government of Senegal to operate as a licensed financial institution (credit union). K-REP in Kenya is actively exploring options to create a financial intermediary. BRK in Niger still operates as a donor-dependent institution but intends to seek both self-sufficiency and the ability to act as a financial intermediary.

In Asia, all four programs are already financial intermediaries that can accept locally generated deposits from villagers as well as make loans. However, only LPD in Bali actually began as a deposit-driven institution. BKD in eastern Java started as a government credit scheme that incorporated savings to a lesser extent. Now, it is primarily funded from retained earnings and deposits. BRI and Grameen started as government-sponsored, donor-driven financial intermediaries. The Unit Desa system of BRI unsuccessfully channeled production loans until the mid-1980s, when it began a fundamental and highly successful transformation into the portion of BRI most driven by deposits. Grameen has steadily decreased its once total dependence on donor funds by increasing the amount of client deposits.

Three issues are important during this transition to deposit-based institutions: (1) transforming a credit-driven institutional culture to one that is deposit based, together with acquiring the financial skills necessary to manage the intermediation function; (2) addressing the issue of regulation and supervision; and (3) building an equity base for the newly transformed entities. The key to attaining the broad sector-level outreach envisioned by development practitioners is successful navigation of microenterprise finance programs through these issues.

Capital structure is an important challenge for specialized lending institutions seeking to transform themselves into formal financial intermediaries. Because they have often started with grants and soft loans, microenterprise finance programs are now well capitalized by normal standards for bank leveraging. That means for large microfinance programs in most countries obtaining sufficient capital is not an immediate constraint to becoming formal financial intermediaries.

That most microenterprise finance programs have been capitalized by donor agencies or other nonprofit sources severely limits subsequent capitalization by “owners.” This may possibly require programs to expand capital essentially through retained earnings. Some programs, particularly in Latin America and Indonesia, have been able to do so with remarkable success. However, the majority have not been willing or able to generate the profit levels necessary to achieve significant growth in capitalization beyond the limits of donor funding.
Thousands of nonfrontier programs have decided to favor their microenterprise clients with lower interest rates on the assumption that they are creating greater individual benefits for each microenterprise client served. In doing so, they have not realized the potential for far greater outreach possible through institutional capitalization and, eventually, transformation into leveraged financial intermediaries. For example, by subsidizing a few hundred poor people, they sacrifice the opportunity to serve tens or hundreds of thousands. Transformation is possible if programs charge higher interest rates, thus generating the surplus necessary for adequate capitalization.

Microenterprise finance programs that do not yet operate as leveraged financial intermediaries have often been limited in their potential to capitalize themselves through retained earnings. For example, the best performers among the low-leverage microenterprise finance programs analyzed have generated returns on equity of less than 10 percent per year—not nearly enough to support significant rates of growth.

As microenterprise finance programs transform themselves, most will need to incorporate investors who are willing to increase their equity participation as the institutions grow. To do so programs must demonstrate sustained high levels of financial performance and at least the potential for attractive returns to investors. The higher the rates of return eventually achieved, the easier it will be for programs to attract capital and expand their outreach.

It is not always optimal to become a bank. In Indonesia and Colombia, for example, monetary restraints on regulated banks forced a contraction in credit to microenterprise clients. However, in Colombia, CorpoSol, as an NGO, was able to continue expanding credit, while in Indonesia, the BRI, subject to monetary restrictions, experienced a difficult period it could do little to avoid.

Expanding Savings Services

Perhaps the greatest challenge of microenterprise finance is expanding savings services to the poor. Extensive research demonstrates that the poor save even in the absence of financial instruments (Gadway et al. 1991; Robinson 1992a, 1992b, 1994, 1995; Vogel 1984, 1990; Vogel and Burkett 1986a, 1986b) They must save if they are to meet inevitable cash demands generated by family emergencies, weddings and funerals, and cyclical expenses such as the start of the school year. Both Vogel’s and Robinson’s work show that poor clients will save through deposits at financial institutions if the instruments offered provide greater returns, security, and liquidity than do their traditional in-kind savings. BRI’s voluntary savings programs, for instance, have enabled it to serve a very large low-income clientele. Effective savings instruments can enhance financial management by poor clients and ultimately increase the productivity of their limited assets. Offering poor families effective mechanisms for financial savings can have greater potential outreach than does credit.

One of the major challenges for institutions in establishing effective savings programs is transforming the corporate culture and capabilities to support a new set of services. Equally important, it is necessary for governments to limit permission for capturing savings from the public only to those institutions meeting stringent management criteria.

Quality savings services for small-scale savers must incorporate four features Robinson and Vogel have identified as critical. The first is convenience of location. The second, the most straightforward but probably least important (to clients) of the four, is a positive real return. Since microenterprise finance programs can fairly readily pass on their costs of funds to borrowers, offering a competitive in-
interest rate to attract depositors is not difficult. However, in pricing savings services, institutions must take into account the high administrative costs of handling small deposits. Generally, it is sufficient for deposits to maintain their postinflation value.

The third critical feature for savers is liquidity. Unfortunately, liquidity management has been difficult for many specialized lending institutions to master. Lending-only institutions have often taken a rather lax attitude toward liquidity management. If an institution runs a little short of cash, disbursements are postponed a week or two with various excuses. Although such actions may diminish a lender's image, the effect on borrowers is nowhere near as serious as delayed payment to savers who come to withdraw their "demand" deposits. Delays in deposit withdrawals can easily lead to a run on deposits and destroy an institution's credibility.

Effective management of liquidity requires more sophisticated financial administration than that normally practiced by specialized lending institutions, including most of the programs examined here. Related practices include maturities matching, interest rate risk management, spread analysis, and service pricing. Such skills are not generally critical when the only function is loan portfolio management.

The fourth critical feature is demonstrating that the microfinance institution is a safe place to put savings. Prospective depositors are sometimes wary—with reason. In some countries, credit unions have had their credibility seriously damaged by failures in which depositors were not protected. Private finance companies have been involved in questionable activities in many countries, thereby discrediting a broad range of nonbank financial intermediaries.

To induce potential depositors to bring in their savings, microenterprise finance institutions often must change their images, and image change demands changes in staff attitudes.

Instead of viewing their fundamental task as financing poor microentrepreneurs, staff must understand that their fundamental role is first to be custodians for the savings of the poor, and second to be investors. Therefore, incentive systems geared to disbursing loans must be shifted toward generating deposits and administering funds safely.

Loan officers must be supplemented by staff whose job is seeking out new funds. In the LPD system, savings promoters actually outnumber credit officials. Institutions that have provided high-quality credit services in particular markets will be positioned to build on that reputation when undertaking the establishment of deposit services. Nevertheless, a reputation alone is not sufficient. The "message" of the institution must be changed, a difficult charge for an institution that has been successful at a different task.

Regulation and Supervision

Prudential regulation is essential for institutions that capture savings from the public. For microenterprise finance institutions, the issues are particularly complex, not only in establishing regulatory norms but also in deciding which agencies are capable of supervising them effectively. Advocates of microenterprise finance have been known to argue vigorously for flexible approaches to supervision that permit microenterprise finance institutions to accept deposits on terms much less stringent than those for commercial banks. This approach should be pursued with great caution and only after understanding clearly key differences in risk between traditional banks and microenterprise finance institutions.

No country in the world has significant practical experience in regulating and supervising intermediaries that engage primarily in microenterprise finance. An agency undertaking these functions will find limited empirical guidance and will need to translate from regul-
latory experiences with other types of financial institutions—commercial banks, credit unions.

Microenterprise finance differs from these other types of finance, however, in ways that can potentially make microenterprise finance institutions less stable. One concern is loan delinquencies. Loan delinquency at good microenterprise finance institutions tends, if anything, to be lower than delinquency at commercial banks. However, delinquency in microenterprise finance can be much more volatile, in part because of the absence of tangible guarantees and the short-term nature of most loans.

For a commercial bank that had been experiencing a reasonably low delinquency rate (say, below 2 percent), bad management might continue for an extended period before that rate would balloon to 30 percent. In contrast, in microenterprise finance programs, similar deterioration has been observed in a few months. However, the deposit base of an institution deriving its funding from voluntary savings, such as BRI, may be less volatile than that of commercial banks, which hold fewer larger deposits.

A second concern is defaults. Default by a recognized microenterprise finance institution might have more drastic consequences than default by a bank, especially for other microenterprise institutions. Banks are a familiar part of the financial landscape. Depositors realize banks may fail from time to time, but depositors rarely lose their savings in the long run and hence continue to use bank services despite an occasional failure. Depositors who use microenterprise finance intermediaries are likely to be new to such intermediaries, and to banking in general. A failure could lead depositors to desert microenterprise finance intermediaries.

A third concern is temporary insolvency. Most microenterprise finance institutions currently transforming themselves into financial intermediaries have only limited capacity to increase their capitalization levels should they find themselves fully leveraged and, simultaneously, incurring temporary operating losses. This danger exists despite the fact that most microenterprise finance institutions are heavily capitalized.

The important point, however, is that most of these institutions have been capitalized by donations from development agencies, not by private investors. As public bureaucracies or foundations, most donors are ill equipped to deal with such financial emergencies, even if they are inclined to do so. If a rescue is attempted, it is unlikely to be quick enough to prevent irreparable harm. Private investors are more likely to respond quickly when it is clear the emergency is short term and the institution is well managed. Still, donor agencies and NGOs, both local and international, have a continuing interest in the solvency of the institutions they support and may wish to act beforehand to prevent institutions from nearing insolvency.

A fourth concern is the limited capacity of financial regulatory agencies in most countries. For example, 5 years ago the Government of Indonesia introduced regulations allowing establishment of local rural banks with small capital investments. These banks have proliferated throughout Indonesia and are currently without effective supervision owing to the Central Bank’s minimal resources for regulation. In fact, a similar situation arose some years ago with the 5,345 BKDs that were licensed individually by the Central Bank. The Central Bank eventually turned its supervisory role over to BRI in return for a fee charged to the BKDs.

Inadequate regulation has handicapped the credit union movement in many countries. With large numbers of individual institutions, a major cause of recurring failures has been the inability to eliminate weak units from the system. Supervisory agencies rarely have resources to examine adequately all the commercial banks under their purview and are loath to expand their responsibilities to other types of intermediaries they neither understand
nor respect. Government agencies responsible for credit unions and credit union federations have been short on resources. Also, because the federations were originally established as promoters of credit unions, their institutional culture seldom supports the disciplined approach required of a supervisory entity. Moreover, because of the existence of agencies legally obligated to supervise them, individual credit unions have often neglected development of their own self-supervision, through adequate internal audit capabilities.

Despite the difficulties of regulating and supervising microenterprise finance institutions, it is likely they will be regulated and supervised eventually. In Bolivia, for example, a new legal definition is being established for nonbank financial intermediaries that wish to capture deposits. Although BancoSol has proved that microenterprise finance can be carried out under a regular commercial banking license, the minimum equity requirements for these bank licenses (about $5 million) are too high for some other promising microfinance programs that also wish to capture savings. Some of the guidelines being discussed for licensing in Bolivia are

- A significant minimum equity requirement, probably about $2 million. In Bolivia, this amount does not pose a substantial problem for the six most effective programs, and these six could cover most of the market once they reach their fully leveraged size.

- A track record of 3 years of successful operations (that is, maintenance of consistently low loan-delinquency rates and achievement of at least near financial self-sufficiency) and a detailed business plan demonstrating the feasibility of leveraging external funds, assuming full commercial costs for these funds.

- A gradual path toward leverage. Microenterprise finance intermediaries would not initially be allowed full “Basel”\textsuperscript{11} leverage (roughly 11 or 12 to 1). They would instead be restricted to about 5 to 1 for the first 2 years, with subsequent gradual increases toward the Basel limit based on the record and capacity of their owners to increase capital when required.

In some cases these requirements are stricter than those imposed on commercial banks, but in general, Bolivian authorities plan to regulate microenterprise finance intermediaries by the same reporting and prudential requirements imposed on commercial banks. Several other countries are currently considering special licensing for microenterprise finance intermediaries.

In any case, there are certain basic rules for regulation and supervision of deposit-taking institutions that must be applied to microenterprise finance institutions, albeit flexibly. Provision of timely, accurate, and pertinent information about the institution’s financial conditions must be available to all interested parties, along with penalties for failing to comply. Moreover, explicit or implicit insurance of deposits should be conditioned on adequate regulation and supervision. Beyond these basic rules, regulation and supervision of microenterprise finance institutions must be flexible enough not to impede what these institutions were designed to achieve—outreach to clients formerly excluded from adequate financial services.

\textsuperscript{11}International standards for capital adequacy, known as Basel standards, are established under the auspices of the Bank for International Settlements in Basel, Switzerland.
Findings and Recommendations to Donors

Findings

Outreach. Microenterprise finance institutions can—and those reviewed here do—achieve strong outreach along all three basic dimensions: depth (reaching the very poor), extent (significant scale), and service quality. Clients of these institutions are often mainly women. The geographic range of services is noteworthy, with successful institutions found in both urban and rural settings and across three continents. The extent to which these services are filling an important gap in poor communities is demonstrated by low rates of default among borrowers and rapid growth of demand, despite relatively high interest charges.

Operational efficiency. Ten of 11 institutions reviewed here have achieved operational efficiency; that is, they cover administrative expenses out of interest income and client fees. This finding leads to the generalization that operational efficiency can be achieved consistently in microenterprise finance in a range of settings and with a variety of clientele. The prerequisites to operational efficiency appear to include adaptation of an effective service delivery methodology and significant institutional competence in such areas as delinquency control, information management, and staff development.

Full self-sufficiency (profitability). Five institutions have achieved full self-sufficiency. Another is approaching this level. These programs generate a return on assets equivalent to returns expected in the private sector, without external subsidies. With only 5 of 11 programs passing this hurdle in only three countries, it is not yet possible to conclude that full profitability can be consistently achieved in all countries. However, given rapid progress in the field, it is likely that in a few years the ranks of self-sufficient programs will be significantly larger. The issue of the universality of the emerging model should be revisited in several years.

Keys to financial viability. Among institutions analyzed, all operationally efficient, only two variables were significant in determining how profitable the institution was: (1) higher real effective interest rates and (2) lower average salaries compared with per capita GDP. Both these factors are largely within the control of program managers. Thus, for efficient programs, achieving full financial viability depends on institutional commitment to this goal and willingness to control costs, set positive interest rates, and select appropriate personnel.

Factors not directly related to financial viability. Contrary to conventional wisdom, the study found that among already efficient organizations some variables are not strongly
correlated with financial self-sufficiency. The frontier organizations studied here have all found ways to overcome obstacles normally thought to inhibit financial viability. Among the factors studied:

1. Loan Size. There was no significant correlation between loan size and financial viability. Even among profitable institutions, the full range of loan sizes is represented, from programs serving only the very poor to those serving a mixture of very poor and moderately poor clients. Several programs demonstrate that it is possible to achieve financial viability while serving the very poor.

2. Geographic setting. Financially viable institutions with strong outreach were found in both urban and rural areas and in countries on different continents. Thus, the emerging model for microfinance appears to be widely applicable, if sensibly adapted to local circumstances.

3. Economic setting. Successful institutions have been developed in countries with a broad range of development and growth trends, including extremely poor countries and countries with stagnant economies. Programs can even tolerate significant inflation if the institution and general public are sufficiently experienced with inflation to have developed coping strategies. Nevertheless, economic growth and low, or at least stable, inflation make it easier for microenterprise finance institutions to flourish.

Shortcomings of microenterprise finance institutions. Two continuing shortcomings of high-performing institutions were identified in the study:

1. Absence of savings services. Despite the importance of voluntary savings services to low-income people, only the institutions in Indonesia were providing such services on a broad scale. Several others were planning savings programs or were in the process of implementing them, but few had put them into full operation. While absence of savings services is a serious gap in service delivery, it is not one that can be filled immediately. Rather, it must await development of new institutional skills and an appropriate regulatory framework for institutions capturing small savings.

2. Lack of adequate information. Few institutions reported financial and outreach data at a sufficiently high standard. Relevant data are essential for both informing internal management and convincing outsiders (donors, lenders, investors, depositors, regulators) of the soundness of an institution. Inability to provide such information will slow an institution’s development and limit its access to funding.

Recommendations

These findings suggest that microenterprise finance institutions with the right model for self-sufficient financing and effective outreach can grow to the point where they address the demand for financial services in poor communities around the world. With this in mind, donors should

1. Assess organizations’ commitment to achieving operational efficiency and ultimately full self-sufficiency within a reasonable period. If operational efficiency can be achieved in most parts of the world and in a range of geographic and economic settings, donors should have clear expectations that any microfinance program they support will reach operational efficiency in a reasonable time period. Management commitment should be visible in concrete targets and credible plans. Financial leverage should be a goal for all microenterprise finance programs supported, including those aimed at the very poor. Institutions can attain scale and leverage while including the very poor in their clientele.

2. Insist that organizations price their services at levels that support financial viability. In particular, programs must adjust interest rates to cover program administration costs and counteract the potentially erosive effects of inflation.
3. **Use performance standards in making funding decisions.** Donors should gain a clear understanding of the performance standards that organizations examined here have achieved. These standards also lead institutions toward the ability to gain access to funds from non-donor sources, thus leveraging donor inputs. Indicators of effective performance include operational efficiency, interest rate and fee policy, and reporting standards.

4. **Invest in institutions with the potential to reach full self-sufficiency and significant outreach.** Donors should stress support that fosters movement to greater financial self-sufficiency. In essence, donors should view themselves as underwriters of the commercialization of microenterprise finance in general, and as start-up investors in specific endeavors.

In considering whether support is warranted, donors need to take into account the time needed to achieve both operational and full self-sufficiency. Programs examined in this study typically required 5 to 10 years to become self-sufficient, often with substantial donor support.

5. **In the early phases of start-up, donors should concentrate on helping programs achieve operational efficiency, including establishing a lending methodology and operational strategy for service delivery.** At this stage, donors are often a key source of start-up capital. However, start-ups should be granted a short time frame, such as one project cycle. If efficiency is not achieved, donors should cease support.

6. **Donors looking at programs that have already achieved operational efficiency should target institutions committed to tapping other sources of funds, with concrete goals and plans.** They should place greater emphasis on improving both financial performance reporting, given the higher standards required by investors, and financial skills, such as spread management and asset and liability management. They should prompt the institutions to meet the legal requirements to become licensed financial intermediaries or to access other commercial funding sources and to mobilize savings to enhance institutional development.

Within a reasonable period, such as one project cycle, assisted institutions need to demonstrate sustained improvement in financial performance indicators.

7. **For top performing programs, donors should consider helping in the transition to full independence.** Donor attention will most likely center on and (a) mobilizing deposits, (b) providing support in identifying and securing equity investors, (c) increasing capitalization through retained earnings or equity investment, (d) enhancing supervisory standards for microenterprise finance and strengthening policy dialogue with the government regarding supervisory standards for microfinance.

8. **Donors should insist that supported organizations use accounting principles appropriate for private sector financial institutions to report on their performance.** These principles should be broadly consistent with international standards. Reporting should make subsidies transparent. Donors should not impose unique reporting standards and requirements but should aim to establish common practices that meet the needs of all potential investors and regulators. They should be prepared to offer technical assistance to organizations to develop the capacity for such reporting.

As more microenterprise finance programs vault the hurdles to operational efficiency and then full profitability with strategically applied external support, they can begin to reach millions of poor families with high-quality financial services. Enlarging opportunities for families to lead more secure, empowered, and healthy lives and provide their children with better economic opportunities is the ultimate purpose of microenterprise finance.
Appendix A: Methodology

To examine the current state of the art in microenterprise finance and the relationship between outreach and financial viability, analysts visited 11 of the best programs throughout the world, collecting data on outreach and financial performance for each program for the past 5 years.

The team had difficulty generating and standardizing the outreach and financial data from most of the individual programs. In most cases the data that were available had been prepared to suit primarily donor requirements rather than internal management needs. This was particularly true with outreach information. There was little consistency in the type and frequency of information gathered on outreach, making the generation of comparative tables difficult.

On the financial side, the information available from most programs was highly aggregated with little detail related to the nature of the accounting adjustments employed or the policies underlying key accounts, such as the loan-loss provision. In most cases, the team was able to gather this type of information on visits to the programs and adjust the audited financial statements.

Externally audited financial statements are frequently imprecise when describing the composition of certain fundamental accounts. Although auditors apply standard accounting principles in analyzing all programs, these principles do not include standard practices of inflation accounting, loan write-offs, and accrual versus cash systems. Although this level of standardization is usually imposed on regulated institutions by a country's bank examiners, NGOs are generally exempt from these requirements.

Constructing the Financial Statements

To make these adjustments, consultants reviewed the following information on their site visits:

- Audited financial statements with all accompanying notes and with clarification of key concepts, such as whether accounting is cash or accrual
- Detailed cost information, which provided a monthly or quarterly breakdown by principal accounts
- Portfolio quality tables showing the outstanding balances affected by delinquency, aged in some manner
- Bad-debt write-offs
- Bad-debt provisioning policies
- Institutional policies related to the creation of all other reserves and provisions
The first step in constructing comparative financial statements for each program was to express in a common set of accounts the information from the programs' audited statements. The following describes the common set of accounts and the concepts used for each:

**Balance sheet accounts**

**Cash on hand.** Cash on hand and in banks that does not, for practical purposes, earn income

**Deposits in banks.** Assets placed in income generating deposits in the financial sector. Special care was taken to note any particular conditions of these deposits: use as collateral guarantees, legal requirements, or reserves. Conceptually, it is important to distinguish between excess liquidity and assets of this type, which the institution is not free to lend directly.

**Loans to clients.** Assets that have been placed with clients and are not experiencing late-payment difficulties.

**Overdue loans.** Assets that have been placed with clients and are experiencing late-payment difficulties. The consultants used 90 days as the guideline for considering a loan payment late and classifying the outstanding loan balance as overdue whenever those data were available. When the criteria were different, the consultant made a special note.

**Loan-loss provision.** This account, expressed as a negative balance, should reflect the historical bad-debt experience and real-risk profile of the portfolio. If the program has not made this provision on analytically solid or consistent grounds, the consultant was asked to calculate what that provision should be by relating the historical write-off percent to the historical late payment record.

**Accounts receivable.** Other accounts receivable from employees, clients, or other sources. If loan payments had been made with postdated checks they were included here.

**Accrued interest.** Interest earned but not yet received. Interest accrued on loans overdue more than 90 days was subtracted from this account if programs had not already done so. This was not usually necessary as most programs do not use accrual accounting but rather cash-based accounting.

**Other current assets.** Any other unclassified current assets.

**Fixed assets.** Land, buildings, equipment. The consultants had to be careful to understand the basis for valuing these assets. They were to be presented revalued for inflation and depreciated for use. This value should not vary tremendously, in principle, from a generally understood market value. Given the time constraints and the relative unimportance of fixed assets in the balance sheets of these types of programs, this adjustment was frequently not done. This does not alter in any significant way the conclusions of the study.

**Demand deposits.** Demand deposits from clients (checking and passbook savings). These accounts were presented separately in the financial statements according to type. The consultant described each instrument in
accompanying notes, including interest rates paid, conditions for deposits (such as limited number of withdrawals, minimum balances), and client group to which the instrument is directed.

**Time deposits.** Time deposits from clients (such as CDs), described in notes in a fashion similar to the notes on demand deposits.

**Short-term loans.** Loans from other financial institutions were classified by type and described in notes detailing interest paid, conditions, and sources of these funds. Additionally, the portion of long-term loans due during the succeeding 12 months was frequently included here.

**Accounts payables.** Outstanding obligations with service providers and others.

**Other current liabilities.** Nonclassified liabilities of less than 12 months' duration.

**Long-term loans.** Loans from other financial institutions with terms longer than 12 months and conditions at or near market values. These loans were described in detail similar to the short-term loans.

**Concessionary funds.** Loans from financial or other institutions with conditions considerably more favorable than market values. These loans were described in detail.

**Other liabilities.** Nonclassified liabilities.

**Reserves.** Reserves should contain amounts for any exchange rate exposure, employee indemnization, and any other clearly identifiable and quantifiable risks other than general business risk. These reserves were identified separately, expensed through the profit-and-loss statement, and described in accompanying notes.

**Inflation adjustment.** The cost of inflation applied to equity account balances at the close of the prior annual period. This inflation adjustment was also reflected as an expense on the income statement.

**Subsidy adjustment.** The consultants were asked to estimate what the market price would be for funds that had reached the program at a significantly subsidized rate and to incorporate, both as expense and as a capital account, the difference between the estimated market price and the real financial costs paid by the program.

**Net profit.** Net profit from the current period.

**Accumulated earnings.** Accumulated net profits from prior periods.

**Paid in equity.** Original capital base plus additions to capital from sources other than net profits.

Profit-and-loss statements included at least the following accounts:

**Interest income.** Income generated by loans to clients on an accrued basis with overdue interest backed out after 90 days. In many cases the programs accounted for interest income on a cash basis and the consultants did not calculate the accrued interest. This was because most of these programs use weekly, biweekly, and monthly payments. The one-time addition to annual income from that portion of income not accounted for, therefore, is not particularly significant to the overall results.

**Fee income.** Income generated from fees charged to clients for services provided. When the fee income was for services other than loans, these services were described in notes. Fee income was to be separated between fees on savings services and those on loan services, but consultants were not usually able to do so.

**Investment income.** Income derived from deposits in financial institutions.

**Other income.** This account reflects income from donations or other nonoperational activities.

**Salaries.** All personnel-related expenses.

**Rent/depreciation.** Infrastructure costs.
Utilities. Electricity, gas, water, etc.

Administration. Materials, transport, fees paid, communications.

Public relations. Publicity, public relations.

Other operating expenses. Nonclassified operating expenses.

Financial costs. Interest and fees paid to financial institutions.

Loan-loss provision, other reserves. The expense counterpart of any of the reserves created to anticipate future expenses.

Inflation adjustment. The expense counterpart to the capital account where the cost of inflation in the capital accounts is registered.

Subsidy adjustment. The expense counterpart to the capital account, which represents what the institution would have had to pay had it financed its assets out of funds generated at market rates.

Other expenses. Nonclassified other expenses. Explained in a note.

Adjustments to the Financial Statements

The programs’ audited financial statements were adjusted to provide comparability for all programs. These adjustments had to be made because of the wide variability of the accounting practices that underlie the externally audited financial statements, the different methodologies used to reach significantly divergent target markets in countries with varying policy contexts, and the fact that most of the programs had received subsidies.

Consultants made three major adjustments to the programs' audited financial information to draw conclusions across the sample. All of the programs were treated as if they had been applying the same accounting policies throughout the past 5 years.

The first major area of adjustment was to ensure that programs were provisioning and writing off bad debt consistently. The criteria adopted for this study was that the loan portfolio on the balance sheet should reflect both the on-time and overdue loans. Overdue loans should accurately reflect the outstanding balance of loans with payments overdue more than 90 days. Overdue balances (more than 90 days) were not always available. Sometimes another definition was used, since this condition does not necessarily distort greatly the current portfolio situation if loan terms are very short.

Additionally, the balance sheet was to show a loan-loss provision that reflected the historical bad-debt experience and the current risk profile of the portfolio. Usually this provision is based on a separate off-the-books analysis. The team also tried to reconstruct the bad-debt write-off history as part of this exercise to check for consistency. The team used the rule that a loan that has been overdue for 360 days should be written off.

The second area of adjustment was to take into account the effect of inflation on programs. Programs that operate in highly inflationary environments and do not take this variable into consideration suffer severely as the value of their financial assets shrinks in real terms. This involved two different analyses:

1. Revaluation of assets. Nonmonetary assets were revalued to the extent of annual inflation and then depreciated. Liabilities denominated in foreign currencies were also revalued to the extent that the relative exchange rates changed.

2. Inflation adjustment of equity. Under the assumption that investors/donors should be entitled to maintain the real value of their investment over time, the cost of inflation was applied to the equity account balances that were maintained at the close of the prior annual period. To generate this value, the consultant multiplied the prior year's closing capital balance by the current year's inflation rate. This adjustment was reflected in a capital account.
called "inflation adjustment" and as an expense account on the income statement.

The third area of adjustment, undertaken only when necessary, was to account for the effect of subsidies—either direct through donation income or indirect through lower financial costs due to concessionary funding. The purpose of this was to put all programs on equal ground analytically, as if they were all operating with commercially available third-party funds. Actually, some programs do operate with exclusively commercial sources of funds while others operate with exclusively donated or concessionary funds. If programs operate exclusively with donated funds, then the cost of inflation on those funds was considered in the inflation adjustment already discussed, since these funds appear on the balance sheet as equity.

Concessionary loans to the program were treated with a different opportunity cost. It was thought that these funds should carry an interest rate equal to at least the short-term time-deposit rate paid in a local economy. This adjustment, called the "subsidy adjustment" in the individual program financial reports, was calculated as the amount the program would have had to pay for these funds had it gone into the local financial markets. It appears both as an expense in the profit-and-loss statement and as an accumulated capital account on the balance sheet.

None of these adjustments affect the overall totals for the balance sheets of the programs. Rather, they signify a rearrangement of the capital accounts. In effect, they generate a new account, one that reflects the increase in equity necessary to maintain the real value of the capital and compensate for the effect of subsidized cost for funds.

What does change dramatically as a result of these adjustments are the traditional measures of profitability. Normally such measures are supplied to the public in nominal, unadjusted terms. However, for this study they were expressed in real and adjusted terms. The net overall effect, of course, was to lower these profitability levels—in some cases, considerably. Nominal profits were lowered and became in essence profits in real terms under the assumption that the programs were to operate entirely as commercial enterprises.

This provided a much more realistic picture of exactly where programs were in terms of financial sustainability in a way that could be readily understood beyond the confines of the unique accounting principles favored by microfinance institutions and other nonprofit entities. The reader should note that this analytical device aids in the understanding of how close programs are to operating on a commercial basis, given the outreach goals.

Presentation of the Adjusted Financial Statements

Final adjustments made to the nominal local currency data, to facilitate drawing conclusions across the entire sample, were to express these results in constant 1993 local currency terms and, subsequently, to convert these into 1993 dollars. These adjustments did not affect profitability or any other key ratios. They influenced only year-to-year growth ratios, which instead of being expressed in nominal terms are expressed in real terms. The conversion to 1993 dollars affected no ratios. Neither nominal nor constant local currency values for prior periods were transformed on the basis of prior period exchange rates because of the distortions that frequently exist in local dollar markets and that alter the long-run relationship between the rate of currency devaluation and the inflation rate.
General Comments

In some cases, we were forced to make reasonable assumptions or classify accounts in somewhat less exact ways to fit them into the general framework necessary for the study to draw cross-program conclusions.

As a result, the financial statement data presented should be regarded as representative of the way different programs would look if the same criteria were applied across the board, especially with respect to loan losses and provisions and adjustments for the effects of inflation and concessionary sources of funds.

Readers should exercise caution when attempting to compare individual programs on the basis of the results presented here. The results represent financial performance for 1993 only. A review of each program would clearly indicate that these results change dramatically as a consequence of internal decisions regarding adjustments in salary levels, hiring of new staff prior to an important expansion phase, interest rate policy changes, institutional-type transformations, and other vital structural variables. Virtually none of these programs operates in a steady state of equilibrium; rather, all can be characterized by very high rates of growth. Thus it is important for the reader to focus on the collective outreach and financial performance of the group of institutions selected rather than make individual and inevitably not particularly accurate or significant comparisons between programs.

Additionally, these results represent the frontier of our current microfinance technology within widely differing cultural, economic, and demographic contexts. Results that appear to be better in one context (for example a higher rate of return on assets) may be non-replicable in a different context because of factors that make it more expensive to operate. All programs may face opportunities to improve both their outreach and financial performance, in effect moving their production possibility frontier outward.
Appendix B: 1993 Summary Data
<table>
<thead>
<tr>
<th>Country Data</th>
<th>BKDs</th>
<th>LPDs</th>
<th>Grameen</th>
<th>K-REP</th>
<th>BRK</th>
<th>ADOPEM</th>
<th>FINCA</th>
<th>CorpoSol</th>
<th>BRI</th>
<th>BancoSol</th>
<th>ACEP</th>
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<tbody>
<tr>
<td>Population (millions)</td>
<td>14.8</td>
<td>2.8</td>
<td>108.0</td>
<td>25.0</td>
<td>8.5</td>
<td>7.7</td>
<td>3.2</td>
<td>32.8</td>
<td>181.3</td>
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<td>7.9</td>
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<td>GNP per capita</td>
<td>610</td>
<td>610</td>
<td>210</td>
<td>340</td>
<td>163</td>
<td>940</td>
<td>1.898</td>
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<td>46</td>
<td>67</td>
<td>76</td>
<td>69</td>
<td>60</td>
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<td>Infant mortality/1,000</td>
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<td>74</td>
<td>103</td>
<td>67</td>
<td>126</td>
<td>54</td>
<td>14</td>
<td>23</td>
<td>74</td>
<td>83</td>
<td>81</td>
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<td>Inflation rate (%)</td>
<td>9.5</td>
<td>9.5</td>
<td>7.8</td>
<td>47.1</td>
<td>0.4</td>
<td>5.3</td>
<td>9.0</td>
<td>19.2</td>
<td>9.5</td>
<td>9.3</td>
<td>6.0</td>
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<td>GNP economic growth rate (%)</td>
<td>6.3</td>
<td>6.3</td>
<td>4.3</td>
<td>0.4</td>
<td>N/A</td>
<td>7.9</td>
<td>6.1</td>
<td>3.0</td>
<td>6.3</td>
<td>3.4</td>
<td>0.3</td>
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<td>Basic Institutional Profile</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<td>Institutional Type</td>
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<td>Spec Bank</td>
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<td>NGO</td>
<td>NGO</td>
<td>NGO</td>
<td>NGO</td>
<td>Bank</td>
<td>Bank</td>
<td>NGO</td>
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<td>Ownership</td>
<td>Municipal</td>
<td>Community</td>
<td>Gov./borrowers</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>State</td>
<td>Private</td>
<td>Private</td>
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<td>No. branch offices</td>
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<td>651</td>
<td>1,030</td>
<td>6</td>
<td>14</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>3,267</td>
<td>21</td>
<td>19</td>
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<tr>
<td>No. employees</td>
<td>16,035</td>
<td>4,913</td>
<td>10,452</td>
<td>60</td>
<td>34</td>
<td>47</td>
<td>19</td>
<td>355</td>
<td>16,067</td>
<td>335</td>
<td>31</td>
</tr>
<tr>
<td>Total assets (US$ millions)</td>
<td>62.6</td>
<td>25.6</td>
<td>238.7</td>
<td>1.9</td>
<td>1.6</td>
<td>1.8</td>
<td>1.7</td>
<td>15.7</td>
<td>2,228.7</td>
<td>34.1</td>
<td>1.1</td>
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<tr>
<td>Aver. annual growth total assets (%)</td>
<td>2</td>
<td>34</td>
<td>30</td>
<td>116</td>
<td>69</td>
<td>99</td>
<td>39</td>
<td>131</td>
<td>15</td>
<td>190</td>
<td>25</td>
</tr>
<tr>
<td>Women borrowers (%)</td>
<td>50</td>
<td>40</td>
<td>94</td>
<td>60</td>
<td>45</td>
<td>100</td>
<td>26</td>
<td>50</td>
<td>24</td>
<td>71</td>
<td>20</td>
</tr>
<tr>
<td>Profile/Credit Service</td>
<td>BKDs</td>
<td>LPDs</td>
<td>Grameen</td>
<td>K-REP</td>
<td>BRK</td>
<td>ADOPEM</td>
<td>FINCA</td>
<td>CorpoSol</td>
<td>BRI</td>
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<td>------------------------</td>
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<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Total value/all loans outstanding (US$ millions)</td>
<td>34.2</td>
<td>18.8</td>
<td>159.5</td>
<td>1.1</td>
<td>1.5</td>
<td>1.1</td>
<td>1.6</td>
<td>11.7</td>
<td>937.6</td>
<td>24.8</td>
<td>2.1</td>
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<td>No. loan clients</td>
<td>907,451</td>
<td>145,183</td>
<td>1,586,710</td>
<td>5,303</td>
<td>6,787</td>
<td>3,500</td>
<td>5,121</td>
<td>32,022</td>
<td>1,897,265</td>
<td>46,428</td>
<td>2,109</td>
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<tr>
<td>Average outstanding balance</td>
<td>38</td>
<td>130</td>
<td>101</td>
<td>217</td>
<td>221</td>
<td>308</td>
<td>310</td>
<td>366</td>
<td>494</td>
<td>535</td>
<td>1,016</td>
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<tr>
<td>Annual growth rate, loan portfolio (1992–93) (%)</td>
<td>N/A</td>
<td>25</td>
<td>35</td>
<td>213</td>
<td>65</td>
<td>92</td>
<td>36</td>
<td>134</td>
<td>8</td>
<td>182</td>
<td>41</td>
</tr>
<tr>
<td>Annual growth rate, loan clients (1990–93) (%)</td>
<td>18</td>
<td>32</td>
<td>23</td>
<td>107</td>
<td>N/A</td>
<td>N/A</td>
<td>57</td>
<td>78</td>
<td>0</td>
<td>47</td>
<td>N/A</td>
</tr>
<tr>
<td>Annual growth rate, average client balance (1992–93) (%)</td>
<td>11</td>
<td>9</td>
<td>18</td>
<td>42</td>
<td>N/A</td>
<td>N/A</td>
<td>14</td>
<td>80</td>
<td>5</td>
<td>65</td>
<td>N/A</td>
</tr>
<tr>
<td>Average loan term (yr)</td>
<td>4m</td>
<td>10m</td>
<td>12m</td>
<td>12m</td>
<td>10–13m</td>
<td>4–12m</td>
<td>12m</td>
<td>5–12m</td>
<td>24m</td>
<td>4–6m</td>
<td>12m</td>
</tr>
<tr>
<td>Effective rate/interest (%)</td>
<td>55</td>
<td>36</td>
<td>20</td>
<td>38</td>
<td>18</td>
<td>72</td>
<td>32</td>
<td>71</td>
<td>34</td>
<td>55</td>
<td>20</td>
</tr>
<tr>
<td>Effective real rate/interest (%)</td>
<td>46</td>
<td>27</td>
<td>12</td>
<td>-9</td>
<td>18</td>
<td>67</td>
<td>23</td>
<td>52</td>
<td>25</td>
<td>46</td>
<td>14</td>
</tr>
<tr>
<td>Loans w/payments late over 90 days (%)</td>
<td>10.3</td>
<td>3.9</td>
<td>2.0</td>
<td>2.3</td>
<td>20.0</td>
<td>4.0</td>
<td>1.7</td>
<td>1.3</td>
<td>6.5</td>
<td>1.5</td>
<td>3.0</td>
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<tr>
<td>Bad-loan write-off rate (%)</td>
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<td>N/A</td>
<td>1.5</td>
<td>N/A</td>
<td>4.0</td>
<td>1.2</td>
<td>N/A</td>
<td>N/A</td>
<td>4.0</td>
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<td>Credit methodology—solidarity groups (%)</td>
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<td>100</td>
<td>100</td>
<td>80</td>
<td>40</td>
<td>100</td>
<td>90</td>
<td>0</td>
<td>100</td>
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<td>Credit Methodology—individual loans (%)</td>
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<td>100</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>60</td>
<td>0</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>98</td>
</tr>
<tr>
<td>Average loan balance/GNP per capita (%)</td>
<td>6</td>
<td>8</td>
<td>48</td>
<td>64</td>
<td>136</td>
<td>33</td>
<td>16</td>
<td>24</td>
<td>81</td>
<td>82</td>
<td>135</td>
</tr>
</tbody>
</table>

*On basis of 1993 dollar-adjusted accounts.*
<table>
<thead>
<tr>
<th>Profile/Savings Service^</th>
<th>BKDs</th>
<th>LPDs</th>
<th>Grameen</th>
<th>K-REP</th>
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<th>ADOPEM</th>
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<th>CorpoSol</th>
<th>BRI</th>
<th>BancoSol</th>
<th>ACEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value savings deposits (US$ millions)</td>
<td>7.7</td>
<td>9.1</td>
<td>42.1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>1,852.3</td>
<td>3.1</td>
<td>N/A</td>
</tr>
<tr>
<td>No. voluntary savings clients</td>
<td>817,119</td>
<td>379,037</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11,325,282</td>
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<td>0</td>
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<tr>
<td>Average size savings deposit</td>
<td>9</td>
<td>24</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>164</td>
<td>N/A</td>
<td>N/A</td>
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<td>Annual growth rate savings deposits (%)</td>
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<td>34</td>
<td>18</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>28</td>
<td>69</td>
<td>N/A</td>
</tr>
<tr>
<td>CAMEL Analysis—Capital Adequacy^</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Leverage (total liability/total equity)</td>
<td>0.21</td>
<td>4.06</td>
<td>2.26</td>
<td>0.12</td>
<td>0.00</td>
<td>4.44</td>
<td>2.42</td>
<td>5.45</td>
<td>19.29</td>
<td>5.32</td>
<td>0.08</td>
</tr>
<tr>
<td>Equity as % of total assets</td>
<td>82</td>
<td>20</td>
<td>31</td>
<td>89</td>
<td>100</td>
<td>18</td>
<td>29</td>
<td>16</td>
<td>5</td>
<td>16</td>
<td>93</td>
</tr>
<tr>
<td>Total loans/total equity</td>
<td>0.66</td>
<td>3.70</td>
<td>2.18</td>
<td>0.66</td>
<td>0.95</td>
<td>3.26</td>
<td>3.18</td>
<td>4.82</td>
<td>8.31</td>
<td>4.60</td>
<td>0.75</td>
</tr>
<tr>
<td>CAMEL Analysis—Asset Quality^</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency/loans &gt; 90 Days Overdue (%)</td>
<td>10.3</td>
<td>3.9</td>
<td>2.0</td>
<td>2.3</td>
<td>20.0</td>
<td>4.0</td>
<td>1.7</td>
<td>1.3</td>
<td>6.5</td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Loan-loss write-off as % portfolio</td>
<td>2.0</td>
<td>0.0</td>
<td>1.5</td>
<td>N/A</td>
<td>4.0</td>
<td>1.2</td>
<td>N/A</td>
<td>N/A</td>
<td>4.0</td>
<td>N/A</td>
<td>2.1</td>
</tr>
<tr>
<td>Effective yield on loan portfolio (%)</td>
<td>37</td>
<td>36</td>
<td>20</td>
<td>22</td>
<td>9</td>
<td>49</td>
<td>24</td>
<td>50</td>
<td>28</td>
<td>45</td>
<td>27</td>
</tr>
</tbody>
</table>

^On basis of 1993 dollar-adjusted accounts. CAMEL = capital adequacy, asset quality, management, earnings, and liquidity.
<table>
<thead>
<tr>
<th>CAMEL Analysis—Staff Management and Performance</th>
<th>BKDs</th>
<th>LPD</th>
<th>Grameen</th>
<th>K-REP</th>
<th>BRK</th>
<th>ADOPEM</th>
<th>FINCA</th>
<th>Corpsol</th>
<th>BRI</th>
<th>BancoSol</th>
<th>ACEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of loans/total staff</td>
<td>57</td>
<td>30</td>
<td>152</td>
<td>88</td>
<td>200</td>
<td>74</td>
<td>270</td>
<td>90</td>
<td>118</td>
<td>139</td>
<td>68</td>
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<tr>
<td>Salaries/total admin expense (%)</td>
<td>69</td>
<td>65</td>
<td>64</td>
<td>68</td>
<td>69</td>
<td>48</td>
<td>65</td>
<td>75</td>
<td>53</td>
<td>60</td>
<td>55</td>
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<tr>
<td>Salaries/aver. portfolio (%)</td>
<td>11.5</td>
<td>6.6</td>
<td>9.3</td>
<td>12.9</td>
<td>10.1</td>
<td>16.8</td>
<td>8.7</td>
<td>16.2</td>
<td>4.5</td>
<td>12.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Salaries/average total assets (%)</td>
<td>6.3</td>
<td>5.0</td>
<td>6.1</td>
<td>6.9</td>
<td>9.7</td>
<td>10.2</td>
<td>8.2</td>
<td>12.0</td>
<td>1.9</td>
<td>9.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Average salary fieldworker</td>
<td>1,100</td>
<td>1,150</td>
<td>687</td>
<td>6,000</td>
<td>3,354</td>
<td>5,750</td>
<td>6,192</td>
<td>8,573</td>
<td>2,567</td>
<td>3,300</td>
<td>4,367</td>
</tr>
<tr>
<td>As multiple of GNP per capita</td>
<td>1.8</td>
<td>0.7</td>
<td>3.3</td>
<td>17.6</td>
<td>20.6</td>
<td>6.3</td>
<td>3.3</td>
<td>5.5</td>
<td>4.2</td>
<td>5.1</td>
<td>5.8</td>
</tr>
</tbody>
</table>

| CAMEL Analysis—Efficiency & Profitability*    |      |     |         |       |     |        |       |         |     |          |      |
| Operational self-sufficiency (%)             | 197  | 148 | 105     | 106   | 44  | 94     | 98    | 124     | 113 | 107      | 142  |
| Financial self-sufficiency (%)               | 118  | 137 | 79      | 38    | 43  | 89     | 75    | 104     | 110 | 103      | 100  |
| Adjusted return/average total assets (%)     | 3.2  | 7.4 | -3.3    | -18.5 | -11.5| -0.8   | -6.3  | 4.9     | 1.6 | 1.0      | 0.1  |
| Adjusted return/equity (%)                   | 3.8  | 32.7| -9.7    | -15.2 | -9.1 | -3.3   | -18.7 | 22.5    | 31.0 | 4.3      | 0.1  |
| Admin expense/average loan portfolio (%)     | 16.7 | 10.1| 14.5    | 19.0  | 14.8 | 35.1   | 13.4  | 21.5    | 8.5  | 21.0     | 19.1 |
| Admin. expense/average total assets (%)      | 9.2  | 7.7 | 9.5     | 10.1  | 14.1 | 21.3   | 12.5  | 16.0    | 3.6  | 15.4     | 12.5 |

| CAMEL Analysis—Liquidity*                    |      |     |         |       |     |        |       |         |     |          |      |
| Current ratio                                | 5.7  | 1.3 | 4.8     | 25.4  | 0.0 | 1.9    | N/A   | 4.8     | 1.0 | 1.1      | N/A  |
| Liquid/total assets (%)                      | 94   | 97  | 84      | 95    | 100 | 87     | 97    | 90      | 98  | 90       | 95   |

*On basis of 1993 dollar-adjusted accounts. b) Operating income/operating expense. c) Operating income/total adjusted cost.


nosis and Prescription for Peru,” Report for UNDP and the IDB: Carbondale, Ill.


