How Should Microfinance Institutions Best Fund Themselves?

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Foreword

The microfinance industry is well on its way to maturity. Only a few years ago, the focus was on how to grant and recover loans and reach sustainability. While these continue to be important concerns, today other issues have also come to the fore, such as the financing of microfinance institutions (MFIs). In their start-up phase, many MFIs depended on borrowings from donors and governments. Currently, however, deposits are their main source of funds, easily surpassing other funding options.

In examining this and related phenomena, the current study gathers together a large database on the funding side of Latin American MFIs, providing detailed coverage of 61 regulated MFIs in nine Latin American countries with major microfinance markets. Together, these 61 MFIs had US$ 1,899 million in total liabilities at the end of 2003, including deposits of US$ 1.24 billion (65 percent of total liabilities), borrowings (from governments, donors, banks, social investors, and others) of US$ 517 million (27 percent of liabilities) and bonds outstanding of US$ 33 million (1.7 percent of liabilities). In addition, the net worth of the 61 MFIs came to $376 million (20 percent of total liabilities, for a leverage ratio of 5:1).

After examining these and other important stylized facts associated with the funding of regulated MFIs, the study goes on to examine the relative costs of the four major funding sources: deposits, borrowings and stock and bond issue. As one important aspect of this analysis, it examines the operating costs associated with deposit mobilization, based on detailed costing studies of 10 Latin American MFIs (six of which are new studies and are undertaken for this analysis). Average annual operating costs are found to be relatively high for savings deposits (11.4 percent of the amount mobilized) but much lower for time deposits (2.4 percent), which helps explain why most of the deposits mobilized by MFIs consist of time deposits (74 percent of the total).

The study also examines rather comprehensively the other advantages and disadvantages of each of the four funding sources. It recommends a funding structure for both maturing and mature MFIs in both stable and unstable macroeconomic environments.

Finally, the study provides numerous best practice recommendations for using each of the four major funding sources. The recommendations are particularly detailed in the area of deposit mobilization, examining, for example, overall strategy, client segmentation, organization and management, strategies for competing and increasing market share, marketing, and controlling the major market risks (liquidity, term mismatch, interest rate and currency mismatch). The study ends with a series of suggestions for how donors and governments can best support the funding side of MFI operations.

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Abbreviations

AFP	Administrator of Private Pension Funds
ATM	Automated Teller Machine
CAF	Andean Development Corporation
CETE	Mexican treasury bill
CFC	Commercial Financing Company (a type of regulated financial institution in Colombia)
CGAP	Consultative Group to Assist the Poor
CIES	Consorcio de Investigación Económica y Social [Consortium for Economic and Social Research] (Peru)
CMAC	Municipal Savings & Loan (a type of regulated microfinance institution in Peru)
CNBV	National Securities Exchange and Banking Commission (Mexico)
COFIDE	Corporación Financiera de Desarrollo, S.A. (a second-tier institution in Peru)
CONASEV	National Supervisory Commission for Companies and Securities (Peru)
CRAC	Rural Savings & Loan (a type of regulated microfinance institution in Peru)
DIF	Deposit Insurance Fund
EDPYME	Institution for the Development of Micro and Small Enterprises (a type of regulated microfinance institution in Peru)
FC	Foreign currency
FEPCMAC	Peruvian Federation of Municipal Savings & Loans
FFP	Private Financial Fund (a type of regulated microfinance institution in Bolivia)
FIE	Fomento a Iniciativas Económicas (an MFI in Bolivia)
FONDESIF	Financial System Development Fund to Support the Productive Sector (a government institution supporting the microfinance sector in Bolivia)
FUNDA-PRO	Fundación para la Producción (a second-tier institution in Bolivia)
GTZ	German Technical Cooperation
IDB	Inter-American Development Bank
IEP	Instituto de Estudios Peruanos [Institute of Peruvian Studies]
IFC	International Finance Corporation
IFI	International Financial Institution
ITF	Financial transaction tax (Bolivia)
LC	Local currency
MFI	Microfinance institution
NAFIBO	Nacional Financiera Boliviana (a second-tier institution in Bolivia)
NGO	Nongovernmental organization
ROE	Return on equity
SA	Savings account
SBEF	Superintendency of Banks and Financial Institutions (in Bolivia)
SBS	Superintendency of Banking and Insurance (in Peru)
SOFOL	Limited purpose finance company (a type of regulated financial institution in Mexico)
TD	Time deposit
TIEE	Mexican equilibrium interbank interest rate
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WA	Workers' accounts: Payment for Time in Service (Peru)

Contents

Executive Summary

CURRENT TRENDS IN MFI FUNDING (CHAPTER 1)

In recent years, with the maturing of the microfinance industry in Latin America, large numbers of microfinance institutions (MFIs) have greatly increased their outreach and sustainability. Their capital structure has also been maturing and is progressively approaching the structure that predominates in banks.

While many MFIs initially depended on domestic and international borrowing, their main source of funds is now by far deposits. Thus, an important milestone in the funding of MFIs has been reached. This observation is based on the analysis of a database we have constructed covering 61 MFIs that specialize in microfinance and are subject to prudential regulation. These 61 MFIs are located in nine Latin American countries with major microfinance markets: Bolivia, Colombia, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Paraguay and Peru. At the end of 2003, the 61 MFIs had attracted US$ 1.24 billion in deposits, which represented 65 percent of their total liabilities. The deposit/loan ratio had reached 76 percent by the end of 2003, indicating that the amount of deposits was almost equal to the size of the loan portfolio. Thus, it is now fair to say that deposits are no longer the forgotten half of microfinance.

At the same time, borrowing has generally decreased in importance in the MFI capital structure. The issuance of bonds, while promising, continues to be little used. Although precise estimates are not available, issuing stock to add new shareholders is a mechanism rarely used by MFIs in Latin America. Instead, the capital base of the MFIs has been increased mostly by reinvesting a large share of the sizable profits that the MFIs have generated. (MFI profitability is examined in Chapter 3.) At the end of 2003, the 61 MFIs had US$ 517 million in borrowings (27 percent of their total liabilities of US$ 1.9 billion), US$ 32.9 million in bonds (1.7 percent of total liabilities) and US$ 376 million in equity (20 percent of total liabilities, for a leverage ratio of 5:1).

Peru and Bolivia have been clear leaders in attracting deposits: they have mobilized 78 percent of the total deposits captured by the 61 MFIs in the nine countries, or approximately US$ 964 million of the US$ 1.24 billion total. The Peruvian MFIs alone mobilized 62 percent of the nine country total (US$ 772 million), with the Bolivian MFIs mobilizing the remaining 16 percent (US$ 193 million). In terms of borrowing, total liabilities and equity, the dominance of the MFIs in these two countries is only slightly less, with 66, 73 and 71 percent, respectively, of the totals.

The 61 MFIs have attracted funds from the general public into time deposits (74 percent of their total deposits at the end of 2003), savings accounts (26 percent), and checking accounts, which have been little used to date (0.1 percent). Time deposits offer customers greater returns, and high MFI time deposit interest rates have enticed many bank clients to transfer their time deposits to MFIs. Time deposits are the most stable type of deposit, at least in the short run, and have the lowest operating costs, advantages that must be set against their greater financial cost and the depositors' sensitivity to the interest rates paid. Very few of the 61 MFIs are authorized to offer checking accounts. Those that do have such authorization give these accounts little priority due to their high operating costs, the powerful (and interconnected) information systems they require and the limited demand for this product by microentrepreneurs.

A closer examination of MFI depositors shows that: (i) MFIs have attracted a large number of depositors, thus expanding and diversifying their principal liability, (ii) the vast majority of clients are small depositors, who provide only a small share of total deposits, and (iii) both the intermediate and large size depositors provide substancial shares of total deposits.

CHARACTERISTICS OF THE FOUR TYPES OF FUNDING (CHAPTER 2)

This chapter explores in greater detail the four types of funding used by MFIs.

Deposits

MFI depositors are very heterogeneous. It is important to segment these clients and develop specific strategies for each group with respect to: the type of service they are offered, adaptation of existing products to the requirements of each group, creation of new products and growth objectives. It is important to segment clients by deposit size and also by such criteria as age and gender. It is useful for MFIs to analyze their own client databases in greater depth in order to more effectively orient marketing and cross-selling efforts. Most MFIs have not done this yet, in some cases because of limited databases, but in most cases because they have not recognized the importance of this work.

Banks and other MFIs usually constitute the principal competition for microfinance institutions in attracting savings. The main strengths of MFIs in capturing deposits are their relatively high interest rates, personalized and efficient service, an image of financial solidity, the fact that no commissions or account maintenance fees are normally charged, low minimum amounts for opening accounts, and the local roots of regionally-based MFIs. MFI weaknesses in mobilizing deposits include: the lack of national networks similar to those of banks, which facilitate payments and transfers; their relatively low net worth; the lack of automated teller machines (ATMs); and the limited range of services offered.

Attracting deposits creates additional operational risks and significantly affects the market risks that MFIs face: liquidity risk, term mismatch risk, interest rate risk and exchange rate risk. Deposit mobilization has important impacts on MFIs in generating and mitigating each of these risks.

Attracting deposits creates new challenges for MFI marketing activities since MFIs must compete in the market with all of the established intermediaries. A marketing department or unit is needed to plan advertising campaigns, analyze clients and client satisfaction levels, and plan and direct the use of communications media.

Borrowing

An analysis of MicroRate's database on the amount and composition of borrowing by 23 regulated MFIs in seven Latin American countries shows that at the end of 2003, the public sector was the single most important source, providing 47 percent of the funds lent to MFIs; donors held second place with 21 percent; local commercial banks and other internal sources were next with 18 percent; and last, international social investors and other external sources provided only 14 percent of total funding.

The importance of borrowing from public-sector institutions and donors is that it allows MFIs to enjoy interest rates and maturities that would be difficult to obtain from domestic or international commercial lenders. Borrowing from these former sources allows MFIs to reduce liquidity and term mismatch risks. At the same time, the interest rates charged by these sources are clearly positive in real terms and are trending up toward commercial rates. This avoids the creation of serious distortions in the financial system and at the same time prepares MFIs to increasingly access commercial financing.

Borrowing also affects the risks faced by MFIs in several ways. First, when MFIs have credit lines that have not been fully utilized, liquidity management is greatly facilitated since these funds can be mobilized quickly to deal with short-term difficulties. Second, exchange rate risk is normally increased, given that a substantial part of MFI borrowing is in foreign currency (FC), while most MFI loans are in local currency (LC). Third, interest rate risks are also increased, given that most MFI borrowing is at variable rates (especially borrowing from government second tier facilities, donors and social invest-

ors) and most MFI loans are at fixed rates. Finally, borrowing may increase concentration risk, by leading MFIs to depend on a small number of creditors.

Bond Issue

Of the Latin American MFIs, the only ones in recent years to issue bonds on a systematic basis have been Mibanco in Peru and Compartamos in Mexico. As a result, at the end of 2003, bonds represented only 1.7 percent of the total liabilities of the 61 Latin American MFIs.

The various Mibanco and Compartamos bond issues have several characteristics in common: terms primarily between 18 months and five years, all bonds issued in local currency, and the use of an investment bank with broad experience and an excellent reputation to facilitate placement. If the bond issue was aimed at institutional investors, the first issues used a credit enhancement to facilitate their sale.

Stock Issue

Stock issues by Latin American MFIs have essentially been limited to programs of reinvesting profits and the incorporation of new shareholders through the private placement of shares. A public offering of shares through the stock market has not yet been made. As underscored in Annex A, before beginning to look for new shareholders, an MFI should prepare a capitalization plan, that is, a medium-term strategy for funding the asset side of the MFI's balance sheet. There are three main scenarios for incorporating new MFI shareholders.

The first scenario is the option that has been selected by most nongovernmental organizations (NGOs) that have become regulated. The NGO retains control of the entity, but through a private placement, it invites donors and social investors to join as shareholders. This is a way to obtain additional capital resources, improve the MFI's image through the presence of highly creditworthy shareholders, and bring in technical assistance. At the same time, the NGO managers get an additional benefit since they maintain control of the MFI. The inclusion of private shareholders is normally deferred, although some MFIs have already begun to incorporate them.

The second scenario occurs in entities, such as the rural savings & loan institutions (CRACs) of Peru, in which the shares are primarily owned by private investors, rather than by an NGO. These private-sector investors may want to add donors or social investors as shareholders because of the advantages cited in the previous paragraph.

The third scenario involves privatizing MFIs that are owned by the public sector, for example, the municipal savings & loan institutions (CMACs) of Peru. But privatization processes are complex and often have unpredictable results.

FINANCIAL AND OPERATING COSTS OF THE DIFFERENT FUNDING SOURCES (CHAPTER 3)

This chapter examines the total costs of different MFI funding sources—including both their financial and operating costs—based on cost studies of 10 MFIs. The institutions examined cover a wide range of sizes and funding mixes, factors that influence their financial and operating costs.

These cost data show that capital is generally the most expensive funding source, while the cost ordering of the remaining sources varies according to the size of the MFI. This ranking, from lowest to highest cost, is given in the table below. The degree to which borrowing is subsidized is found to have substantial impact on whether deposit-taking or borrowing is cheaper for the MFI. This is particularly the case for the large MFIs, given that these institutions typically have achieved significant scale economies in attracting deposits. Thus, the cost ordering of funding sources given in the table below may be affected by changes that governments and donors make in their subsidy policies.

The MFIs examined here capture deposits through two basic products: savings accounts (SA) and time deposits (TD), in both local currency and dollars. Considering our sample of nine MFIs that offer both products, the average

total cost of savings accounts is 15 percent, versus 12.2 percent for time deposits. The operating costs for savings accounts are much higher than those for time deposits, averaging 11.4 and 2.4 percent per annum, respectively, of the average account balances. The interest rates paid on the deposits constitute the difference between total costs and operating costs, and equal 3.6 percent for savings accounts and 9.8 percent for time deposits. These costs demonstrate that for time deposits, the major cost component is the interest rate paid and not operating costs, while the reverse is true for savings accounts. In view of the high financial costs of time deposits, it is important to set their interest rates carefully: high enough to attract the needed funds, but otherwise at the lowest possible rates. Many MFIs still do not give this task the priority it deserves despite paying out substantial sums in time deposit interest. Their still-wide financial margins allow them to absorb without great difficulty the high interest rates that they currently pay on TDs.

Given the lower total cost of mobilizing time deposits compared to savings accounts, MFIs should generally give priority to the former. TDs have other advantages as well: they are easier to manage and are more stable and predictable in the short and medium term (until the TDs mature). TDs may well permit a better matching between assets and liabilities during this same time period (but not necessarily in the longer term, after the current TDs mature).

The great operating cost advantage of TDs is mainly due to the larger balances maintained in these accounts, which are on average nearly 20 times the size of savings accounts (US$ 7,396 compared to US$ 399). Surprisingly, the cost advantage of TDs is not primarily due to the fact that savings accounts have more transactions per acount than do time deposits (1.56 per month for savings accounts vs. 0.39 per month for time deposits). This last assertion can be deduced from the fact that at all MFIs monthly operating costs *per account* are higher for TDs than for SAs, averaging three times higher overall (US$ 12.40 per month for TDs vs. US$ 3.50 per month for SAs). It appears that this higher per-account cost for TDs is mainly the result of the service that larger clients receive from branch managers and other relatively high-ranking personnel. Even though savings accounts generate more monthly transactions per account, they are largely attended to by tellers and other personnel with much lower salary levels. For this reason, the costs per account are much lower for SAs than TDs.

Data from the 10 studies on the cost of mobilizing deposits show mixed results on the existence (or non-existence) of economies of scale. The 10 MFIs are ranked according to their total number of accounts (SAs + TDs), from 1,616 at Finamérica to 100,194 at CMAC Arequipa. The concept of economies of scale is that the larger MFIs (those with more accounts) can spread their overhead costs over a greater number of accounts.

A comparison of the two smallest MFIs with the two largest provides evidence in support of economies of scale. In the case of savings deposits, the two smallest MFIs have an average monthly unit cost (operating cost per account) of US$ 5.95, compared to US$ 3.20 for the two largest MFIs. With respect to time deposits, the average monthly unit cost for the two smallest MFIs is US$ 13.70, vs. US$ 4.40 for the two

Ranking of Funding Sources by Total Cost (from least to most expensive)

Large MFIs	Small and Medium-Size MFIs
1. Bonds	1. Borrowing
2. Deposits and borrowing	2. Deposits
3. Capital – shares	3. Capital – shares

Note: By definition, the large MFIs have more than US$ 50 million in deposits, the small MFIs have less than US$ 5 million, and the medium-size MFIs have between US$ 5 and 50 million. It is assumed that the small and most medium-size MFIs would not issue bonds since they would not meet the minimum volumes needed to undertake an issue and the capital markets would have little or no appetite for their paper.

largest MFIs. Clearly, there is evidence of economies of scale, given the significant drops in unit costs when comparing the smallest and largest MFIs.

The other six MFIs provide evidence against economies of scale. These six medium-size MFIs have the lowest average unit cost for savings deposits (US$ 2.20 per month) and the highest average unit cost for time deposits (US$ 14.57 per month), instead of having intermediate unit cost values in both cases. However, it may be difficult to detect economies of scale in data such as these, except between extreme cases such as the smallest and the largest MFIs. This is due to difficulties in assigning a number of important operating costs to each product and to differences in management efficiency among MFIs.

Microsavings, which consist of savings accounts with balances of less than US$ 100, account for 74 percent of the total number of savings accounts at small MFIs, and 76 percent at large ones. These small accounts provide only 2.5 percent and 3 percent of total savings deposits, respectively. They also generate 30 and 59 percent of total account transactions, respectively. As a result, annual operating costs exceed 200 percent of the amount deposited in microsavings accounts, leading us to conclude that microsavings generate extremely high operating costs for MFIs of all sizes. This means that clients with small balances are being subsidized by the rest.

In dealing with microsavings, MFIs have at least the following three options:

- *Subsidies for small savers.* This option is the most commonly used by Latin American microfinance institutions. MFIs justify subsidies for small savers by pointing out that serving these savers is part of the MFI's social mission, and that even small deposits offer economies of scope and other significant benefits. However, MFIs hardly ever estimate the cost of this subsidy or explore the possibilities for rationalizing it. It is possible that in the medium term growing competitive pressures in the microfinance marketplace will lead to a change in this orientation.

- *Adoption of a more selective policy toward serving microdepositors,* through a series of measures. These measures may include establishing higher minimum deposit sizes, paying interest on account balances only above a certain level, charging commissions for each transaction, and imposing monthly account fees.

- *Massifying the microdepositor client base,* in order to reach a critical mass that can be served more economically through technological and organizational innovations (including ATMs), as well as by offering a range of financial products to small savers—to both facilitate transactions and fully recover the costs generated.

THE BEST MIX OF FUNDING SOURCES (CHAPTER 4)

In the first chapter, it was established that deposit mobilization is by far the major source of funding for MFIs in Latin America. The total cost of the different funding sources was then examined in Chapter 3. It was found that for large MFIs, mobilizing deposits can be the most economical alternative, given that very few MFIs can issue bonds. For small MFIs, borrowing is generally the least cost source of funds. Mobilizing deposits has also made a new financial service available to large numbers of clients and allowed MFIs to move beyond their previous focus on microcredit. Deposit mobilization has reduced financial costs for many MFIs, greatly diversified their funding sources and facilitated substantial increases in leverage. The diversification of liabilities achieved through deposit mobilization has made funding more stable, as it no longer depends so heavily on the sometimes unpredictable decisions of governments and donors. The management of MFIs has thus become much more autonomous.

While deposits have displaced borrowing as the main source of liabilities for MFIs in Latin America, deposits and borrowing are generally complementary sources of funding. Because of

the longer terms of much of the borrowed funds, they help solve problems of term mismatch and facilitate medium-term financial planning. Only in situations of excess liquidity are deposits and borrowing substitutes instead of complements.

Even at small MFIs, the fact that borrowing can be done at lower cost than deposit mobilization should not lead these institutions to prioritize borrowing and de-emphasize deposit mobilization. That is because in choosing between these two funding sources, it is important to consider a number of other factors:

- The amount an MFI can borrow from each lender is typically restricted by loan limits these lenders place on the amount of credit they are willing to extend to any single borrower, including to MFIs.

- A significant amount of borrowing concentrates funding risks and may make the MFI overly reliant on governments and donors, which are the main sources of borrowed funds for the microfinance industry. As a result, liquidity management and the ability to do medium-term planning would typically be adversely impacted.

- Deposits greatly diversify an MFI's funding sources and thus offer much greater stability to its overall liabilities.

- Increasing the volume of deposits mobilized can help reduce their average operating costs since it is possible to spread fixed costs over a greater volume of funds and generate economies of scale.

- Finally, attracting deposits has other significant advantages, including: (i) knowing the clientele better by examining their deposit history, thereby reducing the cost of analyzng loan applications (economies of scope), (ii) achieving greater integration into the local and regional economies, which helps to build loyalty among the MFI's clients, (iii) supporting greater prudence in MFI governance and management since MFI executives are held accountable by local depositors who continually monitor the MFI's performance, and (iv) facilitating the development and/or cross-selling of other financial products—such as loans, money transfers, debit and credit cards and microinsurance—thus generating revenues that may be used to offset the operating costs of deposits, while also providing the client with better service.

For these reasons, then, the relationship between borrowing and deposits is more one of complementarity than of substitution. In the medium term, it is desirable for the most important source of funding to be deposits, supplemented by borrowing in order to lengthen the average maturity of the MFI's liabilities and reduce average funding costs. Subsequently, these two sources could be supplemented by access to the local capital markets, with the MFI issuing bonds.

The best mix of funding sources depends on the MFI's maturity level (how solidly sustainable the MFI is and how developed its deposit-taking and loan operations are) and the characteristics of the country where the MFI is located. These latter characteristics mainly include the country's macroeconomic and political stability, as well as the level of development of its financial and capital markets. Combining both criteria, we consider five scenarios, which are summarized in the table below.

	Characteristics of the MFI	
Characteristics of the Economic and Political Environment	**Maturing MFIs**	**Mature MFIs**
Stable in the medium term	Scenario 1	Scenario 4 eventually developing into Scenario 5 in the long term
Unstable	Scenario 2	Scenario 3

In Scenario 1, the MFI operates within a stable macroeconomic and political environment, which it expects to last over the medium term. It has achieved at least some level of sustainability, though it is not among the industry leaders. While the MFI is well along in developing its lending operations, its efforts at deposit mobilization are much more incipient. Some of the EDPYMEs in Peru are good examples of MFIs in scenario 1.

The best funding strategy in this case is to maximize the diversification of funding sources, supplementing the MFI's loans from second-tier facilities with borrowing from donors and other domestic and foreign lenders, provided that the costs are reasonable. MFIs that obtain authorization to mobilize deposits should undertake this task progressively. In the initial phase, they should give highest priority to time deposits because of their lower operating costs and limited requirements for information technology infrastructure and operating systems. Issuing bonds would typically be advisable only in the medium term, after the MFI has matured and its financial viability has been fully established. The MFI should progressively increase its leverage and expand its capital base through a consistent policy of reinvesting a large portion of profits and adding new shareholders through private placements, especially if these shareholders can provide technical assistance and facilitate access to funding.

In Scenario 2, the maturing MFI operates within an unstable macroeconomic/political environment. In this scenario, it is advisable for the MFI to reduce the terms of its loans, limit its currency and term mismatches, reduce its leverage and seek externally-borrowed funds, which are not so affected by domestic liquidity constraints. MFIs that obtain authorization to mobilize deposits should undertake this task with even more caution than the MFIs in scenario 1. The remaining aspects of the MFI's funding strategy are similar to those discussed in scenario 1.

In Scenario 3, the MFI is clearly sustainable and has efficient lending and deposit-taking operations. However, it operates in an unstable macroeconomic/political environment over the medium term. The MFI's funding strategy should include the following points:

- While deposits (including institutional deposits) should be used as the MFI's basic funding source, they should not represent more than 65-75 percent of total liabilities. The use of deposits should be limited because the unstable environment may result in: (i) important fluctuations over time in the availability of deposits (increasing liquidity and other risks for the MFI) and (ii) deposits being a less reliable source of funding growth, given the negative impact of instability on the growth of deposits.

- Borrowing operations should be strengthened and diversified as much as possible in order to improve term matching and prepare for potential liquidity problems created by the withdrawal of deposits.

- Typically, it would not be advisable to issue bonds in the local market due to the high interest rates and limited terms that accompany macroeconomic instability.

- The institution's leverage should be reduced because of the much greater risks inherent in an unstable economy. It would also be appropriate to strengthen the MFI's capital accounts through a consistent policy of reinvesting profits and by adding new shareholders through private placements. Foreign shareholders may be especially advantageous since they can make additional capital contributions without the constraints imposed by unstable local conditions.

In Scenario 4, the MFI shows clear sustainability and operates in a stable macroeconomic and political environment that is expected to last through the medium term. The following points should guide its funding strategy:

- The MFI should adopt deposits as its basic source of funding. Deposits may come to represent as much as 90 percent or more of the MFI's liabilities if the financial and op-

erating costs associated with deposit mobilization can be reduced sufficiently. At the same time, the MFI should seek to diversify its depositor base, limiting the share of total deposits provided by institutional clients—such as mutual funds, pension funds and insurance companies—in order to control the risks associated with large withdrawals.

- The MFI should also increase and diversify its borrowings and consider issuing bonds in order to: have available sufficient liquidity reserves, improve term matching, and be able to launch new products that require financing over the medium term. The MFI should choose between borrowing and bond issue considering the advantages of each source in terms of costs, terms and diversification. Some experts believe that bonds should not represent more than 15 percent of a deposit-mobilizing MFI's total liabilities. This limit would prevent the MFI from an overdependence on small and shallow capital markets, which could expose it to excessive refinancing risk.

- The MFI should boost its leverage to take advantage of the opportunities available in this environment. To support its growth, the MFI should also increase its capital through an active reinvestment policy, incorporation of new shareholders through private placements of new shares and, subsequently perhaps, through public offerings of shares.

Scenario 5 takes scenario 4 to a much higher level of development. Here, the MFI becomes very successful and diversified and has a substantial market share, all in the context of great macroeconomic stability. The MFI's funding base is highly diversified, with several kinds of deposits (including checking accounts). In many cases, total deposits exceed loans. Such institutions develop broad relationships with the capital markets, both placing and purchasing securities of various types based on their investment and funding needs. An example of this scenario is the Spanish savings banks in recent decades.

BEST PRACTICES (CHAPTER 5)

This section provides best practice recommendations for MFIs in the use of the different funding instruments. Guidance is also offered on actions MFIs can take to deal with economic crises and on how donors and governments can help MFIs to best develop the funding side of their balance sheet.

Deposits

In the area of deposit mobilization, MFIs should: (i) give priority to attracting time deposits because of their lower operating and total costs and their contribution to the matching of assets and liabilities, (ii) deal with the problem of microsavings, a problem that is created by serving a large number of clients with low balances, resulting in high MFI operating costs, and (iii) analyze their own depositor databases and segment the clientele. In the area of organization and management, the MFI should develop detailed annual deposit-mobilization plans and review them periodically, should set interest rates that are differentiated by region and client segment and should consider creating incentive pay schemes for personnel in the savings area. MFIs should attempt to increase their share of the deposit market through: efficient and personalized service, attractive and transparent rates and terms, convenient branch locations, efficient information systems with links to the branches, and effective marketing campaigns.

Deposit mobilization has important repercussions for the major market risks faced by MFIs, namely liquidity, term mismatch, interest rate and exchange rate risks. Best practices in managing these risks include setting up an asset-liability committee made up of the MFI's principal managers, and creating an annual management plan that includes a primary cash flow analysis that is updated at least monthly. The MFI should also use gap models, liquidity ratios and stress tests to help control these market risks. It should have contingency plans to deal with situations of impaired liquidity, as well as sufficient liquidity reserves. More sophisticated

MFIs may use duration analysis instead of gap models to control interest rate risk.

To minimize exchange rate risk, MFIs should make loans in local currency (LC) to clients that produce nontraded goods and make loans in foreign currency (FC) to clients that produce traded goods. The currency composition of the MFI's liabilities should then be matched to that of the resulting loan portfolio and other assets. Regarding this last condition, if there is an oversupply of deposits in FC, the MFI may stimulate deposits in LC with higher rates and better conditions, use deposits (and borrowed funds) in FC as collateral to obtain LC bank loans (back-to-back operations) and employ hedging transactions in the local swap markets.

In order to successfully attract deposits, an MFI must establish a marketing department that performs a number of functions, including carrying out marketing studies, both prior to the opening of new branches and for the MFI as a whole. This department should periodically undertake client satisfaction and service quality analyses and implement programs to maintain the loyalty of its best clients. It should also establish a clear and effective strategy for the use of the communications media and savings promotion personnel in helping to attract deposits. Finally, this department should carefully evaluate its own marketing campaigns, including the use of raffles to stimulate deposit mobilization, perhaps by means of cost/benefit analysis.

Borrowing

With respect to borrowing, MFIs should give priority to increasing the diversification of their sources, while simultaneously taking account of borrowing costs and of the need to avoid excessive dependency on the government's second-tier institutions. Foreign and second-tier borrowing should be used to lengthen the average term of the MFI's liabilities and bring greater stability to its funding. Local commercial bank borrowing should be used to deal with short-term liquidity needs and to convert deposits collected in FC into loanable funds in LC through back-to-back operations. Finally, MFIs should use as a liquidity reserve the portion of borrowings that have been approved but not drawn down—especially funds from second-tier institutions, donors and other foreign sources—all of whose correlations with the domestic liquidity cycle is low.

Bonds

The MFI should issue bonds only when it has clearly achieved sustainability and operates in a stable macroeconomic and political environment that is expected to last through the medium term. Generally, the first bonds should be issued for periods of 18 months to three years, so that the market can become familiar with the MFI and its risk profile. If the MFI seeks to attract institutional investors, it may be important to include a credit enhancement. This provides a partial guarantee of principal and serves to raise the bond's rating and facilitate its purchase. In any event, the MFI should obtain the services of an investment bank with a solid reputation and extensive relationships with potential purchasers. In order to diversify funding sources and avoid depending excessively on capital markets that often lack depth, some experts suggest that deposit-taking MFIs in Latin America should limit their bond funding to no more than 15 percent of their total liabilities.

Stock

It is important to define the role of profit reinvestment and new share issue within the framework of a medium-term strategic plan. The favorable aspects of these capital investments are that they provide the most stable funds available to a financial institution, that they absorb the greatest risks of any funding instrument and that they permit the MFI to leverage liabilities. Their unfavorable characteristics are the high cost of the capital attracted, owing to the risk premium demanded by capital investors, and the high cost of generating the information that must be provided to these investors.

MFIs that are considering adding new shareholders should thoroughly evaluate the different types of possible investors and the advantages and disadvantages of each. In addition to the general advantages and disadvantages noted in

the preceding paragraph, this evaluation should consider such positive aspects as the capacity of new shareholders to make additional capital contributions in the future, their potential contributions to the governance and management of the MFI, the possibility that they may improve the institution's credit rating and reputation, and the potential for new shareholders to facilitate access to technical assistance resources and credit lines. The MFI must also weigh the possible disadvantages of incorporating new shareholders, such as the fact that the investment horizons and profit expectations of the new investors may differ from those of the existing shareholders, possible discrepancies between the two groups in the definition of the institution's mission, and conflicts that may arise among shareholders due to these and other factors.

Economic Crises

During times of economic crisis, MFIs should increase primary and secondary reserves, reduce leverage ratios, update and reinforce contingency plans designed to mitigate liquidity risk, strengthen the functioning of the asset-liability committee, and reduce term and currency mismatches in view of the economy's greater volatility during crisis periods. The MFI should also review its plans and projections for deposit growth, modifying them to take account of current economic realities and adjusting deposit interest rates in line with the market. Finally, the MFI should adopt a more restrictive policy on loans, with lower growth rates, shorter terms and higher interest rates.

Role of Governments and Donors

Governments and donors should foster conditions favorable to the MFIs effectively developing their own funding strategies and, more generally, should promote an environment suitable to the development of the overall financial system. Experience also shows that it is inadvisable to favor MFIs with special treatment.

In order to support the MFIs in attracting savings, governments and donors should: (i) provide technical assistance to the MFIs to help them build their capacity to mobilize deposits, (ii) encourage MFIs that mobilize deposits to use borrowing only as a supplement to deposits, in order to avoid excessive dependence on public and international lenders and the displacement of deposits as the primary funding source and as an important financial service to be provided in its own right, (iii) support the development of a well designed deposit insurance fund once effective prudential supervision has been established, and (iv) encourage the progressive integration of the MFIs into domestic and foreign capital markets.

1. Current Trends in MFI Funding

OVERVIEW

Microfinance institutions (MFIs) face an array of options in their funding strategies. Should they rely on deposits as their basic source of funding and try to attain a funding structure similar to that of banks? What should be the role of borrowing? Should these institutions issue stock or bonds? To be able to make appropriate decisions on these matters, MFIs should consider the financial and operating costs of each funding source. They should also take account of other factors that are important in developing a medium-term funding strategy such as the risks associated with each source, the influence of the macroeconomic environment and the MFI's level of maturity. The purpose of this paper is to explore this set of problems for MFIs in Latin America.

The present study consists of five chapters and four annexes. Chapter 1 analyzes current funding trends for MFIs in Latin America, with particular attention to deposits. Chapter 2 examines the characteristics of the four major funding sources for MFIs: deposits, borrowing, bonds and stock. Chapter 3 quantifies and compares the financial and operating costs of each of the four major funding sources. Chapter 4 discusses the best funding mix for MFIs and Chapter 5 presents best practices. Four annexes provide a detailed guide on how to issue bonds and stock in Latin America (Annex A), data on trends in liability structure and capital for 61 regulated MFIs (Annex B), greater detail on borrowing for 23 MFIs (Annex C) and a description of the costing study data for six MFIs (Annex D).

INTRODUCTION

In the first half of the 1990s, MFIs in Latin America were mainly concerned with achieving sustainability. In particular, they aimed to implement an appropriate lending technology, which would yield them a high-quality microenterprise loan portfolio with returns capable of covering all costs.

By the mid 1990s, it was clear that the most advanced MFIs could achieve sustainability. This led to a debate on how to finance further MFI growth. Two opposing positions emerged:

- The classical view of MFI development held that mobilizing deposits should be the linchpin of MFI funding (for example, see Robinson, 1994). Thus it was proposed that MFIs should obtain most of their new funding by expanding deposits. In this way, MFIs would diversify their clientele and reduce the risks associated with reliance on just a few creditors. The historical experience of the industrial countries and Indonesia's experience with microfinance provide examples of this strategy.

- The financial systems approach held that MFIs should specialize in providing microcredit. MFIs would attract the funds they needed to grow by borrowing (see, for example, Schmidt and Zeitinger, 1994, pp. 3-4 and 102-5). This approach maintained that deposit mobilization should be carried out cautiously and progressively, given the high financial and operating costs of this funding alternative and the complications of providing good service to two large client groups, depositors and borrowers.

A decade after this debate began, the present study explores the state of MFI funding in order to analyze its main characteristics and trends in the context of the rapid growth of the microfinance industry in Latin America.

The first section of this chapter evaluates the importance of each of the four major funding sources for 61 regulated MFIs in nine Latin American countries with major microfinance markets during the period 2000-2003. The second section analyzes deposits in greater detail since it is the most important funding source. The final section examines the main factors that contributed to the successful mobilization of savings by MFIs in Latin America.

MFI FUNDING IN LATIN AMERICA

This study of MFI funding examines a sample of the leading MFIs in Latin America for the period 2000-2003. In particular, it analyzes the 61 MFIs that are subject to prudential regulation in nine countries with major microfinance markets: Bolivia, Colombia, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Paraguay and Peru. In addition, in selecting the 61 MFIs, only institutions with most of their operations in microfinance were included.[1] Thus, banks that have only a small part of their overall loan portfolio in microcredit were excluded since the funding structure of such banks is typical of that found in commercial banks, rather than that found in MFIs. Of the 61 MFIs analyzed here, 46 mobilize deposits; only Peru's 14 EDPYMEs and Mexico's Compartamos do not capture savings. The complete MFI funding database is found in Annex B.

The main stylized facts of MFI funding that emerge from these data are (see Tables 1 and 2):

- *Deposits are no longer the forgotten half of microfinance.*[2] Deposits represented 61 percent of liabilities in 2000 and 65 percent in 2003, and thus constitute the dominant funding source for MFIs. Total deposits increased from US$ 520 million to US$ 1.24 billion during the period, providing the majority of the funds required to finance the rapid growth of microcredit portfolios. The deposit/loan ratio fluctuated around 75 percent, indicating that the total amount of deposits was almost equal to the size of the loan portfolio. For this reason we say that deposits are no longer the forgotten half of microfinance.[3] The next section and Chapters 2 and 3 provide a more detailed analysis of the characteristics of MFI deposits.

- *Borrowing is still important but less so than in the past.* The relative importance of borrowing has fallen from 29 percent of total liabilities in 2000 to 27 percent in 2003. However, the amount of borrowing has actually increased in absolute terms, rising from US$ 245 million to US$ 517 million. Thus, borrowing is still the second most important funding source in terms of the amount of funds supplied to MFIs (less than deposits but greater than equity).

- *Bonds are still incipient.* Bond issues represent only a small share of overall MFI funding, with 1.7 percent of total MFI liabilities at the end of 2003. Only two MFIs have a significant amount of outstanding bond issues: Compartamos (Mexico, 29 percent of its total liabilities in 2003) and Mibanco (Peru, 13 percent of its total liabilities in 2003). Bonds outstanding increased from US$ 0.8 million at the end of 2000 to US$ 32.9 million at the end of 2003.

- *Equity and the issuance of shares.* Although precise estimates are unavailable, MFIs in Latin America rarely issue stock to add new shareholders. Instead, the capital base of the MFIs has been increased mostly by reinvesting a large portion of the sizable profits they have generated. (MFI profitability is examined in Chapter 3.) MFI capital increased from US$ 177 million in 2000 to US$ 376 million at the end of 2003. The latter figure is approximately 30 percent less than the amount the MFIs obtained by borrowing (US$ 517 million).

- *Constant leverage.* The leverage ratio (the ratio of total liabilities to equity) fluctuated in the narrow range from 4.8 to 5.2 in the 2000-2003 period. This constancy reflects two offsetting trends: the MFIs' growing capacity to take on and intermediate liabilities and the aforementioned trend of the MFIs reinvesting their substantial profits, which has kept this ratio from rising significantly.

[1] The Dominican Republic was not included in the sample owing to a lack of data. Chile and Guatemala also have significant microfinance markets but no regulated MFIs specializing in microfinance.

[2] See Vogel (1984) for a discussion of the "forgotten half."

[3] If the 15 MFIs that are not permitted to capture savings are excluded, the deposit/loan ratio is increased by approximately seven percentage points, fluctuating around 82 percent during the four-year period.

- *The predominance of Bolivia and especially Peru in funding.* These two countries lead the field in attracting deposits. In 2003, they captured 78 percent of the total deposits mobilized in the nine countries: US$ 964 million out of the total of US$ 1.24 billion. Peru mobilized 62 percent of the nine-country total (US$ 772 million) and Bolivia the remaining 16 percent (US$ 193 million). Peru and Bolivia were almost as dominant in other funding areas. Of the totals recorded for the nine countries, Peru and Bolivia had 66 percent of borrowing, 73 percent of overall liabilities and 71 percent of equity.

Comparison with the Banking System

Table 3 compares the liability structure of the MFIs in Bolivia and Peru with the liability structure of the banking systems in these two countries. The table illustrates that, in general, the MFI liability structure in both countries is moving toward the pattern seen in banks. This trend is characterized by a strong and growing deposit share and a declining reliance on borrowing. These two trends are clearly evident in both countries and are even more marked in Peru than Bolivia.

The structure of deposits is more diversified in banks than MFIs in the sense that banks can offer checking accounts in addition to savings accounts and time deposits, whereas MFIs generally can offer only savings accounts and time deposits. Even MFIs such as Bancosol and Mibanco, which are permitted to offer checking accounts, have done so to only a very limited

Table 1
MFI Funding Trends in Latin America, 2000-2003
(US$ millions, at end of year)

	Deposits				Borrowings				Liabilities				Capital			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
Bolivia	107.9	126.7	154.1	192.6	69.9	70.2	77.0	92.2	183.5	205.2	242.4	305.0	32.8	32.2	35.2	43.6
Colombia	9.7	13.7	15.7	18.1	10.0	10.5	8.4	12.6	21.6	27.2	25.7	32.9	8.4	8.4	8.1	9.2
Ecuador	44.6	76.5	106.3	129.1	10.8	20.4	36.2	47.5	61.0	101.4	150.6	184.2	9.5	11.0	15.8	23.5
El Salvador	0.0	14.9	22.8	35.3	0.0	13.6	19.2	34.2	0.0	29.7	48.9	71.6	0.0	7.9	8.5	13.7
Honduras	2.1	2.8	1.5	2.0	0.8	1.7	1.8	1.8	5.0	5.0	4.2	4.8	1.9	3.5	3.7	4.9
Mexico	0.0	0.0	0.6	0.8	0.0	18.1	33.3	46.6	0.0	23.1	54.9	74.8	0.0	11.2	22.3	35.0
Nicaragua	14.1	15.2	11.3	12.5	1.7	2.6	16.9	31.6	17.5	18.9	30.1	46.3	2.2	2.2	4.9	7.8
Paraguay	62.1	57.7	44.3	80.5	2.1	1.8	0.3	4.0	75.3	70.4	53.1	90.4	17.5	15.2	10.5	14.6
Peru	279.5	405.6	560.1	771.8	149.9	183.8	238.1	246.5	485.8	624.8	845.5	1,089.0	104.6	131.0	171.2	223.9
Total	**520.0**	**713.1**	**916.7**	**1,242.7**	**245.3**	**322.6**	**431.4**	**516.9**	**849.8**	**1,105.7**	**1,458.4**	**1,899.1**	**177.0**	**222.8**	**280.2**	**376.3**

Source: Superintendency of each country.

Table 2
MFI Funding Structure in Latin America, 2000-2003
(percent, at end of year)

	Deposits / Liabilities				Borrowings / Liabilities				Deposits / Loans				Liabilities / Equity			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
Bolivia	59%	62%	64%	63%	38%	34%	32%	30%	62%	67%	71%	70%	5.6	6.4	6.9	7.0
Colombia	45%	50%	61%	55%	46%	39%	33%	38%	38%	46%	58%	50%	2.6	3.2	3.2	3.6
Ecuador	73%	76%	71%	70%	18%	20%	24%	26%	123%	116%	101%	90%	6.4	9.2	9.5	7.8
El Salvador		50%	47%	49%		46%	39%	48%		50%	53%	54%		3.8	5.8	5.2
Honduras	41%	56%	36%	42%	16%	34%	44%	37%	39%	43%	23%	25%	2.6	1.4	1.1	1.0
Mexico		0%	1%	1%		79%	61%	62%		0%	1%	1%		2.1	2.5	2.1
Nicaragua	81%	80%	37%	27%	10%	14%	56%	68%	110%	117%	45%	29%	7.9	8.5	6.2	5.9
Paraguay	82%	82%	84%	89%	3%	3%	1%	4%	90%	93%	106%	112%	4.3	4.6	5.0	6.2
Peru	58%	65%	66%	71%	31%	29%	28%	23%	76%	83%	80%	84%	4.6	4.8	5.0	4.9
Total	**61%**	**64%**	**63%**	**65%**	**29%**	**29%**	**30%**	**27%**	**75%**	**78%**	**73%**	**76%**	**4.8**	**5.0**	**5.2**	**5.0**

Source: Superintendency of each country.

degree because of the complexity and cost of this product.

MFI DEPOSITS

Given that deposits are the primary source of funding for MFIs, we explore their structure in greater detail. At the end of 2003, the breakdown of total deposits by type at the 61 MFIs was: 6.7 percent negotiable certificates of deposit, 67.3 percent other time deposits, 25.8 percent savings accounts, and 0.1 percent checking accounts (Table 4).

As will be seen in Chapter 3, time deposits (TDs) have lower operating costs and in many cases lower total costs (operating costs plus financial costs) than savings accounts (SAs). Moreover, given that their maturities are preestablished, matching the maturities of TDs with those of the loan portfolio is less complicated than matching the maturities of SAs with those of the loan portfolio. Therefore, MFIs generally give priority to mobilizing TDs. In addition, the average size of a TD is generally much greater than that of an SA (almost 20 times greater for the 10 MFIs examined in Chapter 3). Thus, TDs are able to generate greater quantities of loanable funds.

Few of the 61 MFIs are permitted to offer checking accounts. Those that are authorized have minimal checking account operations because of the high operating costs associated with these accounts and the need for powerful information systems that are connected to all of their bran-

Table 3
Liability Structure of MFIs and the Banking System in Bolivia and Peru, 2000-2003

BOLIVIA

	Microfinance Institutions 1/				Banking System 2/			
	2000	2001	2002	2003	2000	2001	2002	2003
Bonds	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Deposits	**58.8%**	**61.7%**	**63.6%**	**63.1%**	**77.2%**	**78.6%**	**78.6%**	**81.1%**
Checking Accounts	1.0%	0.2%	0.2%	0.3%	14.6%	18.1%	20.6%	23.6%
Savings Accounts	7.6%	9.8%	14.0%	17.6%	15.6%	19.8%	18.2%	23.0%
Time Deposits	50.1%	51.7%	49.3%	45.3%	47.0%	40.7%	39.8%	34.5%
Borrowings	**38.1%**	**34.2%**	**31.8%**	**30.2%**	**18.0%**	**14.9%**	**15.3%**	**12.5%**
Other Liabilities	**3.1%**	**4.1%**	**4.7%**	**6.6%**	**4.8%**	**6.5%**	**6.2%**	**6.4%**
Total Liabilities	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

1/ The MFIs are Bancosol, Prodem, Caja Los Andes, FIE and Ecofuturo.
2/ The banking system excludes Bancosol.
Source: Superintendency of Bolivia (SBEF).

PERU

	Microfinance Institutions 1/				Banking System 2/			
	2000	2001	2002	2003	2000	2001	2002	2003
Bonds	**0.0%**	**0.0%**	**0.7%**	**1.3%**	**0.0%**	**3.1%**	**1.5%**	**1.9%**
Deposits	**57.5%**	**64.9%**	**66.0%**	**70.9%**	**69.1%**	**79.9%**	**83.9%**	**84.8%**
Checking Accounts	0.1%	0.1%	0.1%	0.1%	12.6%	14.1%	14.1%	15.9%
Savings Accounts	18.9%	19.5%	20.6%	20.3%	18.7%	20.5%	20.5%	20.8%
Time Deposits	38.5%	45.3%	45.3%	50.5%	37.8%	45.3%	49.3%	48.1%
Borrowings	**30.9%**	**29.4%**	**28.1%**	**22.6%**	**16.6%**	**6.5%**	**6.5%**	**6.7%**
Other Liabilities	**11.6%**	**5.7%**	**5.3%**	**5.2%**	**14.3%**	**8.0%**	**8.0%**	**6.5%**
Total Liabilities	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

1/ The MFIs consist of the CMACs, CRACs, EDPYMEs, Mibanco and Banco del Trabajo.
2/ The banking system excludes Mibanco and Banco del Trabajo.
Source: Superintendency of Peru (SBS).

Table 4
Deposits by Type at 61 MFIs
(US$ million, December 31, 2003)

MFI	Country	Total Deposits	Checking Accounts	Negotiable Certificates of Deposit	Savings Deposits	Other Time Deposits
Bancosol	Bolivia	69.9	0.1	0.0	20.6	49.2
Prodem	Bolivia	48.7	0.8	0.0	16.2	31.7
Caja Los Andes	Bolivia	47.0	0.0	0.0	10.2	36.8
FIE	Bolivia	19.9	0.0	0.0	5.4	14.5
Ecofuturo	Bolivia	7.1	0.0	0.0	1.2	5.8
TOTAL Bolivia		**192.6**	**0.9**	**0.0**	**53.6**	**138.0**
Finamérica	Colombia	12.8	0.0	12.8	0.0	0.0
Compartir	Colombia	5.3	0.0	5.2	0.0	0.0
TOTAL Colombia		**18.1**	**0.0**	**18.1**	**0.0**	**0.0**
Banco Solidario	Ecuador	126.6	0.0	0.0	27.4	99.2
Financiera Ecuatorial	Ecuador	2.5	0.0	0.0	0.0	2.5
TOTAL Ecuador		**129.1**	**0.0**	**0.0**	**27.4**	**101.7**
Financiera Calpiá	El Salvador	35.3	0.0	0.0	3.8	31.3
TOTAL El Salvador		**35.3**	**0.0**	**0.0**	**3.8**	**31.3**
Finsol	Honduras	2.0	0.0	0.0	0.0	2.0
TOTAL Honduras		**2.0**	**0.0**	**0.0**	**0.0**	**2.0**
Compartamos	Mexico	0.0	0.0	0.0	0.0	0.0
Fincomún	Mexico	0.8	0.0	0.0	0.8	0.0
TOTAL Mexico		**0.8**	**0.0**	**0.0**	**0.8**	**0.0**
Findesa	Nicaragua	0.4	0.0	0.0	0.3	0.1
Procredit (Confía)	Nicaragua	12.5	0.0	0.0	4.0	8.1
TOTAL Nicaragua		**12.9**	**0.0**	**0.0**	**4.3**	**8.2**
Visión	Paraguay	26.7	0.0	20.7	4.9	1.1
El Comercio Financiera	Paraguay	8.9	0.0	6.0	1.5	1.3
Financiera Familiar	Paraguay	26.8	0.0	23.8	1.7	1.2
Interfisa	Paraguay	18.2	0.0	15.1	2.2	0.8
TOTAL Paraguay		**80.5**	**0.0**	**65.7**	**10.4**	**4.5**
Banco del Trabajo	Peru	175.7	0.6	0.0	21.2	153.8
Mibanco	Peru	66.1	0.2	0.0	14.7	51.2
CMACs (14 MFIs)	Peru	439.0	0.0	0.0	144.0	294.8
CRACs (12 MFIs)	Peru	90.4	0.0	0.0	40.1	50.4
EDPYMEs (14 MFIs) 1/	Peru	0.6	0.0	0.0	0.6	0.0
TOTAL Peru		**771.8**	**0.9**	**0.0**	**220.7**	**550.2**
TOTAL 61 MFIs		**1,242.7**	**1.7**	**83.7**	**321.0**	**836.2**
% of Total Deposits (for the 61 MFIs)		**100%**	**0.1%**	**6.7%**	**25.8%**	**67.3%**

1/ EDPYME Edyficar has a small amount of deposits; they are legal, representing deposits of their employees.
Source: Superintendency of each country.

Table 5
MFI Deposits by Currency
(percent, December 31, 2003)

	Savings Deposits			Other Time Deposits			Negotiable Certificates of Deposit			Total Deposits		
Country	**LC**	**FC**	**Total**	**LC**	**FC**	**Total**	**LC**	**FC**	**Total**	**LC**	**FC**	**Total**
Paraguay	71.9	28.1	100	69.5	30.5	100	84.2	15.8	100	81.3	18.7	100
Peru	51.3	48.7	100	59.7	40.3	100				57.1	42.9	100
Nicaragua	14.4	85.6	100	5.5	94.5	100				8.4	91.6	100
Honduras				100	0	100				100	0	100

Note: Blank boxes indicate that the product is not offered by the MFIs.
LC: local currency.
FC: foreign currency.
Source: Superintendency of each country.

ches. Moreover, few microenterprises demand this product, and so it is not very important for the MFIs to offer it unless they are trying to serve a substantial number of small and medium-size businesses, many of which do require checking accounts.

The difference between negotiable certificates of deposit (CDs) and other time deposits is that the CDs can be sold to third parties while the other time deposits cannot. Issuance of negotiable CDs is important in only six of the 61 MFIs: two in Colombia (Finamérica and Compartir) and four finance companies in Paraguay. At the end of 2003, negotiable CDs represented 100 and 82 percent of the total deposits of these MFIs in Colombia and Paraguay, respectively. The emphasis placed on these products reflects the strategy of these six MFIs to attract institutional depositors and access capital markets through the sale of negotiable CDs, although they also sell a substantial part of their negotiable CDs directly to the general public.

Currency Mix of Deposits

The currency mix of deposits varies greatly with the country (Table 5). In countries such as Ecuador and El Salvador that have adopted the dollar, 100 percent of deposits are in foreign currency (FC). The situation in Nicaragua is similar, with FC deposits representing 91.6 percent of the total. Deposits in local currency (LC) take on greater importance at MFIs in Peru (57.1 percent of total deposits), Paraguay (81.3 percent) and Honduras (100 percent).

The Size Distribution of MFI Deposits

This section examines the size distribution of MFI deposits in Bolivia and Peru. These two countries are selected because the required data are available and because 78 percent of the total deposits mobilized by our sample of 61 MFIs are mobilized by the MFIs in these two countries.[4] The following observations and conclusions are derived from Table 6, and refer to the end of 2003:

First, the large number of deposit accounts is striking: 185,017 in Bolivia and 683,167 in Peru.

Second, in Bolivia, deposits under US$ 500 represented 85.8 percent of the accounts but contributed only 3.1 percent of the amount mobilized, with an average balance of US$ 43 per account. At the other extreme, accounts greater than US$ 100,000 represented only 0.2 percent of the accounts but yielded 34.9 percent of the amount mobilized, with an average balance of US$ 270,813. Another important segment is that

[4] Table 6 provides data for all five MFIs in Bolivia and for the CMACs and CRACs in Peru. Thus, for Peru, the table omits the EDPYMEs (which do not mobilize deposits), Banco del Trabajo and Mibanco (which mobilize one-third of all deposits collected by the Peruvian MFIs).

between US$ 10,001 and US$ 100,000, which represented only 1.3 percent of the accounts but provided 37 percent of the funds mobilized, with an average balance of US$ 34,343. Finally, the deposits between US$ 501 and US$ 10,000 represented 12.8 percent of the accounts and 25 percent of the total amount mobilized, with an average balance of US$ 2,312.

Table 6
Size Distribution of Savings Deposits and Time Deposits
(December 31, 2003)

	TOTAL MFIs in Bolivia				
Segment	**Number of Accounts**	**%**	**Balance (US$ 000)**	**%**	**Average Deposit (US$)**
Less than or equal to US$500	158,657	85.8%	6,823	3.1%	43
US$ 501 to US$ 1,000	8,294	4.5%	5,903	2.7%	712
US$ 1,001 to US$ 5,000	12,820	6.9%	29,903	13.6%	2,333
US$ 5,001 to US$ 10,000	2,602	1.4%	19,019	8.7%	7,309
US$ 10,001 to US$ 30,000	1,507	0.8%	26,296	12.0%	17,449
US$ 30,001 to US$ 50,000	466	0.3%	20,294	9.3%	43,549
US$ 50,001 to US$ 100,000	388	0.2%	34,494	15.7%	88,902
Over US$ 100,000	283	0.2%	76,640	34.9%	270,813
Total	**185,017**	**100.0%**	**219,372**	**100.0%**	**1,186**

Source: Superintendency of Bolivia (SBEF).

	TOTAL CMACs and CRACs in Peru				
Segment	**Number of Accounts**	**%**	**Balance (US$ 000)**	**%**	**Average Deposit (US$)**
Less than or equal to US$ 1,973	637,532	93.3%	111,349	21.4%	175
US$ 1,973 to US$ 4,933	27,845	4.1%	83,450	16.0%	2,997
US$ 4,933 to US$ 9,867	9,957	1.5%	66,614	12.8%	6,690
US$ 9,867 to US$ 19,733	5,079	0.7%	68,715	13.2%	13,529
US$ 19,733 to US$ 78,933	2,330	0.3%	76,974	14.8%	33,036
Over US$ 78,933	424	0.1%	114,290	21.9%	269,552
Total	**683,167**	**100.0%**	**521,392**	**100.0%**	**763**

Source: Superintendency of Peru (SBS).

	TOTAL Banking System in Peru				
Segment	**Number of Accounts**	**%**	**Balance (US$ 000)**	**%**	**Average Deposit (US$)**
Less than or equal to US$ 1,973	5,093,638	88.5%	842,543	6.4%	165
US$ 1,973 to US$ 4,933	320,848	5.6%	981,165	7.4%	3,058
US$ 4,933 to US$ 9,867	172,499	3.0%	1,137,984	8.6%	6,597
US$ 9,867 to US$ 19,733	100,126	1.7%	1,345,488	10.2%	13,438
US$ 19,733 to US$ 78,933	57,626	1.0%	1,971,696	14.9%	34,215
Over US$ 78,933	11,987	0.2%	6,921,256	52.4%	577,397
Total	**5,756,724**	**100.0%**	**13,200,132**	**100.0%**	**2,293**

Source: Superintendency of Peru (SBS).

Third, MFI deposits in Peru are also heavily concentrated, with most of the accounts small but most of the mobilized deposits coming from larger accounts. Deposits less than US$ 1,973 represented 93.3 percent of total accounts but contributed only 21.4 percent of the total amount mobilized, with an average balance of US$ 175. By contrast, major depositors, with balances over US$ 78,933, represented only 0.1 percent of total accounts but contributed 21.9 percent of total deposits, with an average balance of US$ 269,552. Finally, the intermediate segment between US$ 1,973 and US$ 19,733 is also quite important, with 6.3 percent of the accounts and 42.0 percent of total deposits.

Fourth, comparing the size distribution of deposits at MFIs versus banks in Peru, deposits are even more concentrated at banks than at MFIs. For example, clients in the highest stratum (over US$ 78,933) provided 52 percent of the total amount mobilized at the banks and only 22 percent at the MFIs. The greater deposit concentration at banks is likely due to the banks' ability to attract more high-income and institutional depositors, which, in turn, is due to the fact that these clients require banking services that MFIs are not permitted to offer.

The main conclusions derived from the preceding analysis are:

- In these two countries, in which the microfinance sector is relatively mature, MFIs have attracted a large number of depositors. Thus, they have provided a valuable service to many thousands of their clients and greatly diversified their liabilities.

- There is marked heterogeneity among depositors in the two countries. Most of the savers are small and contribute only a tiny fraction of the total funds mobilized. An exploration of the operating costs of serving this group is undertaken in Chapter 3.

- The intermediate- and large-size savers are important client segments in both countries. Although most MFI lending consists of loans to low-income clients, most of the savings comes from the intermediate- and large-size savers.

- In Peru, deposits are even more concentrated at banks than at MFIs.

FACTORS BEHIND SUCCESSFUL DEPOSIT MOBILIZATION

The recent success of MFIs in mobilizing savings in Latin America can be attributed to several factors.[5] First, the favorable influence of macroeconomic stability and financial reform are key, since they have made it possible to remunerate deposits with interest rates that are positive in real terms. Second, MFIs are inspiring greater confidence in savers in recent years because these institutions have significantly strengthened their balance sheets and operations. In addition, in some countries such as Peru, MFIs are backed by a deposit insurance fund, which has substantially reduced depositor risk. Third, MFIs generally pay higher deposit rates than banks. MFIs can do this because of the high interest rates they charge on their loans. Fourth, MFIs provide good service to depositors by keeping wait times short, avoiding or minimizing fees, and maintaining low minimum deposit sizes. Finally, many MFIs hold raffles with valuable prizes to attract depositors.

[5] For a more in-depth analysis of this issue in the specific case of Peru, see Portocarrero and Byrne Labarthe (2002).

2. Characteristics of the Four Types of Funding

This chapter explores the four types of funding instruments available to microfinance institutions (MFIs). The first section examines several aspects of MFI deposit mobilization, including products offered, client segmentation, organization and management, competition, risks and marketing. The second section explores MFI borrowing, examining the characteristics of different borrowing sources and the impact of borrowing on MFI risk management. The third and fourth sections analyze the limited MFI experience in issuing bonds and stock, respectively.

DEPOSITS

MFI Deposit Products and Clients

In general, Latin American MFIs that capture savings from the general public use savings accounts (SAs) and time deposits (TDs) as their main deposit products. At the end of 2003, the breakdown of total deposits for the 61 MFIs we have surveyed was: SAs 26 percent, TDs 74 percent, and checking accounts 0.1 percent.

Savings accounts are interest bearing deposits that lack any preset term and that generally permit savers to make deposit and withdrawal transactions at will. Because of these features, savers often use SAs as a liquidity reserve and generally value their liquidity, security, ease of access and low maintenance cost more than the interest rate they pay. SAs are often employed as transaction accounts (in lieu of a checking account), with limited average balances.

Time deposits are interest bearing deposits that have a preset term and often charge a penalty for withdrawals prior to maturity. TDs are of two types: those that can be sold to third parties (negotiable certificates of deposit) and those that cannot. Clients use TDs to earn high returns on excess liquidity that can be committed for the term of the time deposit. The interest rate paid on the TD is a key factor in determining whether savers will purchase this product.

Number of Accounts and Average Size

To compare the two main deposit instruments, SAs and TDs, it is useful to focus on Bolivia, which has disaggregated data on the number of accounts. Table 7 shows that total deposits mobilized by the five regulated MFIs in Bolivia as of June 30, 2004 was US$ 212 million, of which SAs comprised 20 percent and TDs 80 percent. However, savings accounts represented 94 percent of the total number of accounts (and carried an average balance of US$ 210), while time deposits represented only 6 percent of the total number of accounts (and carried an average balance of US$ 12,056). The heterogeneity of the savers is striking. A limited group of institutional investors and middle- and upper-income households provide the bulk of the funds mobilized, primarily through time deposits, while the vast majority of savers provide only a limited share of the funds.[6]

Distribution of Time Deposits by Maturity

Table 8 shows the distribution of time deposits by maturity for the case of CMAC Arequipa in Peru. The CMAC Arequipa data reflect the general trend in Peru toward lengthening TD terms. In the case of CMAC Arequipa, there are significant differences in the extent of this phenomenon depending on the currency. CMAC Arequipa has achieved a lengthening of deposit terms particularly in local currency (LC) time deposits by following a conscious policy of offering higher rates for such deposits. As a result, 30 percent of their LC time deposits have terms

[6] Also see Table 6 in Chapter 1 and the related discussion for more evidence on this phenomenon based on the same five MFIs in Bolivia and 26 MFIs in Peru.

Table 7
Deposits in the Five Regulated MFIs of Bolivia [1/]
(June 2004)

	Balance (US$ million)	%	Number of Accounts	%	Average Balance US$)
Savings Accounts	43.1	20%	205,026	94%	210
Time Deposits	168.9	80%	14,009	6%	12,056
Total	212.0	100%	219,035	100%	968

1/ The five MFIs are Bancosol, Prodem, Caja Los Andes, FIE and Ecofuturo. Given that the data are from June 2004, they do not agree with the data in Annex B, which refer to December 2000-2003.
Source: Superintendency of Bolivia (SBEF).

Table 8
Range of Time Deposit Terms at CMAC Arequipa
(June 2004)

Range of Terms (days)	Time Deposits in Local Currency					
	Number of Accounts	%	Balance (US$)	%	Average Balance (US$)	Average Rate (%)
From 0 to 180 days	2,084	45%	5,917,927	22%	2,840	9.9
From 181 to 360 days	1,632	35%	8,756,981	32%	5,366	8.7
From 361 to 720 days	573	12%	4,636,574	17%	8,092	11.4
More than 720 days	310	7%	8,166,249	30%	26,343	13.6
Total	**4,599**	**100%**	**27,477,731**	**100%**	**5,975**	**10.0**

Range of Terms (days)	Time Deposits in Foreign Currency					
	Number of Accounts	%	Balance (US$)	%	Average Balance (US$)	Average Rate (%)
From 0 to 180 days	3,428	59%	11,356,284	45%	3,313	4.7
From 181 to 360 days	1,856	32%	8,343,601	33%	4,495	4.4
From 361 to 720 days	449	8%	3,796,939	15%	8,456	4.7
More than 720 days	77	1%	1,478,395	6%	19,200	5.4
Total	**5,810**	**100%**	**24,975,219**	**100%**	**4,299**	**4.7**

Source: CMAC Arequipa.

of over 720 days and 17 percent of LC time deposits have terms of 361-720 days. The interest rates paid increase from 9.9 percent per annum for LC time deposits with terms less than or equal to 180 days up to 13.6 percent for LC time deposits with terms over 720 days. Also important to note is the fact that the average size of the over-720-day LC time deposits is US$ 26,343, compared to an overall average size of US$ 5,975 for all LC time deposits. These data reflect CMAC Arequipa's promotional efforts to attract middle- and high-income clients and persuade them to lengthen the terms of their LC time deposits.[7] Peru's macroeconomic stability and appreciating exchange rate in recent years have also helped CMAC Arequipa to attract such deposits.

[7] These clients have significant assets and thus may more easily allocate a portion of these assets to medium-term investments such as time deposits for terms over two years. However, they will do this only if the TD yields are high enough to compensate them for the liquidity they have sacrificed.

Time deposits in foreign currency (FC) present a rather different situation, with the preponderance of these funds having shorter maturities: 45 percent of these funds have terms of up to 180 days and 33 percent have terms of 181-360 days. This reflects CMAC Arequipa's much lower level of interest in lengthening the terms of its FC time deposits. This, in turn, stems from the fact that CMAC Arequipa has an abundance of medium-term credit lines in dollars which can be matched to the medium-term microloans that it makes in dollars. Thus, CMAC Arequipa does not need much medium-term FC time deposits to avoid asset-liability matching problems. Rather, CMAC Arequipa encourages rollovers of maturing FC time deposits into new FC time deposits with similar maturities in order to have a stable source of funding and lower financial costs.

Thus, active management of time deposits provides an opportunity for MFIs to mitigate asset-liability matching problems in both term and currency. MFIs can reduce these problems by offering favorable interest rates and other incentives to depositors who allocate their excess liquidity in line with the MFI's priorities.

Institutional Depositors

Institutional depositors can also be quite important, although their involvement varies with the conditions in each country. This group of depositors includes mutual funds, pension funds (AFPs), insurance companies, banks, credit unions, nongovernmental organizations and social programs, all of which can and sometimes do make substantial time deposits. Because Bolivia's capital markets are less developed, institutional depositors hold a greater share of their assets in the form of financial institution time deposits, as is illustrated by Bancosol and Caja Los Andes, where 50 and 30 percent of time deposits, respectively, are from institutional depositors. On the other hand, in Peru, where capital markets are more highly developed, institutions hold a smaller share of total MFI time deposits. For example, at CMACs Arequipa and Piura, as of June 30, 2004, the time deposits of registered companies (for the most part held by institutional depositors) accounted for 24 and 19 percent of overall time deposits, respectively. At CRAC Señor de Luren, the time deposits of registered companies are even less important, representing only 6 percent of overall time deposits as of April 30, 2004.

It is interesting to examine a more detailed data set on the time deposits of registered companies (which, again, are mostly held by institutional depositors), from FIE in Bolivia. These deposits have an average balance of US$ 96,034 per account (Table 9) and represent 39 percent of all deposits mobilized by FIE. These deposits are highly concentrated, with those over US$ 100,000 comprising 67 percent of the total. Virtually the entire remainder is held in accounts from US$ 10,000 to US$ 100,000, while smaller strata are insignificant.

Institutional depositors in Bolivia are attracted to time deposits at the MFIs because of the competitive interest rates they pay, the possibility of negotiating the terms and conditions of each individual deposit, and the image of financial strength and professionalism of these entities, which is reflected in their good risk ratings.[8] However, having a significant share of institutional deposits increases liquidity, term mismatch and currency risks for an MFI, since asset-liability mismatches may be created by a small group of depositors that tend to use similar assessment criteria. This is especially true in times of generalized liquidity shortages, during which institutional investors may not roll over their deposits or may significantly reduce their terms.

Government Deposits and Checking Accounts

Generally speaking, government deposits are not a very significant source of funds for MFIs. These deposits tend to be concentrated in banks and their placement subjected to constraints. For example, in Peru, public funds must be placed in financial institutions according to an auction mechanism. Thus, at CMAC Arequipa, government deposits represented only 3.9 percent of

[8] Bancosol, Caja Los Andes, FIE and Prodem have a risk rating of A or better.

Table 9
Time Deposits of Registered Companies at FIE
(June 30, 2004)

Segment	Time Deposits of Registered Companies				
	Number of Accounts	%	Balance (US$)	%	Average Balance (US$)
0 to US$ 500	1	1%	126	0%	126
US$ 501 to US$1,000	1	1%	576	0%	576
US$ 1,001 to US$ 5,000	4	4%	8,853	0%	2,213
US$ 5,001 to US$ 10,000	4	4%	22,872	0%	5,718
US$ 10,001 to US$ 50,000	38	42%	1,217,262	14%	32,033
US$ 50,001 to US$ 100,000	22	24%	1,630,316	19%	74,105
More than US$ 100,000	21	23%	5,859,103	67%	279,005
Total	**91**	**100%**	**8,739,109**	**100%**	**96,034**

Source: FFP FIE.

overall deposits as of June 30, 2004. These government deposits consisted of seven time deposits, with an average balance of US$ 540,000 per account. In general, government deposits have two important advantages. First, they may have low financial costs. For example, in Peru, the interest rate paid on government deposits is established at the auction. Recently, the interest rate on local currency deposits has fluctuated between 4.5 and 6 percent, while the interest rate on dollar deposits has been 2.75 percent. These levels are significantly lower than those that CMAC Arequipa pays its other depositors. Second, the large average size of government deposits brings operating costs down considerably. On the other hand, government deposits have at least three clear drawbacks. First, they generally have short terms (mostly between 95 and 189 days in the case of Peru, for example). Second, they are potentially unstable because the MFI cannot be sure of winning the next auction and because government agencies may need the funds and thus may not renew their deposits at maturity or may reduce their size. Finally, in times of generalized liquidity shortages, this source of funds may be costly.

In turn, the insignificance of checking accounts as an MFI funding source can be attributed to two main factors. First, most of the MFIs are nonbank financial intermediaries, which are not permitted to offer checking accounts. Second, the MFIs that are banks still do not offer checking accounts or do so only in a limited way because of: (i) the complexity of this product and its high operating costs, (ii) the large advantages of commercial banks in this business area, which in turn generate substantial scale economies for the banks, and (iii) the limited interest of microenterprise clients in such accounts.[9] On this last point, the use of checks is not widespread among low-income households; instead, a culture of cash payments prevails. Finally, the recent introduction of a financial transaction tax in Bolivia and Peru has further reduced the appeal of using checks in those countries.

Client Segmentation

As seen in both this chapter and the last, the depositors of MFIs are very heterogeneous. Because of this, it can be very useful for MFIs to segment depositors and then develop segment-specific strategies in such areas as products of-

[9] An interesting case of this is Mibanco, an MFI that does offer checking accounts. While only a small number of Mibanco clients have opened such accounts, Mibanco still offers this product as a preparation for the medium term, when some of today's microenterprise clients will turn into small or medium-size businesses, which often *will* be interested in checking accounts.

fered (including new products), level of service and growth targets.

For example, CMAC Arequipa has segmented its depositors by size, setting the following service levels:

- Clients with balances over US$ 144,000 are the responsibility of the Assistant Manager for Savings and Finance.
- Clients with balances between US$ 86,000 and US$ 144,000 are the responsibility of the regional manager.
- Clients with balances between US$ 43,000 and US$ 86,000 are attended to by the branch manager.
- Clients with balances between US$ 14,000 and US$ 43,000 are attended to by an operations assistant.
- Clients with balances below US$ 14,000 are handled by lower level staff or at a teller window.

Thus, different segments are handled differently. Large clients are provided with personalized service. They do not have to stand in line and are given the option to carry out transactions by telephone or email. They are also invited to special events sponsored by CMAC Arequipa, are visited in their offices or homes in order to maintain an ongoing relationship and are given small gifts on their birthdays or Christmas.

This personalized service is very much appreciated by CMAC Arequipa's large depositors, who tend to be older and have a strong regionalist spirit. At the banks in the Arequipa region, these clients are often served in a much more standardized, anonymous way, at teller windows or by lower level staff. This explains the preference of this clientele for CMAC Arequipa. By segmenting its depositors, CMAC Arequipa has created programs to maintain the loyalty of key clients.

Similarly, Bancosol has studied the demographic and socioeconomic characteristics of its clients and analyzed their patterns of financial product use. As a result, it has established categories of clients that receive special treatment, based on their profitability, length of time as clients and other factors. These depositors are given rapid service and are not required to stand in line. They also receive higher interest rates on their savings, more flexible approval of loans and offers of credit and debit cards and of other products tailored to their needs.

CMAC Trujillo has analyzed the gender composition of its clients. In July 2003, at its two most important branches—the main office and the branch on Avenida España—women provided 41 percent and 43 percent of total deposits, respectively. Men provided 28 and 29 percent, respectively, and registered companies, 31 and 28 percent, respectively. Several factors explain the importance of women depositors: the fact that women make most of the household investment decisions in Trujillo, CMAC Trujillo's strong regional roots and the institution's policy of not charging monthly fees for its savings accounts. Interestingly, at branches in small cities in the highlands (the *sierra*), the situation is reversed: men account for between 51 and 56 percent of the deposits mobilized.

Table 10 shows the results of CMAC Trujillo's study of the distribution of deposit balances by deposit type and age of the client. Individuals over age 50 hold 50 percent of total time deposits and 37 percent of total savings deposits. The distribution of savings by age group fits the life-cycle hypothesis quite well.[10] Older persons have more significant savings because they have had a longer accumulation period and because they need to build up assets for old age. The survey also shows the importance of those under 18, especially in savings deposits. It is important to build and maintain the loyalty of these clients, not only because of the sizable savings accounts they have now, but also because they may be a source of even larger deposits in the future.

[10] See Ando and Modigliani (1963).

Table 10
Distribution of Deposit Balances by Type of Deposit and Age of Client at CMAC Trujillo
(May 31, 2004)

Age (years)	Savings Deposits (%)	Time Deposits (%)
Under 18	15.5%	9.9%
18-24	3.5%	4.9%
25-30	8%	8.8%
31-40	18.6%	11%
41-50	17.4%	15.3%
51-65	29.7%	30.3%
Over 65	7.3%	19.9%
Total	**100%** **(US$ 20.8 million)**	**100%** **(US$ 43.4 million)**

Source: CMAC Trujillo.

CMAC Trujillo's analysis of its clients by gender and age has proven very useful. As a result, CMAC Trujillo has been able to gear its marketing campaigns and structure its services based on the needs of the key client segments it has identified.

In general, MFIs need to analyze their client databases in greater depth in order to be able to orient marketing and cross-selling efforts more effectively and better adapt products to the needs of different client segments. MFIs often do little or none of this analysis, in some cases because of the limitations of their databases but, in most cases, because they have not recognized its importance.

Organization and Management

Oversight of the deposit-taking operations of an MFI falls either to the MFI's savings and finance department or, alternatively, to its operations department. In general, MFIs set deposit mobilization targets as part of an overall set of consistent financial projections made during the annual business planning exercise.

MFIs break down their overall deposit-mobilization targets by branch in consultation with branch managers and after considering the current and likely future state of financial markets. They evaluate the extent to which these targets are being met on a monthly basis and analyze the possible reasons for discrepancies in order to implement corrective measures.

In most MFIs, either management or the board of directors sets interest rates centrally, based on an evaluation of financial market trends, the rates offered by competitors, and the MFI's priorities. As an example of this last consideration, to help rectify currency mismatch problems, many MFIs in Peru offer significantly higher interest rates on local currency deposits than on U.S. dollar deposits.[11] In some cases, branch managers are given flexibility to modify deposit

[11] This is true despite the fact that Peruvian and U.S. inflation levels have been similar in recent years.

Box 1: How Branches Handle Deposits

MFIs are decentralized institutions, and so it is hardly surprising that MFI branches play a key role in their operations. At four MFIs we visited in Peru and Bolivia, three types of branches were observed: (i) main offices, which carry out the largest and most complex transactions, both for loans and deposits; (ii) deposit-mobilizing branches, where deposits exceed loans by a large margin; and (iii) lending branches, where the reverse is true. In all cases, the branch's location is of central importance; each branch is generally located near its target market. Thus, main offices are usually located in city centers, where financial activities are concentrated. In regards to deposit mobilization, the main offices offer more favorable conditions for servicing major depositors, such as the ability to provide more personalized service and to negotiate rates more efficiently because of the nearby presence of the MFI's executives. Deposit-mobilizing branches are located in city centers or in middle- and upper-income areas, thus facilitating the transactions of savers who work or live in those areas. Lending branches are located near the main microenterprise activity centers. While these branches give priority to granting loans, they also provide services to savers. Many MFIs try to strike a better balance between the lending and deposit-taking operations of the lending branches, though the makeup of their clientele limits these efforts. In addition, lending branches are often located in areas with safety problems, and so many savers prefer to carry out their transactions at the MFI's main office or its city center branches.[12]

These three types of branches are clearly reflected in the following data:

Characteristics of Selected Branches for Four MFIs in Peru and Bolivia

Branch	Type	Years	Number of Depositors	Deposit Balance (US$ million)	Average Deposit (US$)	Outstanding Loans (US$ million)
La Merced (CMAC Arequipa)	Main	6	Savings: 10,800 Time Dep.: 1,500	Savings: 2.74 Time Dep.: 18.97	Savings: 254 Time Dep.: 12,648	11.2
Mercaderes (CMAC Arequipa)	Deposit Mobilizer	15	Savings: 25,656 Time Dep.: 4,506 WA: 3,374	Savings: 10.10 Time Dep.: 16.30 WA: 4.08	Savings: 394 Time Dep.: 3,617 WA: 1,209	11.5
El Porvenir (CMAC Trujillo)	Lender	14	Savings: 5,500 Time Dep.: 540	Savings: 0.74 Time Dep.: 1.38	Savings: 135 Time Dep.: 2,529	3.8
El Prado (Caja Los Andes)	Main	1	Savings: 815 Time Dep.: 269	Savings: 0.59 Time Dep.: 2.25	Savings: 729 Time Dep.: 8,364	Total: 6.2 Microcredit: 2.3 SME credit: 3.9
Gran Poder (Prodem)	Lender	7	Savings: 1,657 Time Dep.: 93	Savings: 0.11 Time Dep.: 1.32	Savings: 69 Time Dep.: 14,173	2.5

Note: WA indicates workers' accounts, that is, payment for time in service.
Source: CMAC Arequipa, CMAC Trujillo, Caja Los Andes and Prodem.

Branch managers play an important role in deposit mobilization. They participate in setting deposit-mobilization targets and evaluating their fulfillment, design action plans, hold periodic meetings with staff members to solve problems, and deal with suggestions for improving branch operations.

The branch manager is also charged with ensuring good client service (for example, organizing the branch to avoid lines and provide rapid attention to all clients), promoting deposit products in order to attract new clients, and making sure services are personalized. The manager visits the largest depositors and often negotiates better rates for them, within the parameters set by the MFI.

[12] This is what happens in El Alto, Bolivia, where major clients often prefer to make deposits at the MFIs' main offices in La Paz.

rates, as long as they stay within a previously-approved range. Prodem and CMAC Trujillo vary their deposit rates by branch—based on local market considerations, including the deposit rates paid by local competitors—in an attempt to minimize the overall *financial* costs of mobilizing a given amount of deposits. However, MFIs generally do not use analyses of the *operating* costs of different deposit products to guide them in setting their deposit rates (for example, to help them minimize the *total* costs of mobilizing a given amount of deposits, where total costs are the sum of financial and operating costs).

Some MFIs use incentive pay systems to reward branch managers and employees involved in deposit-taking for meeting their assigned deposit-mobilization targets. However, this is much less common than the use of pay incentives for loan officers. This is because most MFIs still place greater emphasis on credit and because it is easier to evaluate loan officer performance. MFIs that do not use incentive pay systems for employees involved in deposit-taking and for branch managers should consider introducing such systems as a way to motivate these personnel to reach the deposit targets that the MFI has set.

The Competition

In making loans to microenterprises, MFIs generally face only limited competition from commercial banks, which are often not interested in this market segment. However, many banks compete with MFIs for the deposits of microenterprises. Banks can generally offer their clients an image of financial strength and security, a sizable branch network, better facilities for making transfers and payments, ATMs, credit cards and some products such as checking accounts and foreign trade finance that are mainly important to larger businesses and middle- and upper-income clients. The disadvantages of banks include the lower interest rates they pay on deposits, the higher fees they charge, the higher minimum deposit sizes they require and the less personalized service they offer compared to MFIs.

Oftentimes, MFIs face tough competition from other MFIs for microenterprise deposits since many of these other MFIs offer similar products at comparable interest rates and have a similar target clientele. Mutual savings & loan institutions and credit unions may provide additional competition, the importance of which varies greatly from market to market.

The main strengths of MFIs in deposit mobilization include the following:

- High interest rates
- Efficient, personalized service
- Image of financial strength and security (better in some MFIs than in others)
- Absence of fees. Deposit rates clearly indicate the return on savings, and are a more transparent indicator than deposit rates at banks.
- Low minimum amount for opening an account
- For regional institutions, regional prestige may confer a powerful competitive advantage on the MFI, as it does in the cases of the CMACs in Arequipa, Piura and Trujillo.

The weaknesses of MFIs in mobilizing deposits include the following:

- Lack of a national network comparable to that of banks, which facilitates payments and transfers
- Limited capital base compared with that of banks
- Lack of ATMs and of information systems that facilitate the analysis of client databases
- Lack of variety among services offered, for example, absence of checking accounts and foreign trade financing

The success of MFIs in mobilizing deposits in recent years can be credited to both external and internal factors. Important external factors include the relative macroeconomic stability that has prevailed in many countries and is reflected in low inflation levels and positive real deposit

Table 11
Use of Raffles to Stimulate Deposit Mobilization
(June 2004)

Country and MFI	Yes	No
Peru		
CMAC Arequipa		X
CMAC Chincha		X
CMAC Trujillo	X	
CRAC Señor de Luren	X	
Bolivia		
Bancosol		X
FIE		X
Caja Los Andes		X
Prodem		X

Source: The MFIs.

rates. At the same time, in many countries, banks have undergone a cycle of low deposit rates and excess liquidity since 2000. This has led the banks to sharply reduce deposit rates and to concentrate on cutting financial costs instead of attempting to expand deposits. All of this has facilitated MFI market penetration. Finally, in some countries, such as Peru, deposit insurance funds have been set up to cover all regulated financial institutions, significantly reducing the risk for savers. Peru's deposit insurance fund covers deposits of up to US$ 19,000.

The success of MFIs in mobilizing deposits is also based on important internal factors such as efficient and personalized service, suitable locations for branches, high interest rates and favorable conditions, an effective information system that interconnects with all branches and facilitates transactions, and effective advertising campaigns that in some cases include raffles.

Raffles to Promote Savings

There is much debate about the merits of using raffles to promote savings. It is hardly surprising, then, that there are major differences in their use, as illustrated by the Table 11 comparison of MFIs in Peru and Bolivia. This table shows that Bolivian MFIs do not favor the use of raffles. There are at least two reasons for this:

- As noted in a study done by Bancosol, raffles are unpopular in Bolivia because few people win and many believe that the raffles are sometimes rigged. Clients prefer that all depositors receive small gifts as incentives.

- Raffles also have a bad reputation in Bolivia because they have often been used by intermediaries facing a crisis as a part of a desperate attempt to procure liquidity.

By contrast, in Peru, the majority of CMACs and CRACs have used raffles to attract savers, and have had very positive results.[13] This can be explained by the following:

- Raffles enjoy a generally unsullied reputation in Peru, with many major banks continuing to employ them.

- MFI raffles are normally limited to the depositors of a single region, and are held at public events with abundant publicity and

[13] Raffles have also played a role in the successful savings mobilization experience of BRI in Indonesia (see Robinson, 1994, pp. 41-42).

transparency, all of which contribute to their good image.

Whether an MFI should use raffles to stimulate deposits depends on the reputation of raffles in the country and on the degree to which the MFI needs additional deposits. For example, CMAC Arequipa already has the second largest share of the deposit market in the city of Arequipa. It is surpassed only by Banco de Crédito, the leading financial institution in Peru, which has 36 percent of the country's deposits. For this reason, CMAC Arequipa has decided not to use raffles.

On the other hand, raffles may be useful when they enjoy a good reputation in the country and the MFI would like to increase its deposits. To maximize the benefits of the raffle, the MFI should carefully design its incentives. For example, at many Peruvian MFIs, more chances to win are given to those with longer-term time deposits in local currency because these characteristics help the MFI to improve the matching of its assets and liabilities in both term and currency. MFIs should also carry out an ex post evaluation to determine whether the profits generated by the raffle exceeded the costs, as illustrated in Box 2.

Principal Risks

Mobilizing deposits has clear impacts on the four market risks faced by MFIs: liquidity, term mismatch, interest rate and exchange rate risk. Attracting deposits also gives rise to additional operational risks.

Liquidity Risk

Liquidity risk arises especially from the need for funds to meet depositors' withdrawals, which sometimes cannot be anticipated. This is especially true for savings accounts, which have no set term. Periods of political or financial instability may bring unexpected withdrawals and, in some cases, contagion effects. To measure this risk, analysts use the liquidity ratio (the ratio of liquid assets to short-term liabilities) and the gaps between assets and liabilities ordered by maturity date.

The Superintendency of Banking and Insurance (SBS) of Peru has set minimum liquidity ratios of 8 percent for local currency (LC) liabilities and 20 percent for foreign currency (FC) liabilities, which all intermediaries must observe.[14] Certain institutions, such as CMACs Arequipa and Trujillo, have an internal policy that requires higher liquidity ratios, 10 percent in LC and 25 percent in FC for both of these CMACs. In any event, when an MFI approaches its minimum ratio, a contingency plan should be activated. At CMAC Arequipa, the main elements of this plan include:

- Using the undisbursed balances of approved credit lines
- Improving loan recovery in the short term
- Reducing loan terms and limiting larger loans
- Extending the maturity of borrowing
- Fostering time deposits with longer terms by offering higher rates
- If there is no other alternative, liquidating reserves (including deposits at banks and other assets that can be quickly converted to cash)

In general, there is no significant seasonality in the deposits received by MFIs in Peru and Bolivia in their urban branches. This is not true for their rural branches, however. For example, Prodem's rural branches experience a significant drop in savings during carnival and at the start of the school year (February and March).

The gap model is useful for quantifying liquidity risk (Box 3). Generally, the model assumes that time deposits will not be withdrawn before maturity, and it also makes an assumption about the timing of withdrawals from savings accounts. For example, CMAC Arequipa accepts the scenario suggested by SBS: it assumes that 25 percent of savings account balances will be withdrawn in the next 30 days and 75 percent in the following 11 months.

Many MFIs create a primary cash flow table (showing the cash flows of the entire MFI) as

[14] See SBS, Resolution no. 472-01.

Box 2: The Use of Raffles at CRAC Señor de Luren

The recent experience of CRAC Señor de Luren (SL), in Ica, Peru, reflects the costs and risks of using raffles to increase deposit mobilization. The following are the results of the campaign "Ahorra y Gana con Nosotros" [Save and Earn with Us], carried out in the 9-month period between October 2002 and July 2003. The prizes consisted of a furnished house, computers and a number of household appliances.

The participants in the raffle were all individuals or registered companies that had taken out a new time deposit (TD) or else had increased their existing balance by S/. 100 for TDs in local currency (equivalent to approximately US$ 29) or by US$ 50 for TDs in dollars. Thus, the raffle reflected SL's preference for TDs in local currency. Those qualifying for the raffle received the following number of tickets for the drawings:

- 90-day TD – 1 ticket
- 180-day TD – 2 tickets
- 270-day TD – 3 tickets
- 360-day TD – 4 tickets

Our ability to evaluate the raffle's results is limited by the absence of a control group that could help us to estimate the amount of deposits that would have been mobilized without the raffle. For the sake of simplicity, it was assumed that any increase in deposits that occurred during the 9-month raffle period was attributable to the raffle.[15]

All costs of the raffle (US$ 95,043) were taken into account: advertising (35 percent of the total), prizes (36.8 percent), promotion (13.2 percent), filming, modeling and show expenses (12.3 percent) and operating and maintenance expenses (2.6 percent).

Financial costs generated by the deposits were also considered. In the 9-month period under analysis, the average financial cost of the TDs was 6.09 percent per annum. The costs of the raffle itself represented an average additional annual outlay of 4.74 percent, calculated by taking the US$ 95,043 in raffle expenses as a percentage of the amount of deposits mobilized by the raffle. These expenses increased the cost of the new deposits by 78 percent, to an annual average of 10.83 percent, where this last figure still does not include the other ("normal") operating costs associated with mobilizing deposits.

Raffles carry a clear risk since the MFI must make an up-front investment in prizes and advertising, which it hopes will allow it to reach its deposit-mobilization target and thus reduce the raffle costs per dollar mobilized to a reasonable level. The following table illustrates the fact that raffle costs per dollar mobilized vary greatly depending on the extent to which the deposit-mobilization target is met. For example, if CRAC Señor de Luren were to have mobilized 50 percent less than what we have estimated, the cost of the raffle would have doubled to 9.48 percent and would be quite a burden; on the other hand, if this MFI were to have mobilized 50 percent more than what we have estimated, the cost would drop to 3.16 percent.

Raffle Costs at CRAC Señor de Luren

Costs of Deposits (annual)				
Percentage of Deposit Target Reached	**Interest Costs**	**Raffle Costs**	**Total Costs**	**Increase from Raffle**
50%	6.09%	9.48%	15.56%	156%
100%	6.09%	4.74%	10.83%	78%
150%	6.09%	3.16%	9.25%	52%

Source: CRAC Señor de Luren.

Thus, raffles entail significant costs for an MFI, which is why they should be used with care and should be well planned and evaluated.

[15] On the other hand, the conservative assumption was made that the deposits attracted during the campaign would stay in the institution for only one year.

part of their annual business planning exercise. This table is frequently updated and used to manage liquidity. During times of political or financial instability, such as the 2003-2004 crisis in Bolivia, it is important to increase liquidity reserves in preparation for possible future contingencies, even at the cost of slowing the growth of the loan portfolio. If a country's financial system is shallow, risks can be greatly increased, as occurred in Bolivia during the 2003-2004 crisis. This is because problems in one sector can absorb most of the available liquidity in the economy, so that liquidity shortages spread rapidly to all intermediaries and sectors, pressuring the entire economy.

Stress tests can help evaluate liquidity risks. For example, CMAC Trujillo simulates the impact of early withdrawals of time deposits simultaneously with withdrawals from savings accounts and delays in loan repayments. The institution compares the resulting imbalances with its primary and secondary liquidity reserves and prepares a contingency plan. In this way the MFI can evaluate its response to stress.

Box 3: The Gap Model in an MFI

Loan repayments (and other cash inflows into the MFI) and deposit withdrawls (and other cash outflows out of the MFI) form the basis of the gap model.

In general, MFIs do less term transformation than banks since MFIs offer shorter-term loans on average than banks. Hence, in MFIs, the distribution of assets and liabilities by time to maturity often shows only fairly small imbalances, as is the case for CMAC Arequipa in the table below. CMAC Arequipa has a comfortable liquidity position, which is in no small measure due to the sizable positive gap for terms of 1 month or less, the result of the liquidity reserves CMAC Arequipa has established. Because of these reserves and the relatively small imbalances between assets and liabilities in other time intervals, the cumulative gap is always positive. In fact, negative gaps arise only in the 1-2 and 2-3 month periods. These negative gaps are also offset in the subsequent time intervals, due to the predominance of shorter term loans (especially urban microenterprise working capital loans with terms of under one year) and monthly repayments of principal and interest.[16] The monthly inflow of loan repayments provides an important source of funds to address an MFI's liquidity needs, especially if the MFI is careful about granting new loans.

Distribution of Assets and Liabilities by Time to Maturity in CMAC Arequipa (US$ millions, May 31, 2004)

	1 Month or Less	1-2 Months	2-3 Months	3-6 Months	6-12 Months	More Than 12 Months	Total
Assets	42.9	6.9	5.2	15.2	23.4	34.0	**127.6**
Liabilities	21.4	12.2	11.0	13.2	16.5	31.8	**106.0**
Gap	21.5	-5.2	-5.8	2.0	6.9	2.3	**21.6**
Cumulative gap	**21.5**	**16.2**	**10.4**	**12.4**	**19.4**	**21.6**	

Source: CMAC Arequipa.

[16] As of May 2004, approximately 25 percent of the local currency microenterprise loan portfolio matured in 31 to 60 days (and generally consisted of parallel loans designed to meet preferred clients' immediate liquidity needs, repaid with a single installment of principal and interest at the end of the loan), while 40 percent consisted of 6-12 month loans, with monthly repayments of principal and interest.

Deposit mobilization can also lead to certain concentration risks if a small number of depositors hold a significant share of total savings, a danger that is more likely to occur when there are institutional depositors. Thus, it is important to periodically evaluate the share of total deposits held by the largest 10 or 20 depositors and establish maximum limits. For example, CMAC Arequipa limits its 10 largest depositors to holding a total of no more than 20 percent of CMAC Arequipa's net worth. To reduce concentration risks, an MFI should diversify its clientele, establish adequate liquidity reserves and develop contingency plans.

Term Mismatch Risk

To understand this risk, one can begin by extending the gap model to assets and liabilities ordered by time intervals greater than one year. For example, time intervals of 1-2 years, 2-3 years, 3-4 years, 4-5 years, and greater than 5 years can be used. All assets and liabilities are placed in the interval that corresponds to their maturity. The aim is to match the amount of assets and liabilities that mature in each interval to avoid liquidity problems in the future.

Deposit mobilization can heighten term mismatch risk for MFIs by financing long-term loans with short-term liabilities: savings accounts and short-term time deposits. The predominance of short-term working capital loans (generally for terms less than one year) means that this risk is not so significant for most MFIs. However, two recent trends are increasing term mismatch risks. First, MFIs are increasing loan terms due to greater competition. Second, MFIs are increasingly lending to small and medium-size enterprises, and these loans are normally longer term (up to three years) both for equipment purchases and working capital.

As a response to term mismatch risk, some MFIs encourage longer-term deposits, offering clients higher interest rates for time deposits of 1-2 years or more. This measure can be adopted in stable macroeconomic situations. Other options include longer-term borrowing and stock and bond issue. Finally, some MFIs can match a portion of their savings account deposits (the stable portion) with medium-term loans. In these MFIs, a significant share of savings deposits (up to 25 percent or more) is very stable, even though the depositors have the right to withdraw their money at any time. Many small depositors use MFIs because they are conveniently located or require a low minimum deposit. These depositors tend not to withdraw all their savings unless they fear that the MFI may become insolvent, which could jeopardize their deposits. In such cases, MFIs can match their medium-term loans against the stable portion of their savings deposits with little or no risk, as long as the MFI maintains its financial solidity.

Interest Rate Risk

The other consequence of assets and liabilities that are not matched by term (besides future liquidity risk) is interest rate risk. To understand interest rate risk, suppose that an MFI makes a substantial amount of 2-year loans at an interest rate of 35 percent and that all of these loans are financed with 1-year time deposits paying 12 percent. Also assume that the MFI requires a margin of 18 percent to cover its operating costs and expected loan losses. The MFI looks to make a healthy profit of 5 percent on these loans (=35% - 12% - 18%). But what happens if in one year's time the country enters a period of tight money or inflation that pushes time deposit rates up by 10 percentage points, from 12 to 22 percent? When the MFI rolls over those deposits, its 5 percent profit turns into a 5 percent loss. This is an example of interest rate risk, which is the risk that changes in market interest rates will affect the MFI's profitability.

Four important caveats should be attached to the rule that MFIs should match the amount of assets and liabilities that mature in each time interval. The first is that for purposes of interest rate risk, assets and liabilities should be classified not based on their maturity but on the time until the next updating of their interest rate. For example, consider the case of a 3-year loan that the MFI has just made with a variable interest rate indexed to a reference rate that is adjusted quarterly. For interest rate risk purposes, this asset should be classified in the 3-6 month interval, not in the 2-3 year interval. Thus, the analy-

sis measures the gap between the amount of assets sensitive to variations in interest rates and the amount of liabilities sensitive to variations in interest rates in each time interval (for example, up to 1 month, 1-2 months, 2-3 months, 3-6 months, 6-12 months, 1-2 years, 2-3 years, etc.).

The second caveat is that liquidity risk and term mismatch risk are both avoided when liabilities have a longer maturity than the assets they fund. Interest rate risk is also avoided under this condition as long as the liabilities are prepayable without substantial penalty and can be replaced by new and similar liabilities. To understand this last statement, suppose that an MFI makes 2-year loans to its clients using money it borrows for three years. If interest rates have fallen substantially by the time the 2-year loans mature, the MFI can prepay its 3-year loan and obtain cheaper funding, thus avoiding interest rate risk.

The third caveat is that, in fact, MFIs may often want to use liabilities that have somewhat shorter terms than the assets they fund. This is because liabilities normally become cheaper as their term is shortened, so that the MFI may accept a certain amount of interest rate risk, term mismatch risk and liquidity risk in exchange for cost savings, especially if the these cost savings are significant. The goal of the MFI's funding strategy is not necessarily to eliminate all risk, but to maximize profitability at acceptable levels of risk.

The fourth caveat is that for purposes of measuring and mitigating interest rate risk (but not liquidity risk or term mismatch risk), it is better to use duration analysis than the gap model. The idea of duration analysis is to set the duration of a financial institution's total assets equal to the duration of its total liabilities.[17] Duration analysis is an ideal tool for analyzing interest rate risk because of the fact that the change in present value of a stream of cash flows that is generated by a change in the interest rate is proportional to the duration of the stream of cash flows. Because duration analysis is a complex tool, its use is suggested mainly for more sophisticated MFIs.

To reduce or eliminate interest rate risk, the MFI must match its assets and liabilities by time intervals (using a series of intervals from less than one month up to more than five years), or even better, by duration. For many MFIs, interest rate risk is created by capturing short-term savings or obtaining short-term loans on the one hand, and offering longer-term loans on the other.

All of the measures discussed above for reducing term mismatch risk can also be used to reduce interest rate risk. In addition, MFIs can charge variable interest rates on their loans, so that their loan rates rise or fall with the deposit rates the MFI is paying. However, such variable loan rates can be quite unpopular with clients because of the additional risks the clients must bear as higher interest rates on their loans are translated, for example, into higher monthly payments or longer loan terms. By setting the initial interest rates charged for variable-rate loans below those charged for fixed-rate loans and by also capping any interest rate increases over the life of the variable-rate loan, MFIs can reduce client risks and overcome some of the client resistance. However, capping loan rate increases returns some of the interest rate risk to the MFI. Moreover, while charging variable interest rates on loans can reduce or eliminate interest rate risk for the MFI, it does so at the cost of inducing additional credit risk. This is because, if loan rates rise, client default rates can be expected to increase under the strain of larger repayment burdens.

Foreign Currency Risk

MFIs that mobilize deposits or borrow in foreign currency (for example, in dollars) in order to fund loans in local currency (for example, in pesos) run the risk that a devaluation will greatly increase the size of the MFI's debt, expressed in local currency (LC). For example, a debt of US$ 1 million could grow from 10 million to 20 mil-

[17] Duration measures the effective or average maturity of a stream of cash flows. For example, the duration of a 5-year loan, repaid in 60 equal monthly payments of principal and interest, may be about two years, which means that in terms of their present value, the payments are received on average in two years.

lion pesos if the peso:dollar exchange rate increases from 10:1 to 20:1. Such a debt would be much more difficult to service and repay if the MFI and its clients primarily earn pesos.

Some believe that to avoid foreign currency risk an MFI need only match the currency of its assets with that of its liabilities. For example, this would mean that if an MFI has borrowed US$ 1 million, all it needs to do is to lend these funds out in dollars in order to avoid foreign currency risk. This is correct if the MFI's clients produce traded goods (meaning goods that are exported or that compete directly with imported goods) and is not correct if the clients produce nontraded goods (meaning goods that are neither exported nor compete directly with imported goods).

Many agricultural, mining, and manufacturing products are traded goods, while most commercial sector activities and services are normally nontraded. Since MFI clients are mostly in the commerce and services sector, most produce nontraded outputs. Even those MFI clients who are in the manufacturing and agricultural sectors sometimes produce goods that are rustic or otherwise only consumed locally, and are not close substitutes for goods traded internationally. These clients also produce nontraded outputs.

The importance of this distinction is that if there is a devaluation of, say, 2:1, the prices of traded goods typically rise by 2:1 also, in proportion to the devaluation. The prices of nontraded goods typically rise by much less than 2:1. This means that if the MFI gives a dollar loan to a client who produces nontraded outputs, that client could easily be ruined by a sharp devaluation since the price of what the client produces (in the local currency the client earns) will not keep up with the client's loan service payments (also expressed in local currency). For example, with a 2:1 devaluation, the loan service payments will double in local currency terms, while the value of what the client sells will typically rise by much less.

During the Asian financial crisis of the late 1990s, many financial institutions learned this lesson the hard way when their clients who had dollar loans and nontraded outputs could not repay and the financial institutions were faced with huge defaults in their credit portfolios.

To minimize foreign currency risk, MFIs should lend in local currency to clients producing nontraded outputs and lend in foreign currency to clients producing traded outputs. The currency composition of the MFI's liabilities should then be matched to that of the resulting loan portfolio.

To match the currency of the MFI's liabilities to that of its loan portfolio and other assets, it is useful to estimate a gap model of assets and liabilities by currency at least once a month. Limits should be set on the net exchange position (the net amount of the gap) in relation to the MFI's net worth. The more volatile the exchange rate, the more conservative the limits should be and the more frequently the gap model should be updated.

Typically, most MFI loans are granted in LC in order to match the nontraded nature of the borrowers' products and perhaps because of the higher interest rates that can often be charged on LC loans. However, in at least some countries, many MFI clients may want to make foreign currency (FC) deposits to protect the purchasing power of their savings, and the loans available to the MFI may also be primarily in FC. To successfully match currencies in this situation, MFIs can do the following:

- Encourage deposits in LC with higher interest rates and better terms and conditions
- Search for loans in LC from banks and other sources
- Issue bonds and stock in LC
- Use funds borrowed from abroad in FC (or time deposits in FC obtained from the MFI's depositors) as collateral to obtain loans in LC from local commercial banks. These are called back-to-back operations. In these operations, the MFI deposits the FC funds in an account in the commercial bank, where they serve as collateral for the bank to make a LC loan to the MFI.
- Use hedging transactions in local swap markets. For example, the Peruvian EDPYME

Edyficar calculated that swap transactions would be 100 basis points (1 percentage point) cheaper than back-to-back operations for covering its currency mismatch problems, if the Superintendency of Banks and Insurance allowed Edyficar to use them.

This last bullet refers to the possibility of using local (not international) swap markets, which exist in a number of Latin American countries. Typically, the MFI contacts a local commercial bank with which it has established a solid credit history. For a fee, this bank may agree to sell one million U.S. dollars in two years to the MFI, in exchange for a predetermined amount of pesos, to cover the repayment of a loan that the MFI has contracted in dollars. For the bank, this will be just one more future dollar liability and one future peso asset in its off balance sheet accounts, which it will balance off along with all of its other future dollar and peso commitments. The bank requires that the MFI be creditworthy in order to limit its counterparty risk, that is, the risk that the MFI will not come forward with the predetermined amount of pesos in two years time. For this purpose, the bank may insist that the MFI have a line of credit available to it. In principle, the swap transaction should provide a cheaper method of covering foreign exchange risk for the MFI than back-to-back operations. This is because back-to-back operations include the loss (for the MFI and participating bank) of the interest that could have been earned on the reserve requirement associated with the dollar deposit.

Operational Risk

Mobilizing deposits can also lead to operational risks for MFIs due to the large number of transactions and clients involved. To reduce these risks, MFIs should have organizational, operating and procedural manuals, as well as internal regulations and properly trained personnel. The information system should include well-designed security, confidentiality and backup features. It is useful to develop contingency plans to handle natural disasters (such as earthquakes and floods) and periods of social upheaval, such as the looting of bank and MFI branches that occurred during the conflicts in El Alto, Bolivia in October 2003.

Marketing

Deposit mobilization creates new marketing challenges. While new MFI borrowers are often

Box 4: CMAC Arequipa's Marketing Campaigns and Use of Promoters

To promote CMAC Arequipa's deposit products, its marketing unit has developed an effective strategy:

- Management selects a group of promoters with experience and skills in selling intangible goods.
- Promoters are paid a relatively low base salary; they earn performance bonuses that vary with the amount and composition of savings captured, giving priority to time deposits.
- Once a year, the MFI conducts an in-depth analysis of the competition's deposit products, comparing them to its own products in such areas as interest rates, other fees and charges, publicity and quality of client service.
- Based on this analysis, the MFI establishes its sales strategy, taking into consideration the advantages of its products and the weaknesses of the competitors' offerings.
- Based on the selected sales strategy, the marketing unit designs the needed publicity material, tests it and incorporates improvements.
- A sales plan is established with goals for promoters.
- The institution monitors the implementation of the plan as well as its results.

Experience has shown that the strategy of using promoters to capture time deposits is often more effective and economical than advertising in the mass media.

recruited directly by loan officers and through referrals by other MFI borrowers, all in the context of limited competition by traditional banks, attracting depositors entails the MFIs competing with all established intermediaries for market share. For this reason, MFIs need a marketing department or unit.

To attract savings, the marketing unit should do the following:

- Plan and launch promotional campaigns
- Conduct analyses of clients and their level of satisfaction with the MFI's financial services
- Program and supervise the use of communications media

It is also important to examine the financial needs of the clients in the different markets in which the MFI operates. For example, before opening a new branch, CMAC Trujillo conducts a market study, exploring the characteristics of the new market and its clients in order to define a market penetration strategy and establish appropriate growth goals. To improve its savings account and time deposit products, Caja Los Andes has conducted focus group studies that have explored the needs and perceptions of various segments of its current and potential clients, including large and small depositors from different regions as well as nondepositors. The study has provided extremely useful data for improving the features of products and suggesting sales strategies.

The level of client satisfaction with MFI services should also be explored. Unfortunately, this is not done on a systematic basis in many MFIs. Although it is quite common for an MFI to review the contents of its suggestion box, it is less common to do a systematic evaluation of client satisfaction. In this area, we note two interesting experiences. In one, Bancosol hired a specialized consulting firm to conduct a detailed study at the national level, surveying 1,500 people in different regions of Bolivia annually. The study explored the issues of image and positioning of Bancosol and its main competitors, as well as the level of client satisfaction. This analysis was supplemented by information gathered in focus groups every six months, in order to carry out a qualitative assessment of Bancosol's products and client satisfaction. In another example, Prodem used phantom clients who, without revealing their purpose, evaluated service quality in Prodem's branches. They used a detailed scoring guide to rate different aspects of service quality. This yielded detailed ratings of each branch, which are useful in assuring that rapidly growing MFIs such as Prodem maintain quality services.

With increasing competition and greater MFI participation in the savings markets, MFIs need to develop methods to maintain the loyalty of their depositors, especially in key depositor segments. The most common strategy consists of offering preferential rates and personalized service to the most important depositors. While MFIs have yet to establish broader programs to promote depositor loyalty, several MFIs are evaluating this possibility. For example, Prodem has conducted a pilot test in one branch in which it identifies certain customers as "star clients." These clients accumulate points ("mileage") based on the total amount and number of transactions they have conducted, thus qualifying them for better rates and prices for all services. The limitations of Prodem's information systems have kept this program from being used on a much wider scale within the institution.

The development of a marketing campaign also includes a strategy for the use of communications media and the preparation of content. While a detailed analysis of such campaigns is beyond the scope of this paper, a few important points are noted here.

First, substantial resources are often devoted to marketing campaigns. In 2003, for example, CMAC Trujillo spent US$ 576,000, CMAC Arequipa spent US$ 373,000, Bancosol spent US$ 600,000, Prodem spent US$ 380,000 and Caja Los Andes spent US$ 280,000. These amounts are not strictly comparable to each other because some MFIs are regional in scope while others serve the national market and also because of the different costs and characteristics of the respective mass media markets. In any case, it is clear that marketing campaign budgets

Table 12
Estimated Distribution of Spending on Advertising at Four MFIs
(first half of 2004)

	CRAC Señor de Luren	CMAC Trujillo	CMAC Arequipa	Bancosol
TV	85%	45%	40%	40%
Radio	15%	25%	35%	12%
Newspapers	na	15%	15%	10%
Pamphlets, sponsorships and promotions	na	15%	10%	38%
Total	**100%**	**100%**	**100%**	**100%**

Note: "na" indicates information not available.
Source: The MFIs.

are substantial. Moreover, a significant share of these total campaign budgets are being used to promote deposit products, for example, 65 percent in CMAC Trujillo and 45 percent in CRAC Señor de Luren. Thus, it is very important that the resources devoted to deposit mobilization (and other) campaigns be used effectively.

Second, use of the various communications media varies, as shown in Table 12. Television is important not only to promote the MFI's image but also to help it mobilize deposits. However, television is expensive, especially for MFIs that operate at the national level. Since television ads are substantially cheaper when they are limited to regional or local broadcasts, greater use has been made of television by Peruvian MFIs, which operate mostly at the regional level. Radio advertisements are also popular, due to their lower costs and the large audiences they attract among microentrepreneurs. Many MFIs use newspapers to promote time deposits with advertisements that show current interest rates and make comparisons with the competition. Such advertisements are especially useful in reaching middle and upper class savers, who are more financially sophisticated and try to maximize the earnings of their surplus funds.

Finally, sponsoring and promoting folklore, neighborhood, school, community and association events has proven to be a very effective marketing tool, which fosters client identification with the MFI and enhances the MFI's image. Coordinating with microbusiness associations to advertise at fairs and markets can also be a very effective and economical marketing tool.

To successfully mobilize deposits, an MFI needs an image of financial strength, which gives clients a sense of safety and security. Therefore, it is important to develop a brand name. The importance of doing this will grow as competitive pressures continue to rise in microfinance. Many MFIs, however, have not systematically addressed this issue. Examples of brand name development include the following:

- After conducting a market study using focus groups in 2002, CMAC Trujillo began working to change its image and differentiate itself from competitors, including from the other CMACs. It changed its name (from CMAC Trujillo to Caja Trujillo), adopted a new and more modern logo and a new slogan ("Grow With Us"), generally made over its corporate image, and employed this new image in its branches and products.

- As part of its transformation into a bank, Caja Los Andes developed a strategy to distance itself from the term "Caja"[18] and build the brand name Procredit (the bank's future name). As part of this process, its logo has

[18] In Bolivia, the word "caja" is associated with the insurance business.

been modified and a campaign to establish a new corporate image has been launched.

- Bancosol has launched a successful campaign to strengthen its brand image and position itself with the general public as a microcredit bank offering good service.

- As part of its brand identity, Prodem has adopted the slogan "Oportunidad," which in Spanish means both "opportunity" and "timeliness." Its logo reflects the three key components of the company: shareholders, employees and clients. Village clocks have been installed outside Prodem's rural branches—as a community service and also to associate its name with timeliness.

As has been discussed, marketing activities are very important for MFIs as part of a larger effort to capture savings. For this reason, the results of these activities should be systematically evaluated. In most MFIs, these evaluations have been limited to a comparison between the projected results and those actually achieved. However, CMAC Trujillo's experience has demonstrated that it can be very useful to carry out a cost/benefit analysis of each marketing campaign to determine lessons learned and improve future campaigns.

BORROWING

Current Sources of Borrowing: Characteristics and Conditions

When many of today's MFIs began operations, their main source of funding was loans from donors and governments. However, by the end of 2003, borrowing represented only 27 percent of the total liabilities of Latin American MFIs. Thus, MFIs have diversified their funding sources, with deposits becoming the main source of MFI liabilities. At the same time, the number and type of institutions offering loans to MFIs have increased significantly, and so the following typology of MFI loan sources is helpful in understanding the types of institutions from which MFIs are borrowing.

The criteria used for categorizing MFI loan sources are the geographical location of the source (domestic or foreign) and the nature of the provider (government, donor or commercially-oriented). Based on these criteria, four categories of MFI lenders were created. Two are domestic: (i) local commercial banks and (ii) the government and other domestic sources. And two are foreign: (iii) donors and (iv) social investors and other foreign sources.

These sources have different characteristics. First, government sources include second-tier facilities, which have played an important role in providing loans to MFIs. These second-tier facilities generally offer medium- and long-term loans with interest rates that do not vary with the MFI's risk and are sometimes below market. Credit allocation can be influenced by the priorities of the public sector and by political factors. Second, local commercial banks generally provide short-term financing and require that the MFI pledge specific collateral to help ensure repayment. Third, donors offer medium- and long-term loans, usually at variable rates, backed only by the net worth of the borrower. Finally, foreign social investors provide medium-term loans in foreign currency also backed only by the net worth of the borrower.

The transactions costs associated with borrowing for the first time from these different sources are often quite substantial for an MFI. Financial and risk analyses of the MFI must be carried out, contractual conditions must be agreed upon and collateral may have to be established. For subsequent loans these costs drop significantly.

The lines of demarcation among the four loan categories are sometimes blurry. For example, second-tier government facilities often obtain much of their funds from donors, such as in the case of the IDB's Global Microenterprise Credit Program offered during the last 15 years in many Latin American countries. Also, the division between the two foreign sources is sometimes fuzzy: private social investors have proliferated, but often use a great deal of donor resources, at least initially.

Table 13
Relative Importance and Cost of Different Sources of Borrowed Funds in a Sample of 23 Regulated MFIs in Latin America (US$ thousands, December 31, 2003)

	Local Commerical Banks		Government and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	40,037	5,190	20,116	9,007	662	8,361	37	14,887	**60,851**	**37,445**	**98,296**	37%
Cost	9.3%	8.3%	11.3%	5.7%	10.2%	6.3%	10.0%	8.3%	**10.0%**	**7.2%**	**8.9%**	
Long term	769	3,348	29,901	66,314	5,414	42,170	1,610	18,454	**37,694**	**130,286**	**167,980**	63%
Cost	7.7%	11.4%	9.5%	5.4%	8.0%	5.9%	14.2%	7.7%	**9.4%**	**6.1%**	**6.8%**	
TOTAL	**40,805**	**8,538**	**50,017**	**75,321**	**6,076**	**50,531**	**1,647**	**33,341**	**98,545**	**167,731**	**266,276**	100%
Cost	**9.3%**	**9.5%**	**10.2%**	**5.4%**	**8.2%**	**6.0%**	**14.1%**	**8.0%**	**9.8%**	**6.3%**	**7.6%**	
%	15%	3%	19%	28%	2%	19%	1%	13%	37%	63%	100%	

Source: MicroRate.

By analyzing data made available to us by MicroRate covering 23 regulated MFIs in Latin America,[19] the authors have calculated the relative share and financial costs of each of the four loan sources (using data as of December 31, 2003). Table 13 presents these calculations for all 23 MFIs taken together, while Annex C provides data for the individual MFIs. Based on the totals for the 23 MFIs, governments are the most important loan source, representing 47 percent of total borrowing by the MFIs, donors hold second place with 21 percent, local commercial banks are in third place with 18 percent, and foreign social investors hold last place with 14 percent.

As expected, foreign sources (donors and social investors) offer loans primarily in foreign currency (FC), while local commercial bank loans are primarily in local currency (LC). The currency composition of government loans is more balanced, with 60 percent of this lending denominated in FC and 40 percent in LC.[20] Overall, for all four sources combined, FC lending predominates, with a 63 percent share.

Clear differences are evident in the terms offered by the four sources: 92 percent of the funding provided to MFIs by local commercial banks is short-term, while 84, 77 and 57 percent of funding from donors, governments and social investors is long-term, respectively.[21] Overall, long-term lending predominates, with a 63 percent share.

In the case of borrowing in FC, the cost of funds varies significantly by source: 5.4 percent per annum for government, 6.0 percent for donors, 8.0 percent for international social investors and 9.5 percent for local commercial banks. Thus we see that governments and donors are still providing loans at below-market interest rates, although the subsidies are not that great. Loans in LC are important only for domestic sources, and here the costs are similar to one another: 9.3

[19] The 23 MFIs covered by the MicroRate data consist of 13 in Peru, three in Bolivia, two in Mexico, two in Nicaragua, one in Colombia, one in El Salvador and one in Paraguay. Special thanks to Damian von Stauffenberg and Todd Farrington of MicroRate for making these data available to us. For reasons of confidentiality, the financial cost data for the individual MFIs are not included in Annex C.

[20] Highly dollarized countries, such as Bolivia and Nicaragua, as well as countries that have adopted the dollar as their currency, such as El Salvador, have a large impact on these results. In these countries, second-tier institutions make loans largely or even exclusively in FC.

[21] Short-term loans are those with terms of less than one year, while long-term loans have terms of one year or more.

percent for local banks and 10.2 percent for governments.

In summary, the significance of government and donor loans is that MFIs can obtain terms and rates that would be difficult to secure from domestic or international commercial sources. Thus, an MFI can reduce its liquidity and term mismatch risks by borrowing from those sources. The interest rates charged by these sources are clearly positive in real terms and are approaching market rates. This prevents the generation of serious distortions in the financial system and prepares the MFIs to access more commercial funding.

Risks

Borrowing affects risk management in MFIs in several ways. First, when MFIs have credit lines that have not been fully utilized, liquidity management is greatly facilitated since these funds can be mobilized quickly to deal with short-term difficulties. Short-term credit lines from local banks can be used for this purpose, although illiquidity often spreads quickly through shallow financial markets, limiting the use of these credit lines for this purpose. Many MFIs try to maintain an unused portion of their loans from second-tier institutions and donors as a liquidity reserve, since the availability of these funds is not closely correlated with the liquidity/illiquidity cycles of the local financial markets. Refinancing risk always exists, since the renewal of loans upon maturity is not guaranteed. Despite these drawbacks, loans, particularly those with longer terms, are valuable in mitigating both liquidity risks in the short run and term mismatch risks in the medium run.

Second, exchange rate risk is normally increased, given that a substantial part of MFI borrowing is in foreign currency, while most MFI loans are denominated in local currency and finance mostly nontraded goods and services.

Third, interest rate risks increase, given that most MFI borrowing is at variable rates (especially borrowing from government second tier facilities, donors and social investors) and most MFI loans carry fixed rates. This risk, however, is greatly reduced by the fact that most MFI lending consists of short-term working capital loans with terms under one year. Thus, MFIs can offset increases in their borrowing costs by increasing their loan rates, the effect of which will be seen in their portfolio yield within a few months. MFIs that offer longer-term loans to small and medium-size enterprises are in a different situation. To counteract their greater exposure to interest rate risk, they offer variable-rate loans.

Finally, borrowing can increase concentration risks by leading MFIs to depend on a small number of creditors. This risk often arises with respect to government institutions. In recent years, many MFIs have made significant efforts to diversify their borrowing sources, turning to the local banking system, donors and international social investors. Development of closer relations with these creditors is often a multi-year task, but it is well worth getting started on in order to move beyond the initially high transactions costs associated with borrowing from a new source.

BOND ISSUE

Among Latin American MFIs, only Mibanco in Peru and Compartamos in Mexico have systematically issued bonds in recent years. Bancosol's pioneering bond issue in 1997 was for a limited amount (US$ 3 million), had a partial credit guarantee (from USAID) and was not followed up because of its high cost. By the end of 2003, bonds represented only 1.7 percent of the total liabilities of Latin American MFIs.

There are several reasons that MFIs have relied so little on issusing bonds.[22] First, regulations impede the access of some MFIs to capital markets; for example, in Peru, CRACs, CMACs and EDPYMEs are not authorized to issue bonds. Second, capital markets are often unfamiliar with MFIs, which may be viewed as new and high-risk intermediaries, thus limiting the MFIs' opportunities to place debt. Third, the fixed costs

[22] See Annex A for a review of the steps required to issue bonds and the pros and cons of bond (versus stock) issue.

of issuing bonds are relatively high, and an MFI's financing needs may not justify such costs. Finally, the rapid growth of deposits in MFIs has covered a large part of their funding needs.

It is important to note that to a certain extent time deposits can substitute for bonds, especially in countries with limited capital markets. MFIs can mobilize medium-term deposits from institutional and private investors, taking advantage of the current macroeconomic stability and the MFIs' good financial performance and risk ratings.[23] Mobilizing these deposits is simpler than issuing bonds and does not involve high fixed costs. Therefore, smaller amounts of funding can be economically obtained. Time deposits are also more flexible than bonds because their terms can be negotiated case by case, according to the MFI's needs and the investors' priorities.

The main characteristics of the bonds issued by Mibanco and Compartamos are shown in Table 14. Common characteristics include:

- All of the bonds issued have terms between 18 months and five years, which is typical of issuers that have recently entered the capital markets and must establish a track record before obtaining longer terms. These terms are generally sufficient for MFIs, whose portfolios mainly consist of short-term loans and rarely include loans with terms exceeding five years.

- In all cases, the bonds have been issued in local currency (LC) and have had fixed interest rates in the case of Mibanco and variable interest rates in the case of Compartamos.[24] Thus, MFIs have responded to the need to generate medium-term funding in LC, since most of their loans to microenterprises finance nontraded goods and services and are denominated in LC.

- In all cases, Citibank/Citigroup, an important financial group in many Latin American markets, has been used as the investment bank. It is important for MFIs to utilize a highly reputable institution such as Citibank, which has substantial experience in capital markets. This greatly facilitates placing the MFI's bonds with both institutional and private investors.

Mibanco and Compartamos have pursued different strategies in their bond issues. Mibanco's first two issues each had a credit enhancement, with repayment of 50 percent of the principal guaranteed by USAID and the Andean Development Corporation, respectively. As a result, the bonds' ratings were much higher than that of the MFI, which facilitated acquisition by institutional investors, a generally very risk-averse group of buyers. With these two bond issues successfully placed, Mibanco then made a third bond issue without any credit enhancements, though for a smaller amount and a shorter term—thus paving the way for additional bond issues in the future based solely on the MFI's net worth.

Compartamos adopted the opposite strategy. Its first three issues had no credit enhancements but did have good risk ratings. These three issues were directed mainly at private clients who were contacted with the help of the investment bank and other banks. The placement of these issues was facilitated by the fact that they were of limited size and term and were directed at a less risk-averse clientele. Once Compartamos established its presence in the Mexican capital markets, it made a fourth bond issue—with a longer term, for a larger amount, and aimed at institutional investors. The International Finance Corporation (IFC) guaranteed 34 percent of the principal of these bonds, facilitating their placement.[25]

[23] In many MFIs, 1-2 year time deposits are common. CMAC Arequipa has been able to mobilize 5-year time deposits from private sector clients. Some of the Bolivian MFIs have captured large time deposits from pension funds and other institutional investors.

[24] This difference reflects the fact that most LC bonds in Peru have fixed rates (at least for terms up to five years), while most bonds in Mexico have variable rates.

[25] The IFC has been a Compartamos shareholder since 2001.

Table 14
Characteristics of the Bonds Issued by Mibanco and Compartamos

	Date	Amount	Term	Interest Rate	Investment Bank	Guarantee/ Collateral	Main Buyers
Mibanco 1st issue	10-Dec-02	US$ 5.7 million (20 million soles)	2 years	12.00%	Citibank	USAID 50% of principal	Pension funds (AFPs) 82%; other investors 18%
Mibanco 2nd issue	19-Sep-03	US$ 5.7 million (20 million soles)	27 months	5.75%	Citibank	CAF 50% of principal	Mutual funds 32.5%; government 28.8%; AFPs 26.2%; banks 10%; insurance companies 2.5%
Mibanco 3rd Issue	23-Oct-03	US$ 2.87 million (10 million soles)	18 months	5.75%	Citibank	Net worth of borrower	Government 59.4%; mutual funds 21.15%; AFPs 19.45%
Compartamos 1st issue	5-Jul-02	US$ 10.4 million (100 million pesos)	3 years	CETE (91 days) + 2.5%	Citibank	Net worth of borrower	Individual investors contacted by Citibank and other banks
Compartamos 2nd issue	8-Nov-02	US$ 4.92 million (50 million pesos)	39 months	CETE (91 days) + 2.5%	Citibank	Net worth of borrower	Individual investors contacted by Citibank and other banks
Compartamos 3rd issue	29-Apr-03	US$ 4.74 million (50 millon pesos)	3 years	CETE (91 days) + 2.9%	Citibank	New worth of borrower	Individual investors contacted by Citibank and other banks
Compartamos 4th issue	30-Jul-04	US$ 16.6 million (190 million pesos)	5 years	TIIE (28 days) + 1.5%	Citigroup / Banamex	IFC 34% of principal	Institutional investors (mutual funds, pension funds and insurance companies) 87.78%; private investors 12.22%

Note: CETE is the Mexican government's Treasury bill rate; TIEE is the equilibrium interbank interest rate.
For updates on rates see: www.banxico.org.mx.
Source: Mibanco's "Memoria 2003" (2003 Annual Report) and data provided by Compartamos.

For an MFI to decide whether to issue bonds, it should evaluate not only the direct financial costs that would be incurred, but also the operating costs, as will be examined in detail in Chapter 3.

STOCK ISSUE

Stock issue by Latin American MFIs has essentially been limited to the reinvestment of profits and to bringing in new investors through the private placement of shares. So far, no MFI has made a public offering of shares in any stock exchange.

The issuance of new stock based on the capitalization of profits is a relatively simple process. The shareholders must come to an agreement, which is notarized. Then, new shares are issued and distributed pro rata, in proportion to each investor's share of capital. Generally, such share issue does not require authorization by the banking superintendency.

Private stock placements to add new shareholders are a different matter.[26] These require au-

[26] Annex A includes a step-by-step description of the process of stock issue.

thorization from the superintendency of banks to ensure that the new shareholders meet the usual requirements of moral fitness, technical capacity and financial solvency, which are required of all owners of financial institutions. It must also be decided whether the new shareholders will acquire a portion of the already-issued shares or whether a capital increase will be used to incorporate them. In the first case, the founding NGO has typically sold some of its shares to the new investors. In both cases, the MFI must face the problem of valuing the shares sold to the new investors and of possibly charging a premium over book value.[27] It is not easy to justify such a premium or set its amount since no stock market valuations of MFIs exist to serve as reference points. So, approximate methods must be used to obtain a range of estimates for the MFI's value, which can serve as the basis for negotiations with new investors.[28]

Government and donor underwriting programs provide another source of equity funding for MFIs. These programs temporarily inject funds from a government or foreign shareholder, with the proviso that the MFI buy back these shares within a preestablished time period. Generally, the new shareholder does not take an active role in managing the MFI.[29] The additional capital from the underwriting program reduces the MFI's leverage and thus may permit it to grow more rapidly.

Underwriting programs must be well designed to ensure that they offer incentives compatible with healthy and prudent management of the MFIs. Underwriting operations should be used only in the best MFIs, which adhere to strict criteria such as committing to reinvest a high percentage (75 percent or more) of their profits during the underwriting period (often 3-5 years). In addition, exit rules should be clearly established so that the government or international shareholder is treated fairly in the distribution of profits.

Underwriting programs that do not meet these criteria should not be approved. By rewarding poor management, such programs could delay changes in management and in the ownership structure that are needed to improve performance.

As discussed in Annex A, it is important for an MFI to create a capitalization plan before beginning to look for new shareholders. It is interesting to examine three scenarios for incorporating new shareholders into an MFI.

The first scenario pertains to most NGOs that have become regulated. In this scenario, the NGO retains control of the institution, but, through a private stock placement, invites donors and other international investors (social investors, broadly defined) to join as shareholders.[30] In this way, the MFI obtains additional capital, improves its image through the presence of highly creditworthy shareholders and perhaps brings in technical assistance. At the same time, the NGO managers have the benefit of retaining control of the MFI. The inclusion of private, for-profit shareholders is only at the beginning stages.

The second scenario occurs in institutions such as Peru's EDPYMEs and rural savings & loan institutions (CRACs), in which the shareholders are primarily private investors, rather than NGOs.[31] These private investors may want to add donors or social investors as shareholders because of the advantages cited in the previous paragraph. These advantages may offset the high costs of this funding source, which is given by the new shareholders' claims on the MFI's profits (whether these profits be distributed or reinvested). In many MFIs, yearly profits may exceed 25 percent of capital, a very high cost of funding. However, the private shareholders re-

[27] For example, in the case of one of the Bolivian MFIs, new investors were charged a premium of 80 percent over book value.

[28] One such method would be to use the present discounted value of the future flow of dividends.

[29] For example, in COFIDE's underwriting programs for the Peruvian CRACs, COFIDE's directors always vote with the majority.

[30] See Kaddaras and Rhyne (2004) for a review of the characteristics of MFI shareholders.

[31] A number of CRACs and EDPYMEs are mainly owned by businessmen with enterprises that are regional in scope.

Table 15
Pros and Cons of Each Type of Shareholder

Type of Shareholder	Pros	Cons
Donors and social investors	- Long-term social vision - Knowledge of microfinance - Ample equity support - Solid creditworthiness - Can provide access to technical assistance and loans	- Most investments are for a limited time period, and so they are temporary investors - Exit strategy may be required - Little flexibility to offer short-term support to the MFI with fresh capital in times of crisis
Private shareholders	- Clearly motivated by profits - Value efficiency, the rationalization of operations and cost cutting - Can become long-term partners	- Tendency to favor short-term objectives - Pressure to distribute profits - Possible conflicts of interest with their other investments
Government shareholders	- Identify with MFI's social mission	- Politics may interfere with the prudent and efficient management of the MFI - Little capacity to support the MFI with fresh capital contributions - Can create delinquency problems for the MFI as borrowers may believe that the government will not enforce or will forgive their debt

tain the majority of the stock and do not allow the new investors to control the MFI.

The third scenario involves privatizing government-owned MFIs, for example, the municipal savings & loan institutions (CMACs) of Peru. But privatization processes are complex and often have unpredictable results, as discussed in Box 5.

The various types of shareholders that can partner with an MFI have widely different characteristics. Each MFI should determine what kind of partners it would like to have based on their pros and cons (see Table 15).

Box 5: Privatization of the CMACs in Peru

Privatizing the CMACs is advantageous in order to: i) increase their equity base, ii) avoid the dangers of politicized management and clientelism and iii) achieve greater efficiency through better use of technology and the control systems that are characteristic of private enterprise. The General Financial Systems Law has opened up the possibility of incorporating private shareholders as owners of the municipal savings & loan institutions (CMACs), with the privatization decision to be made by each municipality.[32]

To date, some steps have been taken to advance the privatization process. The CMACs have changed their bylaws and have converted themselves into corporations. They have carried out valuation studies and proposed strategies to incorporate new shareholders. And the municipal councils have debated agreements that would begin the privatization process. So far, however, no municipality has adopted all of the decisions required to initiate privatization.

Several key factors explain this situation. First, a political climate unfavorable to privatization has gained momentum since the beginning of the popular uprisings that led to the failure to privatize the regional electric companies in southern Peru in June 2002. Municipal leaders are hesitant to make unpopular decisions, although they may eventually consider them to be technically necessary. Second, the CMACs have become important companies, which influence the regional economy and are significant sources of funds for the local governments' investment budgets.[33] This is why many defenders of public ownership consider municipal control indispensable to maintaining the CMACs' social mission and regional orientation. Third, some of CMACs' directors and employees fear that privatization could mean the loss of their influence and employment.[34]

The various alternatives for privatizing the CMACs have all met with resistance. On the one hand, disagreements among the municipalities have blocked the integrated approach, in which the majority of shares in all the CMACs would be publicly auctioned as a single bloc, in order to create one financial institution that would be national in scope, perhaps even with operations in Lima. On the other hand, some municipalities could privatize their CMACs individually or as a group with a common orientation. However, the political difficulties of even these alternatives should not be underestimated in the current environment. For the moment, no municipality has made the decision to start the process. There is also discussion of such alternatives as the incorporation of private investors as minority shareholders in the CMACs or the establishment of joint ventures with privately held companies as a way to enter the Lima market. However, it is unlikely that private investors would want to be the minority partners of a local government under current conditions; at the very least, municipalities will have to spell out the shareholding arrangements with greater precision.

In conclusion, privatization of the CMACs will depend on generating a political consensus in the muncipalities, and on the results of the first CMAC privatizations, should these come to pass.

[32] See Law 26702 of December 9, 1996, Transitory Provision XIV.

[33] In Arequipa in 2003, the dividends provided by the CMAC to the municipality represented 33 percent of the total municipal budget and financed most of the municipality's capital expenditures.

[34] It must be pointed out that most of the employees interviewed have a positive attitude toward privatization, as a way of ensuring the presence of a more technically-oriented and stable management and the long-term development of their institution.

3. Financial and Operating Costs of the Different Funding Sources

This chapter examines the total costs of the four MFI funding sources, including both financial and operating costs. The first two sections analyze the total costs of mobilizing deposits, and then breaks down the operating cost part of these total costs into fixed and variable components and examines more closely the operating costs related to microsavings. The third section compares the total costs of deposits, borrowing, bond issue and stock issue.

TOTAL COSTS OF MOBILIZING DEPOSITS: INTRODUCTION

Unlike other funding sources, mobilizing deposits involves significant operating costs related to setting up a branch network, employing teller and other front-line personnel and establishing back-office support systems to process the transactions. These operating costs must be considered together with financial costs in order to make the best funding decisions. Therefore, operating costs must be measured in a systematic way.

Case Studies: The MFIs Selected and the Methodology Used

We carried out studies of the costs of mobilizing deposits in six MFIs in Peru and Bolivia. Peru and Bolivia were selected because 78 percent of the savings mobilized by MFIs in the nine major Latin American microfinance markets as of December 2003 were mobilized in these two countries (see Chapter 1). The six MFIs were selected in such a way that they constituted a sample of microfinance institutions stratified by size of total deposits: two small MFIs (with deposits less than or equal to US$ 5 million), two medium-size MFIs (with deposits between US$ 5 million and US$ 50 million) and two large MFIs (with deposits over US$ 50 million). We also made use of costing studies that were recently carried out for four other medium-size MFIs in Bolivia, Colombia, Nicaragua and Peru. The first six studies allocated costs by assignment and the last four used activity-based costing (ABC). A brief explanation of these two methodologies is presented below and in Annex D.

Of the 61 MFIs included in the database of Chapter 1 (that is, all regulated MFIs specializing in microfinance in the nine countries), 46 mobilize deposits. Table 16 gives the distributions of these 46 MFIs by the size of their total deposits.

This table shows that 61 percent of the MFIs are of medium size; these MFIs have average deposits of US$ 19.3 million and mobilize 43.5 percent of the total deposits captured by the 46 MFIs. The seven large MFIs have average deposits of US$ 97 million and account for 54.6 percent of total deposits. The 11 small MFIs are of more limited importance, with average deposits of US$ 2.1 million and only 1.9 percent of total deposits.

Table 17 presents characteristics of the 10 MFIs with a costing analysis, including country, cost analysis method and total amount of deposits. By design, the total amount of deposits covers a wide range. Therefore, the results of the costing studies presented in this chapter are useful for examining variations in the financial and operating costs of deposit-taking for MFIs of different sizes.

A brief description of the difference between the two costing methodologies is in order. Cost assignment distributes indirect expenses—that is, those that cannot be directly attributed to a specific product—among products based on specific criteria such as number of transactions, number of accounts or the value of the accounts. With this method, it is assumed that the products are the ultimate cost drivers of expenses.

ABC, or activity-based costing, first performs an analysis of the activities carried out by an MFI and then assigns operating costs to these activities. These costs are then transferred to the

Table 16
Distribution of MFIs by Total Deposits Mobilized
(December 2003)

MFI	Deposit Range (US$ millions)	Number	%	Average Deposit (US$ millions)	Total Deposits (US$ millions)	%
Small	Less than or equal to 5	11	23.9	2.1	23.4	1.9
Medium	Between 5 and 50	28	60.9	19.3	539.9	43.5
Large	More than 50	7	15.2	97.0	678.7	54.6
Total		**46**	**100.0**	**27.0**	**1,242.0**	**100.0**

Source: The superintendencies.

Table 17
The 10 MFIs with Costing Analyses

MFI	Type	Country	Costing Method	Month of Study	Deposits (US$ millions) 1/
CMAC Pisco	Small	Peru	Assignment	May-04	3.0
CMAC Chincha	Small	Peru	Assignment	May-04	3.9
CRAC Señor de Luren	Medium	Peru	Assignment	Apr-04	11.5
Procredit (Confía)	Medium	Nicaragua	ABC	Jan-04	12.5
CRAC NorPerú	Medium	Peru	ABC	Sep-03	14.4
Finamérica	Medium	Colombia	ABC	Jul-04	15.5
FFP FIE	Medium	Bolivia	Assignment	Jun-04	22.2
FFP Caja Los Andes	Medium	Bolivia	ABC	Jun-04	48.3
CMAC Arequipa	Large	Peru	Assignment	Jun-04	91.7
CMAC Piura	Large	Peru	Assignment	Jun-04	96.5

Note: The information for each MFI in the subsequent tables of this chapter is for the month the study was carried out.
1/ Average of the deposits in the month the study was carried out and December of the previous year.
Source: The MFIs.

products through cost drivers. This methodology assumes that the actual operating cost drivers are the activities carried out by the MFI in order to offer the products.

The cost assignment methodology has been adopted for our six case studies. This methodology has two main advantages. First, it considers the number of teller transactions associated with different types of deposits. This makes the results more accurate because teller transactions account for a high percentage of the operating costs of deposits.[35] Second, it facilitates a detailed examination of operating costs by deposit size stratum, which reveals the influence of each client stratum on total operating costs. The principal advantage of the ABC method is that it is usually more accurate than the cost assignment method.

[35] For greater detail on the methodology used, see Annex D.

However, both methods have limitations. First, costing is a static exercise, which means that it must be applied periodically in order to appreciate changes and trends. Second, only deposit and loan services have been considered, not other MFI services such as billpaying and money transfers. This may lead to a slight overestimate of the operating costs of deposits.[36]

TOTAL COSTS OF MOBILIZING DEPOSITS: PRINCIPAL FINDINGS

The 10 MFIs studied here have substantial differences in their liability structures, which influences both their financial and operating costs. Thus it is important to analyze the differences in funding mix, which are presented in Table 18. On the one hand, CMAC Arequipa and Piura mobilize the largest deposit volumes. In these two MFIs, deposits represent a major share of total liabilities and borrowing a very small share. On the other hand, the medium-size MFIs finance themselves to a much greater extent by borrowing, with deposits representing a smaller fraction of total liabilities.

When deposits are the predominant source of funding, they account for a significant share of the MFI's operating costs. However, as we will see later, it is also important to take into account which of two main deposit products is primarily used by the MFI since the two products have very different operating costs.

The two basic products used by MFIs examined here to attract deposits are savings accounts (SAs) and time deposits (TDs), both in local currency and in dollars. The differences between these two deposit products are clearly reflected in their different operating costs, as will be seen below. Table 19 presents the deposit composition of the MFIs analyzed in this study and demonstrates that there is no strong correlation between this composition and the size of the MFI.

In order to determine the total costs of mobilizing deposits for the 10 MFIs, the study next turns to the financial and operating costs of each deposit product.

Financial Costs of Mobilizing Deposits

The MFIs analyzed have different deposit structures, both in terms of products and currencies. These differences directly influence the average interest rate paid to depositors in two main ways (see Table 20). First, as would be expected of a deposit product that is available on demand and that has a greater number of transactions connected with it, savings accounts pay a lower interest rate than time deposits. Second, interest rates are higher on local currency than on dollar deposits. In addition, the two small MFIs generally pay more for deposits than the larger MFIs because they have yet to attain a comparable positioning in their local and regional markets.

It is useful to calculate deposit rates in real terms in order to eliminate the effect of different rates of inflation in different countries and thus give greater cross-country comparability to the deposit rate data. Table 21 shows that, on average, savings deposits compensate savers for inflation but generally provide little beyond this. In fact, real deposit rates are mildly negative in the majority of cases. On the other hand, time deposits offer attractive returns in real terms, especially local currency time deposits.

Operating Costs of Mobilizing Deposits

Before analyzing the operating costs of deposits, it is useful to examine some of the characteristics of the savings accounts and time deposits offered by the 10 MFIs. As expected, total operating costs as a percentage of the total amount deposited is inversely related to average deposit size and directly related to the number of transactions performed. Moreover, operating costs also depend on the MFI's general level of efficiency.

[36] Only FIE in Bolivia had the data needed to include these other services in the costing study.

Table 18
MFI Funding Structure
(US$ thousands)

MFI	Type	Deposits	Borrowing	Net Worth	Deposits / Liabilities (%)	Borrowing / Liabilities (%)
CMAC Pisco	Small	2,979	971	838	68%	22%
CMAC Chincha	Small	3,936	600	611	75%	11%
CRAC Señor de Luren	Medium	11,511	7,648	2,478	56%	38%
Procredit	Medium	12,542	14,185	3,764	46%	52%
CRAC NorPerú	Medium	14,434	3,832	2,595	78%	21%
Finamérica	Medium	15,520	5,608	5,135	72%	26%
FFP FIE	Medium	22,166	15,455	6,250	52%	36%
FFP Caja Los Andes	Medium	48,349	37,550	12,774	52%	40%
CMAC Arequipa	Large	91,715	4,364	24,181	85%	4%
CMAC Piura	Large	96,510	6,287	22,681	78%	5%
Average		**31,966**	**9,650**	**8,131**	**69%**	**21%**

Source: The MFIs.

Table 19
Structure of MFI Deposits
(percent)

MFI	Type	Deposits (US$ thousands)	Savings Accounts	Time Deposits
CMAC Pisco	Small	2,979	40%	60%
CMAC Chincha	Small	3,936	24%	76%
CRAC Señor de Luren	Medium	11,511	45%	55%
Procredit	Medium	12,542	36%	64%
CRAC NorPerú	Medium	14,434	42%	58%
Finamérica	Medium	15,520	0%	100%
FFP FIE	Medium	22,166	24%	76%
FFP Caja Los Andes	Medium	48,349	17%	83%
CMAC Arequipa	Large	91,715	32%	68%
CMAC Piura	Large	96,510	18%	82%
Average 1/		**31,966**	**31%**	**69%**

1/ The last two averages exclude Finamérica because it does not offer savings accounts.
Source: The MFIs.

Table 20
Financial Costs by Product and Currency
(percentage of average balance)

MFI	Savings Accounts		Time Deposits		Total Deposits		Total
	Local Currency	Foreign Currency	Local Currency	Foreign Currency	Local Currency	Foreign Currency	
CMAC Pisco	4.5%	4.0%	19.0%	9.0%	13.2%	7.1%	**11.6%**
CMAC Chincha	5.8%	5.2%	19.1%	10.9%	16.0%	9.2%	**14.7%**
CRAC Señor de Luren	3.1%	2.9%	14.8%	5.0%	8.7%	4.2%	**6.6%**
Procredit	5.9%	5.9%	8.2%	7.4%	6.9%	6.9%	**6.9%**
CRAC NorPerú	4.1%	2.3%	9.2%	4.6%	6.4%	3.8%	**4.8%**
Finamérica			12.5%		12.5%		**12.5%**
FFP FIE		2.9%		5.9%		5.2%	**5.2%**
FFP Caja Los Andes	6.8%	1.5%	11.7%	4.3%	na	na	**3.9%**
CMAC Arequipa	2.0%	1.3%	13.4%	6.9%	10.6%	4.7%	**7.7%**
CMAC Piura	1.9%	1.9%	11.7%	7.2%	9.5%	6.5%	**8.1%**
Average	**4.3%**	**3.1%**	**13.3%**	**6.8%**	**10.5%**	**6.0%**	**8.2%**

Notes: "na" indicates information not available. Blank cells indicate the absence of a product of that type.
Source: The MFIs.

Table 21
Real Financial Costs by Product and Currency
(percentage of average balance)

MFI	Savings Accounts		Time Deposits		Total Deposits		Total
	Local Currency	Foreign Currency	Local Currency	Foreign Currency	Local Currency	Foreign Currency	
CMAC Pisco	0.2%	0.8%	14.7%	5.9%	8.9%	4.0%	**7.6%**
CMAC Chincha	1.5%	2.0%	14.8%	7.7%	11.7%	6.0%	**10.3%**
CRAC Señor de Luren	-1.1%	-0.3%	10.5%	1.9%	4.5%	1.1%	**3.1%**
Procredit	-1.1%	2.7%	1.2%	4.2%	-0.1%	3.7%	**3.4%**
CRAC NorPerú	2.1%	-0.9%	7.2%	1.4%	4.4%	0.7%	**2.1%**
Finamérica			6.4%		6.4%		**6.4%**
FFP FIE		-0.3%		2.7%		2.0%	**2.0%**
FFP Caja Los Andes	5.1%	-1.7%	9.9%	1.2%	na	na	**0.8%**
CMAC Arequipa	-2.3%	-1.9%	9.1%	3.7%	6.3%	1.5%	**3.8%**
CMAC Piura	-2.3%	-1.2%	7.4%	4.1%	5.2%	3.4%	**4.2%**
Average	**0.3%**	**-0.1%**	**9.0%**	**3.7%**	**5.9%**	**2.8%**	**4.4%**

Notes: "na" indicates information not available. Blank cells indicate the absence of a product of that type. Interest rates in local currency were adjusted for inflation in the 12 months prior to the study date in the respective country. Interest rates in US$ were adjusted for inflation from June 2003 to June 2004 in the United States, which was 3.2 percent.
Source: The MFIs.

Table 22
Number of Accounts and Average Deposit Size by Product

MFI	Savings Accounts			Time Deposits		
	Number of Accounts	Total Balance (US$ thousands)	Average Balance (US$)	Number of Accounts	Total Balance (US$ thousands)	Average Balance (US$)
CMAC Pisco	3,962	1,178	**297**	1,390	1,801	**1,296**
CMAC Chincha	2,035	980	**482**	571	2,956	**5,177**
CRAC Señor de Luren	11,496	5,188	**451**	2,501	6,323	**2,528**
Procredit	5,174	4,535	**876**	416	8,008	**19,249**
CRAC NorPerú	16,880	6,007	**356**	5,692	8,428	**1,481**
Finamérica				1,616	15,520	**9,604**
FFP FIE	21,729	5,257	**242**	1,065	16,909	**15,877**
FFP Caja Los Andes	40,375	8,177	**203**	3,221	40,172	**12,472**
CMAC Arequipa	84,697	29,078	**343**	15,497	62,636	**4,042**
CMAC Piura	49,920	17,198	**345**	35,535	79,312	**2,232**
Average	**26,252**	**8,622**	**399**	**6,750**	**24,206**	**7,396**

Source: The MFIs.

Table 22 presents the number of accounts, total balance and average balance for both deposit products for the 10 MFIs. Savings accounts have a relatively small average balance of US$ 399, versus US$ 7,396 for time deposits. In addition, savings accounts have a much larger volume of transactions (Table 23).

The total operating costs of each deposit product are determined in good measure by the number of transactions that are carried out for the product. Transactions involve costs related to personnel (teller services), communications, security, use of equipment and electricity, and other expenses. The number of transactions per account and the total number of transactions for the MFI vary from one MFI to another, but it is clear that SAs have much higher volumes of transactions than TDs by both measures. This is expected given the nature of the two products.

Table 24 shows operating costs as a percentage of the average deposit balance for the 10 MFIs. For all MFIs, compared with TDs, SAs generate greater operating costs as a percentage of the amount deposited. This is primarily because time deposit accounts are on average almost 20 times larger than savings accounts (Table 22). Interestingly, the main reason for the higher costs of SAs is *not* the fact that savings accounts involve many more transactions per account than time deposits (on average four times more according to Table 23). Table 25 shows that monthly operating costs *per account* are much greater for TDs than SAs at all MFIs, averaging more than three times as much. It appears that the attention that larger clients receive from branch managers and other relatively high-ranking personnel generates higher unit costs (costs per account) for TDs compared to SAs. Although savings accounts generate more monthly transactions per account, these accounts are largely attended to by tellers and other personnel with much lower salary levels. Therefore, costs per account are much lower for SAs than TDs.

Table 23
Number of Monthly Transactions, by Product

MFI	Savings Accounts		Time Deposits	
	Total Transactions	Transactions per Account	Total Transactions	Transactions Per Account
CMAC Pisco	367	0.10	25	0.02
CMAC Chincha	7,132	3.50	324	0.60
CRAC Señor de Luren	33,247	2.90	892	0.40
Procredit	351	0.07	45	0.11
CRAC NorPerú	22,447	1.33	680	0.12
Finámerica			na	na
FFP FIE	32,406	1.50	583	0.50
FFP Caja Los Andes	36,342	0.90	1,646	0.51
CMAC Arequipa	241,315	2.80	14,499	0.90
CMAC Piura	47,192	0.95	11,103	0.31
Average	**46,755**	**1.56**	**3,311**	**0.39**

Note: "na" indicates information not available. Blank cells indicate the absence of a product of that type.
Source: The MFIs.

Table 24
Annual Operating Cost as a Percentage of Average Deposit Balance

MFI	Savings Accounts	Time Deposits	Total Deposits
CMAC Pisco	13.9%	3.9%	**7.9%**
CMAC Chincha	21.2%	3.1%	**7.6%**
CRAC Señor de Luren	12.0%	3.1%	**7.1%**
Procredit*	2.6%	0.9%	**1.5%**
CRAC NorPerú*	8.3%	2.6%	**5.0%**
Finamérica*		1.8%	**1.8%**
FFP FIE	16.1%	1.5%	**5.0%**
FFP Caja Los Andes*	5.8%	3.7%	**4.1%**
CMAC Arequipa	10.5%	1.6%	**4.4%**
CMAC Piura	11.8%	1.9%	**3.6%**
Average	**11.4%**	**2.4%**	**4.8%**

* ABC costing is used instead of cost assignment.
Source: The MFIs.

Table 25
Operating Cost per Account
(US$ per month)

MFI 1/	Total Number of Accounts	Operating Cost per Account		
		Savings Accounts	Time Deposits	Total Deposits
Finamérica*	1,616		14.0	**14.0**
CMAC Chincha	2,606	8.5	13.4	**9.6**
CMAC Pisco	5,352	3.4	4.2	**3.6**
Procredit*	5,590	1.9	14.4	**2.8**
CRAC Señor de Luren	13,997	4.5	6.5	**4.9**
CRAC NorPerú*	22,572	2.5	3.2	**2.6**
FFP FIE	22,794	3.3	20.3	**4.0**
FFP Caja Los Andes*	43,596	1.0	38.8	**3.8**
CMAC Piura	85,455	3.4	3.5	**3.4**
CMAC Arequipa	100,194	3.0	5.3	**3.4**
Average	**30,377**	**3.5**	**12.4**	**5.2**

* ABC costing is used instead of cost assignment.
1/ The MFIs are shown in increasing order of their total number of accounts.
Source: The MFIs.

The data in Table 25 show mixed results on the existence (or nonexistence) of economies of scale. The table ranks MFIs according to their total number of accounts (SAs + TDs), from 1,616 at Finamérica to 100,194 at CMAC Arequipa. The idea behind economies of scale is that larger MFIs (in the sense of those with more accounts) can spread their overhead costs more thinly over this greater number of accounts.

A comparison of the two smallest MFIs with the two largest provides evidence in support of economies of scale. In the case of savings accounts, the two smallest MFIs (CMACs Chincha and Pisco, given that Finamérica cannot offer this type of account) have an average unit cost of US$ 5.95, compared with US$ 3.20 for CMACs Piura and Arequipa, the two largest MFIs. With respect to time deposits, the average unit cost for the two smallest MFIs is US$ 13.70, versus US$ 4.40 for the two largest MFIs. With both types of deposits there is clear evidence of economies of scale, given the significant drops in unit costs when comparing the smallest MFIs to the largest.

The other six MFIs provide evidence against economies of scale. These six medium-size MFIs have the lowest average unit cost for savings accounts (US$ 2.20) and the highest average unit cost for time deposits (US$ 14.57), instead of having intermediate average unit cost values in both cases.

The wide fluctuations in unit costs, especially in the case of time deposits, lead us to two questions: (i) Are there in fact economies of scale? and (ii) Do cost studies really provide accurate and reliable cost estimates? Regarding the second question, the signal weakness of costing studies is their use of arbitrary rules to assign indirect expenses to products (or to activities and then to products). This weakness is an important one since these indirect expenses often account for the majority of total operating costs.[37] Perhaps with another set of rules, the unit costs calculated for the medium-size MFIs would have been lower for TDs and higher for SAs, and thus

[37] Annex D lists the indirect expenses and the assignment rules used to allocate them in six of the MFI costing studies.

more in line with what the existence of scale economies would lead us to expect. At least, perhaps, the abrupt swings in unit costs would have been less pronounced. For a definitive resolution of these questions, we need more evidence, hopefully using the same methodology for all of the costing studies.[38]

It is important to separate savings accounts from time deposits and look for evidence for or against economies of scale at the level of each individual product. The alternative is to estimate the operating costs per account for all deposits taken together, and to analyze whether this ratio becomes smaller for larger MFIs. The problem with this latter strategy is that the average unit cost of TDs is more than three times the average unit cost of SAs (Table 25). Moreover, the share of TDs in total deposits varies substantially from one MFI to another (Table 19). Because of these two factors, variations in the unit cost of total deposits may be the result either of economies of scale or of variations in the share of each type of account in total deposits. Therefore, this analysis would not offer clear evidence on the existence of economies of scale.

Total Costs of Mobilizing Deposits

Figure 1 shows the breakdown of total costs into financial and operating costs by type of deposit product for the MFIs. Note that financial costs are low and operating costs are high for SAs. The situation is reversed for TDs, where interest payments are the major component of total costs.

In general, savings accounts have greater total costs than time deposits. Considering the nine MFIs that offer both products (all MFIs studied here except Finamérica, which is permitted to offer TDs but not SAs), the average total cost of savings accounts is 15 percent and the average total cost of time deposits is 12.2 percent. Only Caja Los Andes pays substantially more for TDs than SAs (11.7 percent vs. 9.9 percent), while Procredit pays 0.2 percentage points more for TDs than SAs. In the other seven MFIs, SAs have the higher total cost, usually by a wide margin. Therefore, based on this sample, we can say that SAs tend to be more expensive than TDs for MFIs. Moreover, reducing the operating costs of SAs presents substantial problems because it requires a significant streamlining of processes or other such measures. Conversely, it is only necessary for an MFI to lower the interest rates it pays on its TDs in order for it to realize substancial savings in the total cost of offering that product.[39]

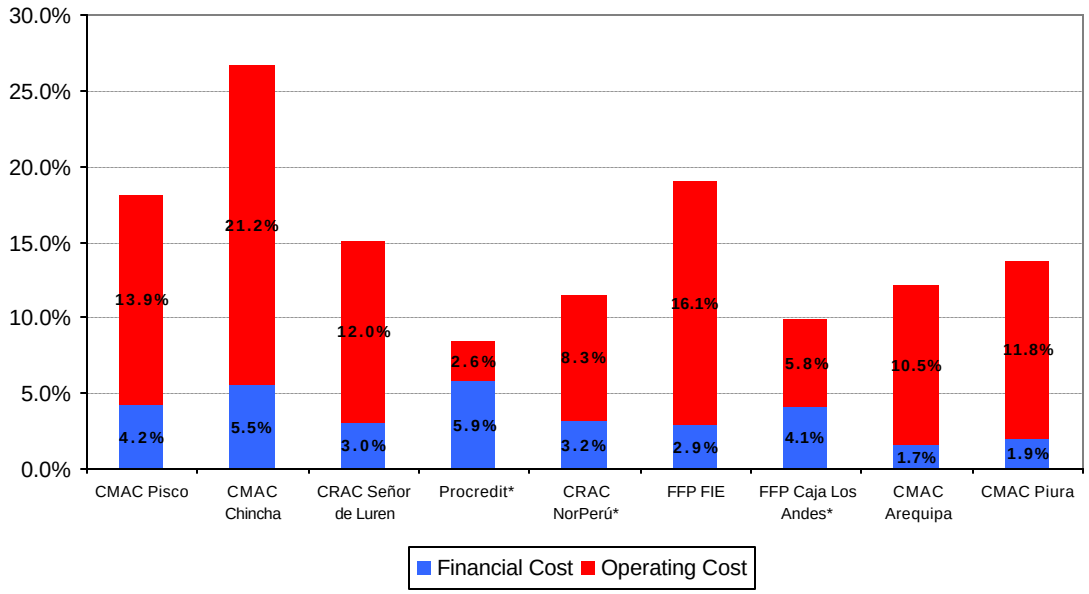
In conclusion, it would appear advisable for MFIs to give priority to mobilizing time deposits because of their lower total costs. In addition, TDs offer several other advantages: they are easier to manage, provide greater funding stability and predictability in the short and medium term (until their maturity) and generally permit better term matching between assets and liabilities during this same time horizon.[40] Since the main cost of TDs is the interest rate paid (and not their operating costs), it is extremely important to properly set the interest rate for TDs at a level that will attract the required funds at the lowest possible cost. Nonetheless, this task has not received the priority it should at many MFIs because their still wide financial margins allow

[38] In six of the studies presented here, the same team of professionals used the same methodology (cost assignment), while in the other four studies another methodology was used (ABC).

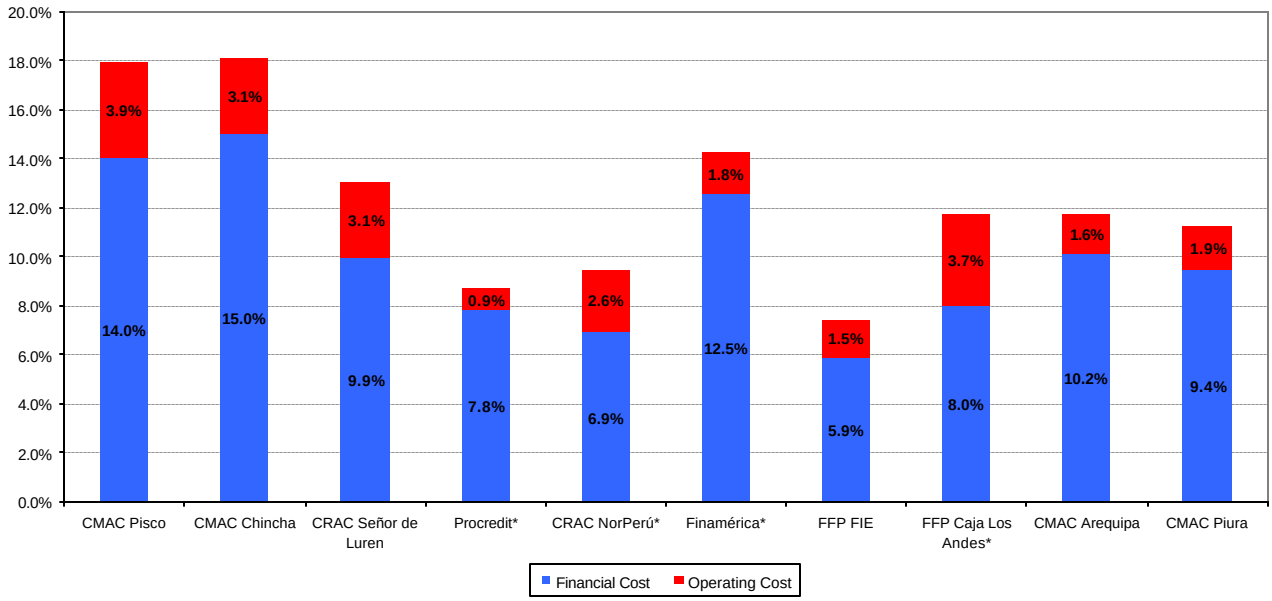
[39] Naturally, the advisibility of reducing deposit rates depends on the specific conditions of each market, including the degree of competition from other financial institutions.

[40] However, TDs are not necessarily more stable than SAs in the longer term (after maturity of the current TDs). This is true for two reasons. First, the much greater number of savings accounts gives them a certain stability because the deposits and withdrawls from so many accounts tend to cancel each other out to a greater degree than is the case for time deposits. Second, credit unions and other MFIs that mobilize substantial savings from a large number of small depositors frequently find that a significant share (25 percent or more) of these funds is very stable. This is so despite the fact that depositors have the right to withdraw their money at any time. Many small depositors use an MFI because of its convenient location or low minimum deposit requirements. They tend to keep their savings there unless they fear that the MFI may become insolvent, in which case their deposits would be in danger.

Figure 1
Financial and Operating Costs of Deposit Products
a. Savings Accounts



b. Time Deposits



them to absorb the high rates paid on time deposits without much difficulty.

A More Detailed Examination of the Operating Costs of Deposits

The analysis thus far has focused on the operating costs of deposits but has not resolved whether growth in the number of accounts at MFIs leads to economies of scale. In order to better understand this subject, this section breaks down the operating costs of deposits into fixed and variable components. It also tackles the subject of microsavings.

Fixed and Variable Operating Costs

Operating costs may be classified as either fixed or variable. Since fixed costs are spread over an increasing number of accounts as the number of accounts grows, the presence of fixed costs tends to reduce operating costs per account.[41]

Figure 2 breaks down operating costs for savings accounts and time deposits into fixed and variable cost components. It recognizes as fixed and variable the same types of expenses for both deposit products. We can see from this figure that at the larger MFIs the share of fixed costs in total costs is lower, reflecting the fact that fixed costs are spread over more accounts as the number of accounts increases. This assertion can be verified more formally by calculating the correlation coefficient between deposit volume and the share of fixed costs in total costs. These calculations yield high negative correlations of -0.84 for savings accounts and -0.85 for time deposits.

This demonstrates that as the volume of deposits increases, fixed management and back-office costs are spread ever more thinly. For example, small and medium-size MFIs, which have fixed costs that average 23 percent of their total operating costs, can decrease their operating costs at least in that percentage simply by increasing their deposit volumes. It is also important to note that the share of fixed costs in total costs is higher for TDs than for SAs because of the greater involvement of managers and other high-level personnel in negotiations with TD clients (which, in turn, is due to the much larger size of TDs compared to SAs).

Beyond these considerations of fixed costs, the variable costs per deposit account could also fall as the number of accounts rises. For example, this might occur if staff productivity increases with the number of accounts. In this way, MFIs may reduce both their fixed and variable costs per deposit account as a result of the economies made possible by a greater number of accounts.

Operating Costs of Microsavings

A number of publications have analyzed the subject of microsavings at MFIs and the social mission of these institutions in promoting savings among low-income individuals. Increasing access to the financial system and promoting a culture of saving among poor people are undoubtedly worthwhile goals. However, elevating the importance of this social mission has often led MFIs to neglect analyzing the costs that microsavings generate for the MFI. Studies such as that of Richardson (2003) conclude that this cost is not prohibitive because MFIs also have larger clients that offset the greater operating costs of microsavings.

This section analyzes the operating costs of microsavings and the implications of these costs for MFIs, where microsavings are defined as savings accounts with balances less than or equal to US$ 100. The subject of the operating costs of time deposits is not explored here because small savers rarely use this product. Table 26 shows that SAs are responsible for an average of 93 percent of the total transactions and 82 percent of the total deposit accounts at MFIs, but bring in only 31 percent of total deposits. Thus, savings accounts are a product with high operating costs.

Having looked briefly at the overall characteristics of savings accounts, we now examine the number of clients and amount mobilized by account size strata, which are presented in Table 27. This table shows that microsavings represent, on average, three-quarters of all the accounts, but provide less than 3 percent of the

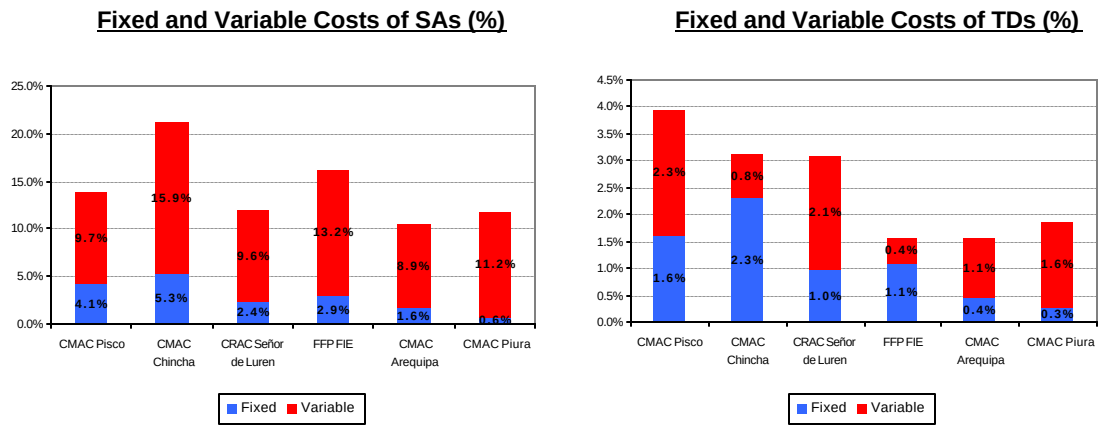
[41] It could be argued that all costs are variable in the long run. However, we have assumed that certain costs (namely, the fixed costs) remain constant or nearly constant as the MFI grows. Fixed costs include, for example, the cost of the board of directors, the general manager and the managers of such departments as credit, savings, finance, risk, operations and maintenance, auditing, treasury and accounting. See Annex D for more detail.

Table 26
Characteristics of Savings Accounts

MFI	Volume (US$ thousands)	% of Total Volume	Number of Accounts	% of Total Accounts	Number of Transactions	% of Total Transactions	Operating Cost of SAs (%)	Total Operating Cost (%)
CMAC Pisco	1,178	40%	3,962	74%	367	94%	13.9%	7.9%
CMAC Chincha	980	25%	2,035	80%	7,132	96%	21.2%	7.6%
CRAC Señor de Luren	5,188	45%	11,496	82%	33,247	97%	12.0%	7.1%
Procredit	4,535	36%	5,174	93%	351	89%	2.6%	1.5%
CRAC NorPerú	6,007	42%	16,880	75%	22,447	97%	8.3%	5.0%
FFP FIE	5,257	24%	21,729	95%	32,406	98%	16.1%	5.0%
FFP Caja Los Andes	8,177	17%	40,375	93%	36,342	96%	5.8%	4.1%
CMAC Arequipa	29,078	32%	84,697	85%	241,315	94%	10.5%	4.4%
CMAC Piura	17,198	18%	49,920	58%	47,192	81%	11.8%	3.6%
Average	**8,622**	**31%**	**26,252**	**82%**	**46,755**	**93%**	**11.4%**	**5.1%**

Source: The MFIs.

Figure 2
Fixed and Variable Operating Costs of Deposits
(percentage of average balance)



total amount mobilized in SAs at both small and large MFIs.

It is also interesting that in both small and large MFIs, a segment that contains one of the greatest percentages of total savings is that between US$ 1,001 and US$ 5,000; this segment is especially important in the case of the large MFIs. While the large MFIs have a great number of microsavings clients, they mobilize most of their deposits from the middle-size accounts. By contrast, the small MFIs are more dependent for their deposits on large clients, especially those with balances greater than US$ 50,000. At small MFIs these clients provide 18.8 percent of total deposits, versus 6.2 percent at large MFIs.

Table 27
Savings Account Clients at MFIs, Averages by Strata 1/

Stratum	Small MFIs					Large MFIs				
	Number of Accounts	%	Total Balance (US$ thousands)	%	Average Balance (US$)	Number of Accounts	%	Total Balance (US$ thousands)	%	Average Balance (US$)
From US$ 0 to US$ 100	2,219	74.0	30	2.5	14	49,966	76.1	593	3.0	12
From US$ 101 to US$ 500	475	15.8	112	9.2	235	8,793	13.4	2,076	10.6	236
From US$ 501 to US$ 1,000	141	4.7	99	8.1	700	2,769	4.2	1,950	10.0	704
From US$ 1,001 to US$ 5,000	135	4.5	270	22.2	2,006	3,468	5.3	7,112	36.4	2,051
From US$ 5,001 to US$ 10,000	15	0.5	99	8.2	6,850	438	0.7	2,961	15.2	6,761
From US$ 10,001 to US$ 50,000	13	0.3	279	31.0	21,856	212	0.3	3,640	18.6	17,171
From US$ 50,001 to US$ 100,000	2	0.1	140	10.4	69,874	9	0.0	526	2.7	58,402
More than US$ 100,000	1	0.0	51	8.4	101,431	5	0.0	685	3.5	137,085
Total	**2,999**	**100.0**	**1,079**	**100.0**	**360**	**65,660**	**100.0**	**19,543**	**100.0**	**298**

1/ Average number of savings accounts and average account balances by type of MFI. The small MFIs are CMACs Pisco and Chincha and the large MFIs are CMACs Arequipa and Piura.
Source: The MFIs.

Before analyzing operating costs by account size strata, it is important to examine a breakdown of the number of transactions by these strata since most of the operating costs associated with savings accounts involve transactions that are carried out by clients at teller windows. Table 28 shows the number of transactions by account size strata. The microsavings stratum stands out as having the greatest number of transactions, especially at the large MFIs. Another salient point is the large number of transactions per account in the upper strata, which arise from these MFIs handling company savings accounts that use drafts (which are similar to checks in that they allow savings account holders to draw against their savings balances). This results in a greatly increased number of transactions per account. Nonetheless, the large amounts of deposits mobilized in these segments generally offsets the greater number of transactions, as will be seen in the analysis of operating costs by strata.

The characteristics that have been discussed here are all reflected in the operating costs shown in Table 29. In all five MFIs that were able to provide data, annual operating costs for the microsavings stratum are more than 200 percent of the microsavings balances. This means that for each dollar mobilized from this segment, it costs on average more than two dollars in operating costs per year, without taking account of the interest paid to these clients. It is also important to note that starting with the US$ 501-1,000 stratum, there is a reduction in operating costs to lower-than-average levels. At the same time, the fact that more than three-quarters of all savings deposits are mobilized from savings accounts larger than US$ 1,001 significantly reduces the average operating costs of savings accounts. Thus, there exists an important cross-subsidy between large and small savers.

In conclusion, microsavings generate very high operating costs at MFIs of all sizes. Depositors with low balances are thus subsidized by those with larger balances. However, the long-term sustainability of these cross-subsidies should be reviewed, particularly in markets with increasing levels of competition.

Alternative Strategies to Deal with Microsavings

We now consider three alternative strategies that MFIs could adopt to deal with the issue of microsavings:

1. S*ubsidies for small savers,* who often receive interest on their savings accounts and pay little or nothing in fees to the MFI despite the high operating costs generated by

these accounts. This strategy particularly serves the interests of low-income individuals with small balances who are looking for a safe, economical and easily accessible place in which to hold their excess liquidity. This option is the one most commonly used by Latin American microfinance institutions. MFIs justify subsidizing small savers by noting that serving these savers is part of the MFI's social mission and that even small deposits offer economies of scope and other significant benefits, which are discussed in the next point. However, MFIs rarely estimate the costs of this subsidy or explore the possibilities of rationalizing it. It is possible that in the medium term, growing competitive pressures in the microfinance marketplace will lead to a change in this orientation.

2. *Adoption of a more selective service policy for microsavers,* through a series of meas-

Table 28
Monthly Transactions by Strata for Savings Accounts [1/]

Stratum	Small MFIs			Large MFIs		
	Number of Transactions	%	Transactions per Account	Number of Transactions	%	Transactions per Account
From US$ 0 to US$ 100	1,076	30.0	0.5	82,774	58.6	1.7
From US$ 101 to US$ 500	950	26.5	2.0	25,729	18.2	2.9
From US$ 501 to US$ 1,000	271	7.6	1.9	9,673	6.9	3.5
From US$ 1,001 to US$ 5,000	701	19.6	5.2	15,200	10.8	4.4
From US$ 5,001 to US$ 10,000	489	13.6	33.7	3,506	2.5	8.0
From US$ 10,001 to US$ 50,000	69	1.9	7.1	2,924	2.1	13.8
From US$ 50,001 to US$ 100,000	5	0.1	1.0	805	0.6	94.6
More than US$ 100,000	21	0.6	21.4	525	0.4	116.6
Total	**3,582**	**100.0**	**1.2**	**141,134**	**100.0**	**2.1**

1/ Average transactions for savings accounts by type of MFI. The small MFIs are CMACs Pisco and Chincha and the large MFIs are CMACs Arequipa and Piura.
Source: The MFIs.

Table 29
Operating Costs by Strata for Savings Accounts
(annualized percentage of the average stratum balance) [1/]

Stratum	CMAC Chincha	CMAC Pisco	CRAC Señor de Luren	CMAC Arequipa	CMAC Piura
	Small	Small	Medium	Large	Large
From US$ 0 to US$ 100	596.7%	238.3%	235.3%	254.9%	298.0%
From US$ 101 to US$ 500	57.8%	19.7%	16.1%	16.3%	22.5%
From US$ 501 to US$ 1,000	18.1%	8.0%	6.8%	6.3%	8.0%
From US$ 1,001 to US$ 5,000	11.6%	4.0%	4.8%	2.8%	3.4%
From US$ 5,001 to US$ 10,000	18.1%	2.9%	4.3%	1.6%	1.7%
From US$ 10,001 to US$ 50,000	1.5%	1.8%	9.4%	1.2%	1.1%
From US$ 50,001 to US$ 100,000	0.9%	1.6%	3.6%	1.6%	0.9%
More than US$ 100,000	1.2%		4.5%	1.1%	0.9%
Total	**21.2%**	**13.9%**	**12.0%**	**10.5%**	**11.8%**

Note: The high costs in stratum 5 at CMAC Chincha, as well as in stratum 6 at CRAC Señor de Luren, are due to the presence of a subtantial number of savings accounts in each stratum that are used by companies for payment and collection services and thus have a large number of transactions per account.
1/ FIE is not included because it had no data for accounts from US$ 0 to 100.
Source: The MFIs.

ures that could be introduced separately or together. These measures include: (i) paying interest only on accounts with balances above a certain level, (ii) establishing higher minimum deposit sizes and (iii) charging monthly or per-transaction fees on accounts with low balances. Employing the first of these measures, an MFI could, for example, eliminate interest on accounts of less than US$ 100. This would not create a major funding problem for the MFI nor would it be particularly burdensome for clients, because, as numerous studies have shown, SA depositors value safety, convenience and liquidity ahead of the interest rate paid.[42] However, the MFI would save little by introducing this measure because of the small amount deposited by these savers. For example, the total annual savings would be only US$ 19,120 at the four MFIs in Table 28.[43]

Likewise, it would be possible to introduce a minimum deposit requirement on savings accounts, for example, of US$ 100. Many MFIs might resist this measure because they identify with the social mission of providing access to the financial system for low-income savers. To evaluate this alternative, it would be useful to undertake a marginal analysis that compares the costs of all products with and without microsavings.[44] Cost reductions would be seen especially in the medium and long term as additional funds would be mobilized from other client segments, without the need for as much personnel and infrastructure at the MFI's branches.

Finally, MFIs could introduce monthly fees and/or charges for each transaction performed for accounts with balances of less than US$ 100. For example, the two largest MFIs in our sample could cover the costs of serving their microsavers with a charge US$ 1.30 per transaction or a monthly fee of US$ 2.60 per account. Although these charges are quite high, the fees needed to cover microsaver operating costs at the two smallest MFIs are even higher.

MFIs cite the following reasons for not charging fees on microsavings: (i) the MFI may assess the profitability of mobilizing deposits overall, rather than from a specific client segment; (ii) additional services, such as loans, may be sold to the microsavers at the same time (economies of scope); (iii) the income from introducing fees would not be substantial; and (iv) the MFI may consider the life cycle of microsavers, whose small deposits may grow over time and who may also require other services in the future such as loans.

Taken as a group, the proposed measures seek to reduce the subsidy given to microsavers, either by eliminating service or recovering additional costs. Most banks in Latin America have taken one or both of these routes. The advantages of this strategy for MFIs lie in rationalizing operating costs and reducing congestion at branches, thus providing better service to the remaining clients. The drawbacks of this strategy are that it abandons or reduces service to an entire market segment and loses the benefits described in the preceding paragraph.

[42] This is true for savings accounts but not for time deposits since the interest rate paid is much more important to TD clients.

[43] The amount each MFI would save depends on how much is mobilized in these small accounts and the interest rate that is paid.

[44] Some MFIs may have significant unused capacity, for example, in their computer systems or other parts of their infrastructure, or in branches where tellers perform few transactions. In these cases, microsavings may not increase operating costs very much and could help to productively employ this unused capacity. Such considerations can be explored in detail through marginal analysis. Nevertheless, it must also be kept in mind that at some point small savers could tax the MFI's infrastructure or cause congestion problems at the branches. MFIs might then have to make new investments and incur additional operating expenses to keep clients satisfied.

3. *Enlarging the microsaver client base,* in order to reach a critical mass that can be served more economically through technological and organizational innovations, as well as by offering a range of financial products to small savers to both facilitate transactions and fully recover the costs generated. FFP Prodem is following this strategy by introducing the following: a smart card with fingerprint identification, the widespread use of automated teller machines especially designed for low-income clients, a large network of branches in rural and urban areas, and a range of services to facilitate payments and transfers between accounts.[45] In order to recover some of the cost of these services, Prodem charges its clients an annual fee of US$ 7. This experience needs an in-depth evaluation in order to determine if it offers a profitable way to serve microsavers.

TOTAL COSTS OF THE DIFFERENT FUNDING SOURCES

As already mentioned, MFIs can choose from a variety of sources to meet their funding needs. The principal criteria that MFIs should use to guide their selection of the best mix of funding sources include the total cost of each source (financial plus operating cost), the risks associated with the use of each source and the MFI's medium-term strategy. This section examines the total cost of each funding source. Chapters 2 and 4 respectively analyze the risks associated with each source and the most appropriate medium-term strategy for an MFI.

The calculation of the total cost of each funding source takes account of the following considerations. First, substantial personnel and infrastructure are required to mobilize deposits. Hence, account must be taken of these significant operating costs as well as the also significant financial costs of deposit mobilization in calculating total deposit costs. Second, the operating costs involved in borrowing are relatively small compared to the financial cost, particularly when an MFI borrows more than once from the same source. Therefore, in order to simplify the analysis, it is assumed that borrowing involves only financial costs. Third, issuing bonds involves appreciable operating costs, including the fees paid to the investment bank, attorneys, rating agency, stock exchange, capital markets regulatory authority and brokerage houses. Thus, the total cost of bond issues includes operating as well as financial costs. Finally, while Latin America has no experience with public offerings of MFI stock, there have been numerous private placements. The operating costs associated with these private stock placements have been highly variable, but sometimes very low. MFIs have also issued stock as a means to reinvest profits, a transaction that has relatively insignificant operating costs. As a result of these considerations, we assume that the total cost to the MFI of issuing stock can be reasonably approximated by the MFI's return on equity (ROE).[46]

Using the assumptions given in the previous paragraph, Table 30 compares the total costs of the four funding sources. This comparison yields the following conclusions:

[45] For a discussion of Prodem's experience, see Bazoberry (2003).

[46] The following example illustrates why ROE may be reasonaably taken as the cost of stock issue. Consider an MFI which has an ROE of 20 percent and whose stock is entirely owned by a single individual. This person would like to increase the MFI's capital (equity) by 10 percent with a new issue of shares. Assume that this new capital is equally as productive as the existing capital, so that the ROE will remain at 20 percent. Solely for purposes of simplifying the exposition, also assume that each year all profits are distributed to the shareholders. If the current owner sells the new shares to another person instead of investing his own money to buy them, that other person will earn 20 percent on his investment. That is, the cost of issuing shares is equal to the ROE, because the earnings are distributed among all the shareholders and each shareholder earns $.20 for each $1 invested. The great unknown in this calculation is whether the ROE will remain unchanged in the medium term. It may be that in some competitive markets the ROE will tend to fall with increasing competitive pressures. In other cases, the MFI may achieve substantial productivity increases (as many MFIs have done in the past), which will tend to increase the ROE and therefore the cost of stock issue.

Table 30
Total Costs of the Four MFI Funding Sources
(percent per annum)

MFI	Type	Date	Deposits			Borrowing	Capital	Bonds
			Financial Cost	Operating Cost	Total Cost	Financial Cost 1/	ROE 2/	Total Cost
CMAC Pisco	Small	May-04	11.6%	7.9%	19.5%	13.0%	4.1%	
CMAC Chincha	Small	May-04	14.7%	7.6%	22.3%	12.1%	31.5%	
CRAC Señor de Luren	Medium	Apr-04	6.6%	7.1%	13.7%	6.5%	17.8%	
Procredit*	Medium	Jan-04	6.9%	1.5%	8.4%			
CRAC Nor Perú*	Medium	Sep-03	4.8%	5.0%	9.7%	5.7%	21.1%	
Finamérica*	Medium	Jul-04	12.5%	1.8%	14.3%	5.7%	4.6%	
FPP FIE	Medium	Jun-04	5.2%	5.0%	10.2%	5.1%	23.6%	
FFP Caja Los Andes*	Medium	Jun-04	3.9%	4.1%	8.0%	4.3%	14.3%	
CMAC Arequipa	Large	Jun-04	7.7%	4.4%	12.1%	13.0%	29.1%	
CMAC Piura	Large	Jun-04	8.1%	3.6%	11.7%	10.6%	32.6%	
Compartamos 3/	Large	Jul-04						9.4%
Mibanco 4/	Large							9.1%
Average			**8.2%**	**4.8%**	**13.0%**	**8.4%**	**19.8%**	**9.2%**

Note: Blank cells indicate information not available.
*ABC costing is used instead of cost assignment.
1/ It is assumed that borrowing has negligible operating costs.
2/ ROE is used as the cost of capital of an MFI since this is what would be paid if all profits were distributed.
3/ Cost of July 2004 bond issue, which consists of annual financial costs of 8.61 percent plus annual operating costs of 0.81 percent.
4/ Weighted average annual financial cost of 8.25 percent for the three Mibanco bond issues plus 0.8 percent annual operating costs, estimated based on information supplied by the capital markets.
Source: The MFIs.

Deposits. Comparing small and large MFIs, there is an inverse relationship between total cost and MFI size. The small MFIs—CMACs Pisco and Chincha—have high total costs (19.5 and 22.3 percent, respectively) as a result of the high interest rates they must pay to attract clients and the elevated operating costs they face as a result of their small scale of operations. By contrast, the large MFIs—CMACs Arequipa and Piura—have lower total costs: 12.1 and 11.7 percent, respectively. These lower total costs are the result of the lower deposit rates that these large MFIs can pay and still attract savings since they are more established in the market. They are also the result of economies of scale and other factors that reduce the operating costs of the large MFIs. Between these two extremes, the total costs for the six medium-size MFIs are rather heterogeneous; some have higher total costs than the large MFIs and some have lower total costs. Ultimately, the total cost paid by an MFI for its deposits depends, among other things, on the combination of SAs and TDs attracted (time deposits being generally less expensive than savings deposits), the percentage of deposits in foreign currency (since foreign currency deposits generally have lower interest rates than local currency deposits, as shown in Table 20), the average account size (because there are clear economies in managing larger accounts) and the size of the MFI (on account of scale economies and possibly economies based on a more established presence in the market). Given that an MFI's size is only one of these factors, it should not be surprising that the total cost of deposits is not strongly correlated with the size of the MFI.

Stock issue. With capital costs averaging 19.8 percent, capital is easily the most expensive

source of funds. Capital has a significantly higher cost than the other three alternatives because shareholders demand a high risk premium as compensation for their subordinated position vis-à-vis the MFI's other funders (see also Wisniwski, 1999b, p. 3) and because the MFIs are earning high ROEs.

Bond issue. Since none of the 10 MFIs with deposit costing studies has issued bonds, we turn to two MFIs with recent bond issues, Mibanco and Compartamos, to obtain data on the cost of this funding source. Table 30 shows the average annual cost of the three Mibanco bond issues and of Compartamos' fourth bond issue. The average annual *total* cost of Mibanco's three bond issues is 9.1 percent, consisting of a financial cost of 8.25 percent and operating costs of 0.8 percent. The annual total cost of Compartamos' fourth bond issue is 9.4 percent, with a financial cost of 8.61 percent and operating costs of 0.81 percent. Mibanco's experience could serve as a guide to the costs that CMACs Arequipa and Piura might expect should they decide to issue bonds, because the three MFIs are similar in size and risk rating.

A breakdown of the operating costs of Compartamos's fourth bond issue is shown in Table 31. On this US$ 16.6 million bond issue, total operating costs were US$ 671,000. These costs equal 4.05 percent of the total amount issued, for an average annual cost of 0.81 percent over the 5-year term of the bond. A substantial portion of these costs are fixed; therefore, a minimum size issue is needed in order to reasonably spread the costs.

Borrowing vs. deposits at small MFIs. At the small MFIs, such as CMACs Chincha and Pisco, borrowing is significantly less expensive than deposits. This reflects the high deposit rates that these MFIs must pay to attract savings and the high operating costs associated with deposit mobilization due to the lack of economies of scale.

Borrowing vs. deposits at medium-size MFIs. Borrowing at the medium-size MFIs is less expensive than mobilizing deposits, primarily because of the large amount of subsidized credit available to these MFIs. For example, FIE receives 46 percent of its borrowed funds from NAFIBO (a second-tier lender in Bolivia), for a term of five years and at an average annual interest rate of 4.4 percent. CRAC Señor de Luren obtains 47 percent of its borrowed funds from Agrobanco (a second-tier agricultural lender in Peru), for a term of 18 months and at an average annual interest rate of 1.9 percent.

Borrowing vs. deposits at large MFIs. The results are mixed for the large MFIs. On the one hand, deposits at CMAC Arequipa cost less overall (12.1 percent) than borrowing (13 percent), in part because of the economies of scale generated by the large volume of deposits. On the other hand, at CMAC Piura, borrowing is less costly (10.6 percent) than deposits (11.8 percent). This situation is probably the result of a significant amount of short-term borrowing from banks in local currency using liquid foreign currency collateral that the MFI has deposited in the bank (back-to-back operations). The MFI obtains this foreign currency collateral from the foreign currency deposits of local savers.

In conclusion, the evidence analyzed here confirms that, generally speaking, capital is the most expensive source of funds. The total costs of the remaining sources vary according to the size of the MFI. All funding sources are ranked by their total cost from least expensive to most expensive in Table 32.

The relationship between the cost of deposits and the cost of borrowing depends to a large extent on the amount of subsidized credit that is available to the MFI. This is particularly true for large MFIs since they usually achieve significant scale economies when attracting deposits. Therefore, changes in the policies of governments and donors with regard to subsidized borrowing may affect the ranking shown in Table 32.

However, funding sources are not chosen solely based on their costs. Other factors play an important role, such as the macroeconomic context, the MFI's maturity and the strategies it adopts to manage its risks, as will be seen in the next chapter.

Table 31
Operating Costs of Compartamos' Fourth Bond Issue

Operating Cost Component	Amount (US$)	Percentage of Total Operating Costs
1. Investment bank (Citigroup/Banamex) fees, equal to 1.5% of the US$ 16.6 million issued, plus 15% value added tax	285,995	43%
2. IFC guarantee fee	146,675	22%
3. Legal expenses	76,265	11%
4. Rating agency expenses	54,014	8%
5. Registration in national securities registry	35,602	5%
6. Fees to bondholders' representatives	31,108	5%
7. Mexican Stock Exchange listing and maintenance fees	21,859	3%
8. Auditing expenses	13,089	2%
9. Other expenses (CNBV study and processing, notices of public offering, promotion)	6,637	1%
Total	**671,244**	**100%**

Source: Compartamos.

Table 32
Ranking of Funding Sources by Total Cost
(from least to most expensive)

Large MFIs	Small and Medium-Size MFIs
1. Bonds	1. Borrowing
2. Deposits and borrowing	2. Deposits
3. Capital – shares	3. Capital – shares

Note: It is assumed that small and many medium-size MFIs cannot issue bonds because they do have the minimum volume required to undertake an issue and because the market would not be receptive to bond issues from these MFIs.

4. The Optimal Mix of Funding Sources for MFIs

Chapter 1 showed that deposit mobilization is currently the dominant funding source for regulated MFIs in Latin America. Chapter 3 examined the total costs of the different funding sources and found that for large MFIs, mobilizing deposits and borrowing are generally the most economical alternatives given that few MFIs can issue bonds. For small MFIs, borrowing is the least costly source of funds. Chapter 2 analyzed the characteristics and risks of the different MFI funding sources.

Within this context, it is important to recognize that mobilizing deposits has allowed many MFIs to offer a new financial service to their clients and move beyond their previous focus on microcredit. Deposit mobilization has also reduced financial costs, diversified MFI funding sources and facilitated increases in leverage. Moreover, increasing reliance on deposit mobilization has made MFI funding more stable because deposits both atomize the MFI's liabilities and reduce the MFI's dependence on the sometimes unpredictable decisions of governments and donors. With the influence of second-tier institutions and donors reduced, the management of MFIs has also become more autonomous.

While deposits have become the principal source of liabilities for MFIs in Latin America during the last several years, deposits and borrowing are oftentimes complementary funding sources at many institutions. Because of the longer terms of much of the borrowed funds, they help solve problems of term mismatch and facilitate medium-term financial planning. Only in situations of excess liquidity do deposits and borrowing become substitutes for one another instead of complements.

In addition to these tangible benefits, mobilizing deposits creates other benefits for MFIs. These benefits include an enhanced public image, the greater willingness of borrowers to repay loans to an institution that obtains its funds from the local community, and the greater levels of responsibility and prudence which are likely to be exercised in the management of an intermediary that depends on public confidence.

As analyzed in greater detail in Chapter 3, mobilizing deposits results in high operating costs, particularly when deposits take the form of small savings accounts. Therefore, many MFIs focus most of their efforts on attracting time deposits, even though they have higher financial costs. On the other hand, time deposits have significantly lower operating costs, help to mitigate term mismatch risks, make financial management more predictable and facilitate liquidity management.

However, depending primarily on deposits for funding also carries risks. First, it increases liquidity risks, particularly in Latin America where financial markets are not very deep. Second, an excessive reliance on large, institutional depositors may produce concentration risks and weaken incentives to attract smaller deposits from the general public. Finally, mobilizing deposits has integrated MFIs more closely into the local financial system, which in times of crisis and/or external shocks may increase uncertainty and volatility. This happened to the MFIs in Bolivia during the crises there in 2003-2004.

Nevertheless, even at small MFIs, the fact that borrowing can be done at a lower total cost should not lead the institutions to prioritize borrowing and de-emphasize deposit mobilization. In choosing between these two funding sources, it is important to consider a number of other factors:

- The amount an MFI can borrow from each lender is typically restricted by loan limits these lenders place on the amount of credit they are willing to extend to any single borrower. This makes it more difficult for MFIs to increase their overall liabilities. Many second-tier institutions set limits of one to three times the MFI's capital. Commercial banks often impose stringent collateral requirements in addition to setting loan limits.

- A significant amount of borrowing concentrates funding risks and may make the MFI overly reliant on governments and donors, which are the main sources of borrowed funds for the microfinance industry. As a result, liquidity management and the ability to do medium-range planning may be adversely affected. Moreover, borrowing from governments and donors may create at least two other types of negative impacts for the MFI. First, a culture and expertise may be built within the MFI of courting donors and second-tier institutions rather than providing good service to depositors, undercutting efficient, client-oriented management. Second, in some cases, the MFI may be forced to serve clients or sectors that are unprofitable for the institution as a condition for receiving the loan.

- Deposits atomize liability risks and provide the MFI with greater stability.

- Increasing the volume of deposits may reduce their operating costs because it is possible to spread fixed costs over a greater volume of funds and generate economies of scale.[47]

- Attracting deposits has several other significant advantages. First, it permits the MFI to know its clients better by examining their deposit history, thus reducing the cost of analyzing loan applications (economies of scope). Second, greater integration into the local and regional economy helps to build loyalty among the MFI's clients. Third, deposit mobilization promotes greater prudence in MFI governance and management since MFI executives are held accountable by local depositors who continually monitor performance. Fourth, having a significant clientele of savers facilitates the development and/or cross-selling of other financial products—such as loans, money transfers, debit and credit cards and microinsurance—thus generating revenues that may be used to offset the operating costs of deposits while also providing clients with better service.

For these reasons, the relationship between borrowing and deposits is characterized more by complementarity than substitution. In the medium term, it is desirable for the most important source of funding to be deposits, supplemented by borrowing in order to lengthen the average maturity of the MFI's liabilities and perhaps reduce average funding costs. Subsequently, these two sources could be supplemented by access to local capital markets, with the MFI issuing bonds. Table 33 summarizes the advantages and disadvantages of MFI bond issues.

The final source of MFI finance, stock shares, have the advantage of being the most stable funding source, of absorbing risks better than any other funding source and of offering the possibility of being leveraged with liabilities. Moreover, new shareholders may provide expertise, contribute funds in moments of crisis, improve the reputation and credit rating of the MFI and facilitate access to technical assistance and lines of credit. The disadvantages of stock issue include the high cost of the capital attracted and the significant cost of generating the information that must be provided to investors. Moreover, new shareholders may generate conflicts over governance of the MFI, particularly if they do not share the MFI's social mission or if they require special exit strategies.

Table 34 presents the major pros and cons of the different funding sources.

THE FINANCIAL ENVIRONMENT AND ITS IMPACT ON FUNDING DECISIONS

When choosing its funding mix, it is important for an MFI to consider the financial and economic environment within which it operates. The MFI should try to take advantage of opportunities and avoid or mitigate potential problems.

[47] A similar evolution toward lower operating costs is also seen in borrowing and bond issues, though less intensely, given that the operating costs of these latter funding sources are much lower to begin with.

Table 33
Favorable and Unfavorable Aspects of MFI Bond Issues

Favorable Aspects	Unfavorable Aspects
• Extends terms of liabilities • When issued in local currency, the result is a better currency match with the MFI loan portfolio • Reduces the cost of liabilities in the longer run • Enables construction of a yield curve for the MFI's liabilities, which provides guidance for setting interest rates on the MFI's time deposits • Improves the MFI's image	• Generates refinancing risk, given that when the bond matures, money may be tight in the national market. In this case, the MFI may have to pay much higher interest rates or may be completely unable to place new bonds. • Tendency of investors to follow herd behavior

Table 34
Major Advantages and Disadvantages of the Differe nt Funding Sources

Funding Source	Advantages	Disadvantages
Savings accounts	- Atomize liability risks and provide greater stability - Lower financial costs	- Higher operating costs, especially for microsavings - Greater demands on liquidity management and internal controls
Time deposits	- Enable the MFI to mobilize significant volumes of funds - Lower operating costs than savings accounts - Can enable better matching of terms and currencies	- High financial costs - Liquidity risk due to greater concentration - Renewal risk
Institutional deposits	- Can be a significant source of funds - Low operating costs	- High financial costs - Liquidity risk due to greater concentration - Renewal risk - Tendency of investors to follow herd behavior
Subsidized borrowing	- Low financial cost - May have longer terms	- MFI may be required to serve clients or sectors that are unprofitable for it; potential for interest rate ceilings to be imposed on these loans - Instability and political influence - MFI management may focus on pleasing donors and governments instead of providing good service to depositors - Rationing of funds - High information and reporting costs
Commercial borrowing	- May be a significant source of funds - Low operating costs	- Higher financial costs - Stringent collateral requirements - Clear lending limits, overall and by lender
Bonds	- Extend terms of liabilities - May reduce financial costs	- Significant refinancing risk - Tendency of investors to follow herd behavior
Stock	- Provides the most stable funds, oriented towards covering risks - Can be leveraged with liabilities - New shareholders may provide expertise, contribute funds in moments of crisis, improve the reputation and credit rating of the MFI and facilitate access to technical assistance and lines of credit	- High cost of the capital attracted - Significant cost of generating information that must be provided to investors - New shareholders may create conflicts in MFI governance if they do not share the MFI's social mission or if they require special exit strategies

Financial liberalization and macroeconomic stability create favorable conditions for MFIs to attract deposits and access capital markets. Conversely, financial repression, macroeconomic instability and high inflation rates negatively impact MFI efforts to attract deposits and access capital markets.

Public sector interventions in the financial system may create significant distortions that affect the development of microfinance. For example, Agrobanco, a public institution in Peru that combines first tier and second tier functions, directs subsidized credit to MFIs for onlending to the agricultural sector. In this way, it attempts to compensate for the impact of the government's financial recovery program for agriculture. More generally, the entry of public development banks into microfinance may adversely affect MFI development because not all market participants face the same conditions. For example, development banks typically have privileged access to public sector budgetary resources and can often operate without regard to many of the commercial realities faced by MFIs.

The availability of subsidized lines of credit from the government should not lead to blind acceptance of these funds by MFIs. Although such funds may carry low interest rates, it is important to take account of the obligations imposed by their use. For example, these obligations may include having to provide loans to certain regions or types of clients that are not necessarily profitable for the MFI to serve. In addition, interest rate ceilings and other conditions favorable to the MFI's borrowers may be established, which may have negative impacts on the rest of the MFI's loan portfolio. If subsidized credit is used, the MFI should make sure that these funds are not an important share of its overall liabilities. Otherwise, the MFI could become overly dependent on unstable funds and be subject to political influence, both of which may limit the MFI's ability to properly manage its operations.

MFI SIZE AND LIABILITY STRUCTURE

It is often assumed that the liabilities of larger and more mature MFIs are more diversified and that these institutions fund themselves primarily with deposits. It is often further assumed that smaller MFIs rely mostly on borrowing, particularly from donors and governments.

Recent data on the 46 MFIs that mobilize deposits in the nine countries examined in Chapter 1 clearly show that MFI size is not strongly correlated with liability structure in these ways (Table 35). Numerous small MFIs (with assets of less than US$ 10 million) have a high share of deposits in overall liabilities, as shown by the cases of CRACs Cajamarca (72.5 percent), Los Andes (77.3 percent), Chavín (83.5 percent), Cruz de Chalpón (85.1 percent) and Libertadores (87.4 percent), as well as CMACs Pisco (68.0 percent) and Chincha (74.9 percent). At the same time, large MFIs (with assets over US$ 100 million) have similar ratios of deposits to liabilities (with a similar range of variation), as shown by the cases of Mibanco (61.8 percent), Bancosol (71.5 percent), CMAC Piura (73.3 percent), Banco Solidario (76.9 percent), Banco del Trabajo (79.5 percent) and CMAC Arequipa (90.5 percent).

Further analysis of the Table 35 data shows a weak positive correlation ($r = 0.10$) between MFI assets and the share of deposits in liabilities, instead of the strong positive correlation suggested by the hypothesized relationship. In addition, there is a weak negative correlation ($r = -0.14$) between MFI assets and the share of borrowing in liabilities, instead of a strong negative correlation.

Legal, regulatory and institutional factors are very important in determining the structure of liabilities at many MFIs, as shown by the following examples:

Table 35
Liability Structure of 46 Latin American MFIs (December 31, 2003)

MFI	Country	Assets (US$ millions)	Deposits / Liabilities (percent)	Borrowing / Liabilities (percent)
Banco del Trabajo	Peru	250.4	79.5	13.3
Banco Solidario	Ecuador	181.6	76.9	18.9
CMAC Piura	Peru	142.2	73.3	24.1
Mibanco	Peru	139.0	61.8	16.0
CMAC Arequipa	Peru	122.4	90.5	4.7
Bancosol	Bolivia	114.6	71.5	23.7
Caja Los Andes	Bolivia	98.6	54.1	36.7
CMAC Trujillo	Peru	94.8	70.4	26.1
Financiera Calpiá	El Salvador	85.3	49.3	47.7
Prodem	Bolivia	77.8	68.9	24.8
CMAC Cusco	Peru	54.2	92.6	3.7
CMAC Sullana	Peru	52.6	68.2	27.3
CMAC Huancayo	Peru	46.7	88.8	5.5
FIE	Bolivia	46.0	50.1	42.6
CMAC Tacna	Peru	37.2	73.1	24.2
Visión	Paraguay	36.8	80.2	11.1
Financiera Familiar	Paraguay	34.5	95.1	1.2
CMCP Lima	Peru	31.4	41.2	50.2
Confía	Nicaragua	31.0	44.2	52.2
CRAC San Martín	Peru	30.4	77.3	22.0
Financiera Ecuatorial	Ecuador	26.1	12.8	83.8
CRAC Nor Perú	Peru	23.7	78.3	19.5
Findesa	Nicaragua	23.2	2.3	91.0
CMAC Ica	Peru	22.5	84.3	9.6
Finamérica	Colombia	22.4	70.8	20.2
Interfisa	Paraguay	21.8	93.9	0.0
CRAC Cajasur	Peru	20.8	59.2	38.0
CRAC Señor de Luren	Peru	20.7	61.0	36.3
CMAC Maynas	Peru	20.6	77.8	16.9
CMAC Paita	Peru	20.0	67.8	28.2
Compartir	Colombia	19.7	35.6	60.3
CMAC Del Santa	Peru	18.9	72.1	21.7
Fincomún	Mexico	16.4	6.0	86.6
El Comercio Financiera	Paraguay	12.0	91.4	0.0
Ecofuturo	Bolivia	11.6	71.6	26.9
CRAC Quillabamba	Peru	10.3	81.5	16.2
Finsol	Honduras	9.7	42.1	37.4
CRAC Cruz de Chalpón	Peru	7.8	85.1	12.0
CRAC Profinanzas	Peru	7.5	62.2	36.5
CRAC Libertadores	Peru	7.3	87.4	7.7
CMAC Chincha	Peru	5.2	74.9	19.9
CRAC Cajamarca	Peru	5.1	72.5	21.7
CMAC Pisco	Peru	5.0	68.0	25.5
CRAC Prymera	Peru	4.9	36.2	60.5
CRAC Chavín	Peru	3.0	83.5	12.6
CRAC Los Andes	Peru	1.9	77.3	17.6
Average		**45.1**	**66.5**	**27.4**

Source: The banking superintendencies.

- In Mexico, SOFOLs (limited purpose finance companies), such as Compartamos, are not permitted to mobilize deposits, but can borrow and issue bonds. This explains Compartamos' interest in developing an active bond issue program.

- In Peru, the General Financial System Law does not permit EDPYMEs to mobilize deposits or issue bonds, which means that these MFIs must fund themselves largely through borrowing. In the case of the CMACs and CRACs, neither of these types of MFIs is permitted to issue bonds. In order to diversify their funding sources, all three types of MFI are attempting to change the law.

- In Colombia, the CFCs (commercial financing companies), such as Finamérica and Compartir, are not permitted to offer savings accounts (only time deposits), which limits their ability to mobilize deposits.

- The age of the deposit mobilization program may also play an important role in explaining an MFI's liability structure. Of the 46 MFIs in Table 35, four were capturing deposits in 2003 but not in 2000. The four MFIs with new savings programs are Findesa (Nicaragua), Fincomún (Mexico), Financiera Ecuatorial (Ecuador) and Financiera Calpiá (El Salvador). At the end of 2003, their deposits/liabilities ratios were 2, 6, 13 and 49 percent, respectively, well below the average for the 46 MFIs (66.5 percent).

OPTIMAL MIX OF FUNDING SOURCES

For MFIs, as for other financial institutions, the principle of diversification—with due consideration given to diversification's impact on costs—is the axis around which the institution's funding strategy should be built. Adherence to this principle not only means that a variety of different funding sources should be used, within the legal and market constraints faced by each MFI, but also that within each funding source a variety of different segments of depositors and other providers of funds should be accessed as well.

Although the evidence in Chapter 3 was inconclusive, there are likely to be economies of scale in deposit mobilization, which would enable MFIs to reduce unit operating costs as they serve greater numbers of savers. Further cost economies would be possible if microsavings were to be rationalized. At the same time, it is likely that substantial further growth would permit MFIs to reduce the interest rate premium they must pay on deposits in order to attract savers from banks. If MFIs can continue to reduce the operating and financial costs of attracting deposits in some or all of these ways, they should strongly consider making a fundamental decision: to make deposits their major funding source, aiming to lower the costs of deposit mobilization over time and reinforce their competitive advantage. As will be seen below, in choosing a funding strategy, an MFI must also consider its degree of maturity and the financial and economic environment in which it operates.

Making deposits the central funding source does not mean that MFIs should overlook the important complementary role of borrowing or access to capital markets. The best mix of funding sources depends on the MFI's maturity level (how solidly sustainable the MFI is and how well-developed its deposit-taking and loan operations are) and the characteristics of the country where the MFI is located. These characteristics consist primarily of the country's macroeconomic and political stability, as well as the level of development of its financial and capital markets. Table 36 combines both criteria and presents five scenarios, each of which calls for a different funding strategy. These five strategies are intended to provide general guidelines for MFIs on the best mix of funding sources. The five scenarios are as follows.

In scenario 1, the MFI operates within a stable macroeconomic and political environment, which it expects to last over the medium term. The MFI has achieved at least some level of sustainability but is not among the industry leaders.

Table 36. Funding Strategies

	Characteristics of the MFI	
Characteristics of the Economic and Political Environment	**Maturing MFIs**	**Mature MFIs**
Stable in the medium term	Scenario 1	Scenario 4 eventually developing into Scenario 5 in the long run
Unstable	Scenario 2	Scenario 3

Although the MFI is well along in developing its lending operations, its efforts to mobilize deposits are much more incipient. The EDPYMEs of Peru are good examples of MFIs in this scenario.

The best funding strategy for scenario 1 is to try to maximize the diversification of funding sources, supplementing the MFI's loans from second-tier facilities with borrowing from donors and domestic and foreign commercial lenders, provided that the costs are reasonable. MFIs that obtain authorization to mobilize deposits should undertake this task progressively. Especially at the beginning, they should give highest priority to time deposits because of their lower operating costs and the more limited demands they make on the MFI's information systems and other infrastructure. Issuing bonds would only be possible in the medium term, after the MFI has matured and fully established its financial viability. The MFI should progressively increase its leverage and expand its capital base through a continuous policy of reinvesting most or all of its profits and adding new shareholders through private placements, especially if these shareholders can provide technical assistance and facilitate access to funding.

In scenario 2, the maturing MFI operates within an unstable macroeconomic and/or political environment. In this scenario, it is advisable for the MFI to reduce the term of its lending, limit its currency and term mismatches, reduce its leverage and seek externally borrowed funds since these are not so affected by domestic liquidity constraints. MFIs that obtain authorization to mobilize deposits should undertake this task with even more caution than in scenario 1, at least until the level of macroeconomic instability is reduced. The remaining aspects of the MFI's funding strategy are similar to those discussed in scenario 1.

In scenario 3, the MFI is clearly sustainable and has efficient lending and deposit-taking operations. However, the macroeconomic and/or political environment is expected to remain unstable over the medium term. The MFI's funding strategy should include the following points:

- While deposits (including institutional deposits) should be used as the MFI's basic funding source, they should not represent more than 65-75 percent of total liabilities. The use of deposits should be limited because the unstable environment may result in: (i) important fluctuations over time in the availability of deposits (increasing liquidity and other risks for the MFI) and (ii) deposits being a less reliable source of funding growth, given the negative impact of macroeconomic instability on the growth of deposits.

- Borrowing operations should be strengthened and diversified as much as possible in order to improve term matching and prepare for potential liquidity problems created by the withdrawal of deposits.

- It would not be advisable to issue bonds in the local market due to the high interest rates and limited terms that accompany instability.

- The MFI's leverage should be reduced because of the much greater risks brought on by the instability. The MFI should also strengthen its capital accounts through a consistent policy of reinvesting profits and by adding new shareholders through private placements. Foreign shareholders may be especially advantageous since they can make additional capital contributions without the constraints imposed by unstable local conditions.

In scenario 4, the MFI is clearly sustainable and operates in a stable macroeconomic and political environment that is expected to last through the medium term. The following points should guide its funding strategy:

- The MFI should adopt deposits as its basic source of funding. Deposits may come to represent as much as 90 percent or more of the MFI's liabilities if the financial and operating costs associated with deposit mobilization can be reduced sufficiently. At the same time, the MFI should seek to atomize its deposit base, limiting the share of total deposits provided by institutional clients—such as mutual funds, pension funds and insurance companies—in order to control the risks associated with large withdrawals. Companies may not provide a significant share of MFI deposits, given that these clients often require financial services (including checking accounts and foreign trade transactions) that MFIs typically do not provide.

- The MFI should increase and diversify its borrowing and consider issuing bonds—in order to have sufficient liquidity reserves, improve term matching and be able to launch new products that require financing over the medium term. The MFI should choose between borrowing and bond issuance considering the advantages of each source in terms of cost, maturity and diversification. Some experts believe that bonds should not represent more than 15 percent of a deposit-mobilizing MFI's total liabilities. This limit would prevent the MFI from an overdependence on small and shallow capital markets, which could expose it to excessive refinancing risks.

- The MFI should increase its leverage to take advantage of the opportunities available in this environment. To support its growth, the MFI should also increase its capital through an active reinvestment policy, incorporation of new shareholders through private placements of new shares and, subsequently perhaps, through public offerings of shares. The possibility that more intense competition will reduce financial margins and, therefore, the MFI's profitability has to be considered. This would make it necessary for the MFI to rely more on new share issues, rather than the reinvestment of profits, in order to increase capital.

Scenario 5 takes scenario 4 to a much higher level of development. Here, the MFI becomes very successful and diversified and has a significant market share, all in the context of continued macroeconomic and political stability. An example of this scenario is the Spanish savings banks in recent decades. Highly atomized deposits of several kinds (including checking accounts) constitute the funding base of these banks. In many cases, total deposits exceed loans. The Spanish savings banks have also developed broad relationships with the capital markets, both placing and purchasing securities of various types based on their investment and funding needs.

5. Best Practices

The last section of Chapter 4 made recommendations on the best mix of funding sources, considering both the characteristics of the MFI and the environment in which it operates.

This chapter presents best practices in using each of the funding sources. In particular, the first four sections discuss best practices in mobilizing deposits, borrowing, issuing bonds and issuing stock, respectively. The fifth section goes on to examine best funding practices in times of crisis. Finally, the sixth section presents implications of all these best practices for donors and governments.

Chapter 2 of this study examines the different MFI funding sources in detail. Those discussions are the primary (though not only) source for the best practice recommendations made in the next four sections.

DEPOSITS

MFIs can use a **variety of products** to mobilize deposits. As discussed in greater detail in Chapters 2 and 3, the following can be established as best practices in choosing among these products:

Best Practices	**Comments**
Give priority to mobilizing time deposits (TDs).	- TDs generally have lower total costs and greater short-term stability. - TDs facilitate matching of assets and liabilities, and may attract significant numbers of middle-class depositors. - It is important to atomize time deposits by mobilizing a critical mass of them, thus avoiding over-reliance on a small number of institutional or other large depositors.
Do not give priority to checking accounts.	- Checking accounts have high operating costs. - They require a powerful, interconnected information system. - Microenterprises do not demand the product (but small and medium-size enterprises *do* demand it).
An MFI that has just started to mobilize deposits should give priority to time deposits and later introduce savings accounts.	- Time deposits are a much simpler product that generates fewer transactions and has lower operating costs per peso mobilized. - Time deposits have greater short-term stability; once this client base has been developed, the MFI can progressively introduce savings accounts, which will attract far more clients.
Study in greater depth the issue of microsavings, which is created by a large number of depositors with low balances (e.g., US$ 100 or less) who provide only a small fraction of the funds mobilized but carry out many transactions, thus generating high operating costs.	Consider adopting one of the following alternatives: - Collect fees and/or increase the minimum account size in order to *fully* cover the cost of services provided. - Develop a progressive policy to *reduce* microsavings through fees and/or higher minimum account sizes. - Massify the number of microsavers in order to generate scale economies.

Savers have widely differing characteristics, making **client segmentation** very important. MFI experience leads to the following recommendations:

Best Practices	Comments
Analyze savings clients and determine the most important segments, considering variables such as amount and purpose of the deposit, age and gender of the depositors, and other factors.	Segmentation allows the MFI to differentiate service levels and marketing activities, adapting them to the requirements of each group.
Analyze depositor databases.	Many MFIs do not systematically examine their own databases, thus losing opportunities to improve their savings products and cross-sell other products.

MFIs that mobilize deposits must adopt a series of measures in the areas of **organization and management.** Best practices in these areas include the following:

Best Practices	Comments
Develop detailed annual savings mobilization plans, with specific goals by branch and product; provide the budgetary resources required to reach these goals.	- These savings mobilization plans should be drawn up with the involvement of central management and the branches. - The creation of savings mobilization plans should be part of the MFI's strategic planning exercise, within which the MFI should also establish a medium-term funding plan.
- Evaluate the implementation of the savings mobilization plan at least once every month and take corrective actions as required. - Establish systematic comparisons among branches.	Encourage staff to identify with the MFI's goals and contribute to their achievement.
Periodically review interest rates, taking account of market trends and the MFI's needs. Give some flexibility to branch managers to change rates within pre-approved ranges.	To provide the MFI greater flexibility to respond to changing market conditions, it may be useful for management or an executive committee of the board to have the authority to modify interest rates, duly reporting all changes to the full board of directors.
Differentiate interest rates by region and client segment.	This allows the MFI to fine-tune its strategy for penetrating different markets and segments, taking account of variations in competitive conditions.
Consider creating pay incentives for branch managers and officers who deal with depositors.	Pay incentives may reinforce the motivation of key personnel to reach the MFI's goals.
Reinforce internal controls.	Internal controls help avoid fraud linked to deposits (such as occurred, for example, at one MFI where staff created phantom loans using time deposits as collateral, and then appropriated these deposits without authorization from the affected clients).

Chapter 1 provided ample evidence that MFIs can meet the competition from banks and increase their **share of the deposit market.** Internal factors that explain their success include the following:

Best Practices	**Comments**
Efficient and personalized service to clients.	In many cases, banks provide their depositers, especially those with small and medium-size accounts, with service that is slow and impersonal.
High interest rates and attractive conditions, transparently offered.	- MFIs often pay higher deposit rates than banks and do not charge fees. - Bank charges often lack transparency.
Suitable location of branches.	It is very important for an MFI to set up a branch network that meets the needs of its diverse group of savers.
An effective information system linked to the branches.	Effective information systems facilitate good client service and management controls, and help to reduce operating costs.
Effective advertising campaigns, including the judicious use of raffles.	Advertising campaigns allow MFIs to strengthen their image and disseminate information about the advantages of their deposit products.

For MFIs, deposit mobilization generates liquidity, term mismatch, interest rate and exchange rate (also called foreign currency) risks. These market risks should be appropriately identified and managed.

Liquidity and Term Mismatch Risks

Best Practices	Comments
Set up an asset-liability committee, made up of the principal managers of the MFI.	- This committee should identify liquidity and term mismatch risks and design measures to mitigate them. - It should carry out a similar process for interest rate and exchange rate risks.
Draw up an annual risk management plan, including a primary cash flow analysis that is updated at least monthly.	An annual risk management plan makes it easier to anticipate the need for different kinds of funding (differentiated, for example, by term and currency) and program their acquisition.
Establish and frequently update a gap model of assets and liabilities by maturity.	A gap model allows MFIs to identify those time periods when there may be asset/liability imbalances and design ways to deal with them.
Compute liquidity ratios daily; these ratios may be stricter than those set by the banking superintendency.	Such ratios serve as an early warning system that the MFI's liquidity is becoming impaired.
Design contingency plans to deal with situations of deteriorating liquidity, as indicated by the early warning system.	With such contingency plans, an MFI can implement a well-considered set of measures to improve its liquidity situation.
Maintain adequate liquidity reserves.	These reserves should take into account current economic conditions and the seasonal and regional needs of the areas served by the MFI.
Perform stress tests.	- These tests often assume the simultaneous occurence of early withdrawals of time deposits, heavier-than-normal withdrawals from savings accounts and a deterioration in the rate of loan recoveries. - The results are compared with liquidity reserves and the contingency plan. - These tests allow MFIs to identify their main points of vulnerability and develop preventive measures to deal with them.
Aim to structure the maturity distribution of time deposits to best suit the MFI's needs; create incentives for clients to lengthen time deposit maturities if needed.	If the macroeconomic situation so allows, an effective way to reduce term mismatch risk may be by promoting time deposits for terms greater than one year.

Interest Rate Risk

Best Practices	Comments
Use the gap model to assess this risk and update it often.	- The gap model allows an MFI to determine the magnitude of the mismatch between its liabilities with variable interest rates (such as savings accounts and short-term TDs) and its fixed-rate assets (such as loans). - When the degree of mismatch is relatively low, the risk may be absorbed by the MFI.
When the MFI depends on a significant amount of variable-rate liabilities (such as savings accounts and short-term TDs), it may be useful to try to match them against variable-rate loans and/or short-term, fixed-rate loans.	- Variable-rate loans are often granted to small and medium-size enterprises, typically with medium-term maturities. - Short-term loans create a significant inflow of monthly payments to the MFI, which can be relent at new interest rates.
More sophisticated MFIs may use duration analysis instead of the gap model.	Duration is the average (or effective) maturity of a stream of cash flows. Duration analysis is an ideal tool for evaluating interest rate risk because of the fact that the change in the present value of a stream of cash flows produced by a change in the interest rate is proportional to the duration of the stream of cash flows.

Exchange Rate Risk

Best Practices	Comments
To minimize exchange rate risk, MFIs should lend in local currency to clients producing nontraded outputs and lend in foreign currency to clients producing traded outputs. The currency composition of the MFI's liabilities should then be matched to that of the resulting loan portfolio and other assets.	It is not sufficient to simply match the currency composition of liabilities and assets; see Chapter 2.
Estimate a gap model of assets and liabilities by currency at least once a month, and set limits on the ratio of the net foreign exchange position to the MFI's capital.	MFIs should set limits on their net foreign exchange position based on the foreign exchange market outlook. The more volatile the exchange rate, the more conservative those limits should be and the more frequently the gap model should be updated.
If there is an excess supply of foreign currency deposits, the MFI may stimulate local currency deposits through higher rates and better conditions.	On the other hand, when economic stability permits, MFIs may opt for a deliberate policy of transforming foreign currency deposits into local currency loans.
Time deposits (and borrowed funds) in foreign currency may be used as collateral to obtain bank loans in local currency.	Such back-to-back operations allow exchange rate risk to be reduced.
Another way to reduce exchange rate risk is through hedging operations.	Here, the MFI accesses the local swap markets.

Mobilizing deposits means that MFIs must undertake marketing activities in order to understand clients' characteristics and needs, assess their level of satisfaction with the services provided, build client loyalty, use the communications media effectively and efficiently, and develop a brand name. The following is a brief summary of best practices in these areas.

Marketing

Best Practices	**Comments**
Set up a marketing department or unit.	The marketing unit's main tasks include analyzing clients and carrying out marketing campaigns, including the use of the communications media.
Perform marketing studies, both prior to the opening of a branch and at the overall MFI level.	These studies allow the MFI to better position itself in the marketplace, fine-tune its market penetration strategy and set appropriate growth targets.
Periodically carry out client satisfaction and quality-of-service studies.	- Hire specialized companies, which use questionnaires, focus groups and phantom clients. - Systematically analyze the comments in the MFI's suggestion box.
Implement programs to promote loyalty among the MFI's best clients.	Such programs should provide special services to these clients and offer them the best product terms and conditions possible.
Have a clear and efficient strategy for using the communications media.	The magnitude of the resources committed to the communications media makes it indispensable to periodically evaluate these campaigns.
Use promoters to help mobilize deposits.	A well-trained sales force may be an effective and economical means for promoting the MFI's time deposits.
Signboards and sponsorships are an efficient and economical alternative.	These strengthen the institution's image and disseminate its products among key client segments.
Carefully evaluate the use of raffles as a means to stimulate deposit mobilization.	This evaluation should consider the general environment in which raffles take place, the positioning of the MFI in its market and the need for funds, as well as the goals, costs and risks of the raffle programs.
Stimulate the development of a brand name.	Brand name development strengthens the MFI's image and clients' identification with the institution.
Systematically evaluate marketing campaigns.	Evaluations should include a cost/benefit analysis of marketing activities.

BORROWING

Even though borrowing is no longer the primary means by which Latin American MFIs fund themselves, it often still plays a significant role in liquidity management and in helping to avoid term and currency mismatches. In many cases, borrowing is a means to obtain longer-term funds than deposits can provide. Moreover, the availability of government and donor credit lines is not closely associated with local liquidity cycles. Thus, borrowed funds provide increased flexibility in the management of MFIs.

Best practices in the use of borrowed funds include the following:

- Borrowing from an increasingly diversified set of lenders, particularly to avoid excessive dependence on public second-tier institutions. Such institutions may reduce an MFI's managerial flexibility and subject it to political pressures that negatively impact its sustainability. MFIs should, and often do, agree to pay higher interest rates, at least in the short run, in order to establish relationships with new lenders.

- Avoiding government funds with conditions that place the sustainability of the MFI at risk, such as interest rate ceilings and directed credit schemes.

- Borrowing from donors, second-tier institutions and foreign commercial sources in order to extend the term of the MFI's liabilities and bring greater stability to its funding.

- Borrowing from domestic commercial sources in order to meet short-term funding needs and transform foreign currency deposits into loanable local currency funds through back-to-back operations.

- Using, as a liquidity reserve, balances not yet drawn down from already-approved borrowing as well as any other funds the MFI can obtain, especially from second-tier institutions, donors and other external sources since these have have low correlations with domestic liquidity cycles.

- Much medium- and long-term borrowing can only be done at variable interest rates. This variable-rate borrowing needs to be matched in some fashion on the asset side of the MFI's balance sheet. To do this, the MFI may, for example, choose to make variable interest rate loans, especially to small and medium-size businesses. Or, the MFI may stay with fixed-rate loans but shorten loan maturities, especially for its microenterprise clients. By shortening maturities, the MFI generates a large flow of loan repayments each month that can be relent at new interest rates.

BONDS

Latin American MFIs have limited experience with bonds as a source of funding, with only Mibanco and Compartamos having regularly issued them.

The MFI bond issues that have taken place so far permit us to identify some best practices. A central theme of many of these best practices is that MFIs should develop a strategy that is progressive in its approach to the bond markets and fosters the MFI's access to these markets in the medium term. The best practices pertaining to bond issues are as follows:

- In situations of macroeconomic instability, it is inadvisable to issue bonds because of the lack of liquidity in the economy and the resulting difficulty and cost of accessing the capital markets.

- An MFI typically would issue its first bonds for terms of 18 months to three years, in order to familiarize the market with the MFI's characteristics and risk profile. Once the MFI has established itself in the capital markets, terms may be extended to 5-7 years.

- If the aim is to attract institutional investors, a credit enhancement may be useful. This provides a partial guarantee of the principal

of the issue, which raises the bond's rating and facilitates its sale.

- If the first issues are directed at private clients, the involvement of a well-connected investment bank and a good risk rating may obviate the need for an external guarantee.

- The MFI should evaluate the merits of obtaining a higher risk rating for the bond to be issued, comparing the costs generated by a guarantee or securitization with the benefits of paying a lower interest rate.

- To facilitate bond placements, MFIs should engage an investment bank with a solid reputation and extensive relationships.

- The MFI should adequately diversify its funding sources, so as not to depend excessively on capital markets that are often shallow and may create significant refinancing risks for the MFI, particularly at times when there is little liquidity in domestic financial markets. Domestic liquidity shortages may stem from various causes such as tight monetary policy, recession or an external crisis. In view of all these considerations, some experts suggest that Latin American MFIs that can mobilize deposits should limit their bond funding to no more than 15 percent of their total liabilities.

- Bond issues should be preceded by two actions. First, MFIs should develop a medium-term strategic plan to define their total funding needs for the next several years and the contribution of each funding source to meeting those needs. If bonds are to be issued, the plan should give the main characteristics of the bonds and the optimum time to begin their placement. Second, all bond offerings should be carefully prepared, in order to minimize their financial and operating costs.

STOCK

In the area of stock issuance, the MFIs have limited themselves to issuing new stock in order to formalize the reinvestment of profits and, to a lesser extent, to carrying out private placements in order to add new shareholders. It is important to note that the decision to capitalize profits (transfer profits to the capital account) is irreversible, whereas retained earnings not yet capitalized can be distributed at any time. Thus, the decision to capitalize represents a major commitment by the current shareholders to the future of the MFI.

We derive the following best practices from the preceding discussions of stock issue:

- It is important to define the role of profit reinvestment and new share issuance within the framework of a medium-term strategic plan. Reinvesting profits and issuing new shares have the advantage of providing the most stable type of funds to the MFI, which are oriented towards covering risks and can be leveraged with liabilities. The disadvantages of issuing additional shares include the high cost of the capital thereby obtained and the significant costs of generating the information that must be provided to investors.

- MFIs that are considering adding new shareholders should thoroughly evaluate the different types of potential investors and the advantages and disadvantages of each. In addition to the pros and cons noted in the preceding paragraph, this evaluation should consider such positive aspects as the capacity of new shareholders to make additional capital contributions, their potential contributions to the governance and management of the MFI, the possibility that they may improve the institution's credit rating and reputation, and the potential for new shareholders to facilitate access to technical assistance and credit lines. The MFI must also weigh the possible drawbacks of incorporating new shareholders, such as the possibility that they may have different investment horizons and profit expectations, may not share the same vision of the MFI's mission, and may create conflicts in governance due to these and other factors.

- In general, MFIs should: (i) increase their leverage in good economic times and reduce

it in times of economic crisis and (ii) increase their leverage as they mature.

BEST PRACTICES IN TIMES OF CRISIS

Microfinance has only become a significant presence in Latin America since the 1990s. The recessions and banking crises experienced by many Latin American countries at the end of the 1990s, in addition to the recession and social and political instability experienced by Bolivia in 2003-2004, presented MFIs with serious challenges. The lessons learned from these events in the area of funding may prove useful to MFIs during future crises. Best practices include:

- Strengthen primary and secondary liquidity reserves in order to prepare for possible reductions in the amount of deposits held in the MFI.
- Reduce the MFI's leverage by increasing capital or reducing debt.
- Update and strengthen contingency plans designed to mitigate liquidity risks.
- Strengthen the functioning of the asset/liability committee.
- If inflation is accelerating and there are frequent changes in borrowing and lending rates, it is advisable for the board of directors to appoint an executive committee that is authorized to adjust interest rates. The committee then reports back to the full board.
- Reduce term and currency mismatches, given the greater volatility of the economy in times of crisis.
- Increase the amount of borrowing from second-tier institutions, donors and external sources since these funds are typically not affected by domestic liquidity constraints.
- Revise growth plans for deposits to adapt them to the new economic situation and bring interest rates in line with the market.
- Adopt a more restrictive loan policy, with lower portfolio growth rates, shorter loan terms and higher interest rates.
- Strengthen internal controls to counter higher credit risk and ensure prudent liquidity management.

IMPLICATIONS OF BEST PRACTICES FOR DONORS AND GOVERNMENTS

It is increasingly recognized that the central role of governments and donors in the development of the microfinance industry should not be the provision of funds to MFIs. Rather, governments and donors should focus on fostering conditions in which MFIs can obtain their own funding, especially from deposits. In this way, MFIs will be able to access the funds needed for their growth and the frontiers of the financial system will be expanded in a sustainable way.

An important part of fostering conditions favorable to MFIs' obtaining their own funding is the creation of an environment that is conducive to the development of the entire financial system. This includes the promotion of macroeconomic stability, flexible and open financial and capital markets, and a regulatory and supervisory framework that establishes appropriate and similar conditions for all financial intermediaries. It is inadvisable to single out MFIs for favorable treatment (for example, by lowering their reserve requirements or granting them exemptions from certain taxes, such as the financial transaction tax), since this would give the MFIs a spurious advantage vis-à-vis the banks and other intermediaries. Rather, experience has shown that well-managed MFIs can compete on an equal footing with banks in mobilizing deposits.

To help MFIs attract deposits, governments and donors can take the following initiatives:

- Provide technical assistance in such areas as: the design and implementation of new products, segmentation of clients, analysis and use of the MFI's depositor databases, strengthening marketing activities, and improving information systems. The technical assistance operation should be designed for the medium-term since significant results in this area are generally achieved only after a lengthy effort.

- For MFIs that capture savings, encourage borrowing only as a supplement to deposit mobilization. This prevents an excessive dependence on governments and donors as well as the displacement of deposits as the primary funding source and an important service to be provided in and of itself. MFIs should establish overall borrowing ceilings for themselves and set these at a relatively low percentage of deposits (for example, 25 percent). MFIs that are not authorized to capture savings are a different case. Governments and donors can provide such MFIs with funding while also providing technical assistance to prepare them for deposit mobilization.

- Help to establish deposit insurance funds (DIFs), which may provide a more orderly resolution of banking crises while at the same time stimulating deposits, especially from small savers. Such funds mitigate or eliminate depositor risks associated with asymmetric information and increase depositor confidence, which helps all participating financial institutions, including MFIs, to mobilize deposits. DIFs should be guided by the following principles:

    - The maximum loss covered for each person by the DIF should not be unlimited.
    - The DIF premiums paid by financial institutions should vary with the risk level of each intermediary, thus providing an incentive for less risky behavior.
    - Deposit insurance should not be offered if prudential supervision is weak. This is because DIFs cause depositors to reduce their oversight of financial institutions, and therefore, prudential supervision must be ready to replace it.

- Provide incentives to add new shareholders to MFIs in order to improve their governance, particularly in MFIs with diffuse ownership structures, as occurs, for example, when an NGO is the majority shareholder of the MFI.

Governments and donors can also play an important role in helping MFIs to access domestic and international bond markets. This allows MFIs to diversify their funding sources and obtain longer-term finance in order to make loans to small and medium-scale enterprises as well as to extend housing and fixed-asset loans. MFI bond issues may be stimulated by:

- Greater use by donors and governments of credit enhancements for MFI bond issues. Donors and governments have a comparative advantage over the capital markets in taking on this role because of their knowledge of the microfinance market and the MFIs. Credit enhancements should only be given to MFIs that meet strict eligibility requirements, and support should only be temporary. Such programs enable MFIs to establish their reputation in the market and subsequently issue bonds backed only by their own reputation and collateral.

- Technical support for securitized bond issues by MFIs, since securitization generally increases a bond's rating quite significantly and thus helps in its placement.

- When existing regulations do not permit MFIs to issue bonds, governments and donors should work to change these regulations.

In the longer run, MFIs must open up their capital structure to include new shareholders, both international and domestic, in order to obtain the additional capital needed to fuel growth. To facilitate this process and provide a more transparent mechanism for transferring shares, it is advisable for MFIs to list themselves on the stock

exchange. Government and donor underwriting programs can support this process.

It is also important to briefly note what governments and donors should avoid doing, so as to help encourage MFIs to use appropriate funding strategies. First, subsidized credit from a donor or second-tier institution may considerably weaken the MFI's incentives to mobilize savings and use more commercial funding sources. Donors and governments should avoid providing subsidized credit, particularly large amounts of it, for these reasons and also because it also distorts resource allocation. Second, governments and donors should avoid distorting financial markets in other ways. For example, financial transactions taxes, such as those recently introduced by the governments of Bolivia and Peru, reduce the use and benefits of the financial system, damaging economic efficiency and growth and limiting the expansion possibilities of financial institutions—and thus should be avoided.

Bibliography

Ando, Albert and Franco Modigliani. 1963. The "Life Cycle" Hypothesis of Saving: Aggregate Implications and Tests. *American Economic Review* 53(1):55-84.

Arshadi, Nasser and Gordon V. Karels. 1997. *Modern Financial Intermediaries & Markets.* New Jersey: Prentice-Hall.

Bazoberry, Eduardo. 2003. The Bolivian Experience of FFP Prodem. Presented at the conference, "Paving the Way Forward for Rural Finance." Washington, D.C.: USAID.

Branch, Brian and Janette Klaehn, editors. 2002. *Striking the Balance in Microfinance: A Practical Guide to Mobilizing Savings.* Washington, D.C.: PACT Publications.

Buchenau, Juan. 2004. Innovations in Microfinance: Long Term Loans, Remittances, Costing. Washington, D.C.: Frontier Finance International.

_____. 2003. Innovative Products and Adaptations for Rural Finance. Washington, D.C.: Frontier Finance International.

Carter, Michael and Eliza Waters. 2004. Rethinking Rural Finance: A Synthesis of the Paving the Way Forward for Rural Finance Conference. Washington, D.C.: USAID.

CGAP. 2002. Savings Are as Important as Credit: Deposit Services for the Poor. Donor Brief 4. Washington, D.C.: Consultative Group to Assist the Poorest.

_____. 2000. The Microfinance Experience with Savings Mobilization. Technical Note 3. Eschborn, Germany: Working Group on Savings Mobilization.

_____. 1998. Savings Mobilization Strategies: Lessons Learned from Four Experiences. Focus Note 13. Washington, D.C.: Consultative Group to Assist the Poorest.

Chao-Beroff, Reneé. 1999. Self Reliance Village Banks, Mali. Case Study. Washington, D.C.: CGAP.

Charinotenko, Stephanie, Anita Campion and Nimal A. Fernando. 2004. Commercialization of Microfinance: Perspectives from South and Southeast Asia. Manila: Asian Development Bank.

Cracknell, David, Henry Sempangi and Graham A.N. Wright. 2004. Costing and Pricing of Financial Services: A Toolkit for MFIs. Nairobi, Kenya: MicroSave.

Elser, Laura, Alfred Hannig and Sylvia Wisniwsky. 1999. Comparative Analysis of Savings Movilization Strategies. Working Group on Savings Mobilization. Eschborn, Germany: CGAP.

Farrington, Todd and Julie Abrams. 2002. The Evolving Capital Structure of Microfinance Institutions. *Microenterprise Development Review.* Washington, D.C.: Inter-American Development Bank. December.

Fernando, Nimal A. 2004. Micro Success Story? Transformation of Nongovernment Organizations into Regulated Financial Institutions. Regional and Sustainable Development Department. Manila: Asian Development Bank.

Fiebig, Michael, Alfred Hannig and Sylvia Wisniwski. 1999. Savings in the Context of Microfinance – State of Knowledge. Working Group on Savings Mobilization. Eschborn, Germany: GTZ and CGAP.

Fitchett, Delbert. 1999. Bank for Agriculture and Agricultural Cooperatives (BAAC), Thailand (Case Study). Working Group on Savings Mobilization. Eschborn, Germany: GTZ and CGAP.

Gómez Soto, Franz. 2003. *Evolución de los depósitos en los fondos financieros privados de microfinanzas en Bolivia: Tendencias y volatilidad*. SEFIR Project, USAID. La Paz, Bolivia: Development Alternatives, Inc.

González-Vega, Claudio. 2003. Evolution of Microfinance in Bolivia. Rural Finance Program. Columbus, Ohio: The Ohio State University.

González-Vega, Claudio and Jorge Rodríguez Meza. 2003. Importancia de la macroeconomía para las microfinanzas en Bolivia. SEFIR project, USAID. La Paz, Bolivia: Development Alternatives, Inc.

Goodwin-Groen, Ruth. 2003. Success in Rural Savings: How One Donor Led the Way. Donor Information Resource Center. Washington, D.C.: CGAP.

Gorton, Gary and Andrew Winton. 2002. *Financial Intermediation.* Cambridge, Massachusetts: National Bureau of Economic Research (NBER).

Helms, Brigit and Lorna Grace. 2004. *Microfinance Product Costing Tool.* Technical Tools Series No. 6. Washington, D.C.: CGAP.

Hempel, George, Donald Simonson and Alan B. Coleman. 1994. *Bank Management: Text and Cases.* Fourth edition. New York: John Wiley & Sons.

Hirschland, Madeline. 2003. Serving Small Depositors: Overcoming the Obstacles, Recognizing the Tradeoffs. *Microbanking Bulletin* 9:3-8. Washington, D.C.: The Microfinance Information eXchange (The MIX).

Jansson, Tor. 2003. Financing Microfinance. The Micro, Small and Medium Enterprise Division. Washington, D.C.: Inter-American Development Bank.

Kaddaras, James and Elisabeth Rhyne. 2004. Characteristics of Equity Investment in Microfinance. Washington, D.C.: Council of Microfinance Equity Funds.

Maurer, Klaus. 1999. Bank Rakyat Indonesia (BRI), Indonesia (Case Study). Working Group on Savings Mobilization. Eschborn, Germany: CGAP.

Moore, Amanda et al. 2000. Saving and Asset-Accumulation Strategies Used by Low-Income Individuals. Center for Social Development. St. Louis: Washington University.

Moyo, Sibusiso et al. 2002. Use and Impact of Savings Services among Low Income People in South Africa. Nairobi, Kenya: MicroSave.

Mutesasira, Leonard. 1999. Savings and Needs in East Africa: An Infinite Variety. Nairobi, Kenya: MicroSave.

Nalela, Richard. Rural Financial Institutions: Savings Mobilization. Kampala, Uganda: Centenary Rural Development Bank.

Pikholz, Lynn and Pamela Champagne. Proactive Risk Management: Lessons for Microfinance Institutions. Briefing Note 22. Nairobi, Kenya: MicroSave.

Portocarrero M., Felipe and Alvaro Tarazona. 2003a. *Costeo basado en actividades (ABC) en CRAC Nor Perú, resultados finales.* Trujillo. Website: http://www.cgap.org/productcosting/experiences.html

_____. 2003b. Determinantes de la rentabilidad en las cajas rurales de ahorro y crédito. In Carolina Trivelli, et al., *Mercado y gestión del microcrédito en el Peru*. Lima, Peru: CIES.

Portocarrero M., Felipe and Guillermo Byrne Labarthe. 2002. Las microfinanzas y la movilización de depósitos. *Punto de Equilibrio* 77:22-23. Lima, Peru: Universidad del Pacífico.

Ravicz, R. Marisol. Searching for Sustainable Microfinance: A Review of Five Indonesian Initiatives. Rural Cluster, Development Economics Research Group.

Rhyne, Elisabeth. 2003. Towards a Package of Savings Indicators. *Microbanking Bulletin* 9:19-23. Washington, D.C.: The Microfinance Information eXchange (The MIX).

Richardson, David. 2003. Going to the Barricades for Microsavings Mobilization: A View of the Real Costs from the Trenches. *Microbanking Bulletin* 9:9-13. Washington, D.C.: The Microfinance Information eXchange (The MIX).

Robinson, Marguerite S. 1994. Savings Mobilization and Microenterprise Finance: The Indonesian Experience. In *The New World of Microenterprise Finance,* eds. María Otero and Elisabeth Rhyne. Bloomfield, Connecticut: Kumarian Press.

Robinson, Marguerite and Graham Wright. 2001. Mobilizing Savings. Briefing Note 3. Nairobi, Kenya: MicroSave.

Rutherford, Stuart. 1999. Money Managers: The Poor and Their Savings. Briefing Note 13. Nairobi, Kenya: MicroSave.

Schmidt, Reinhard H. and C.-P. Zeitinger. 1994. *Critical Issues in Small and Microbusiness Finance.* Frankfurt, Germany: IPC.

Villafani Ibernegaray, Marcelo. 2003. Evolución de la cartera de los fondos privados y Bancosol: Mirando las cifras desde una nueva perspectiva. Project SEFIR, USAID. La Paz, Bolivia: Development Alternatives, Inc.

Vittas, Dimitri. 1995. Thrift Deposit Institutions in Europe and the United States. Washington, D.C.: World Bank.

Vogel, Robert C. 1984. Savings Mobilization: The Forgotten Half of Rural Finance. In *Undermining Rural Development with Cheap Credit,* eds. Dale W. Adams, Douglas H. Graham and J.D. von Pischke. Boulder, Colorado: Westview Press.

Vogelgesang, Ulrike. 2001. Investigating Microfinance: Caja Los Andes, Bolivia. Mannheim, Germany: University of Mannheim.

Wehnert, Ulrico. 1999. Rural Bank of Panabo (RBP), Philippines (Case Study). Working Group on Savings Mobilization. Eschborn, Germany: CGAP.

Westercamp, Christine. 1999. Federation of the Agricultural Savings and Credit Unions, Benin (Case Study). Working Group on Savings Mobilization. Eschborn, Germany: CGAP.

Westley, Glenn. 2003. Equipment Leasing and Lending: A Guide for Microfinance. Washington, D.C.: Inter-American Development Bank.

Wisniwski, Sylvia. 1999a. Banco Caja Social (BCS), Colombia (Case Study). Working Group on Savings Mobilization. Eschborn, Germany: CGAP.

_____. 1999b. Microsavings Compared to Other Sources of Funds. Working Group on Savings Mobilization. Eschborn, Germany: CGAP.

Wright, Graham A.N. 2000. Two Perspectives on Savings Services. Briefing Note 12. Nairobi, Kenya: MicroSave.

_____. 1999a. A Critical Review of Savings Services in Africa and Elsewhere. Nairobi, Kenya: MicroSave.

_____. 1999b. Beyond Basic Credit and Savings: Developing New Financial Service Products for the Poor. Eschborn, Germany: CGAP.

_____. 1998. Beyond Basic Credit and Savings: Developing New Financial Service Products for the Poor. Nairobi, Kenya: MicroSave.

Wright, Graham A.N. and Leonard Mutesasira. 2001. The Relative Risks to the Savings of Poor People. Briefing Note 6. Nairobi, Kenya: MicroSave.

Wright, Graham A.N., David Cracknell, Leonard Mutesasira and Rob Hudson. 2003. Strategic Marketing for MicroFinance Institutions. Briefing Note 22. Nairobi, Kenya: MicroSave.

Wright, Graham A.N., Robert Peck Christen and Imran Matin. 2000. Introducing Savings into a Micro-Credit Institution – Lessons from ASA. Briefing Note 2. Nairobi, Kenya: MicroSave.

Annex A: Step-by-Step Description of Stock and Bond Issuance[48]

INTRODUCTION

Issuing debt or equity in domestic capital markets is neither a quick nor simple process. This annex reviews the procedures, documentation, marketing and pricing exercises that are necessary for such transactions in Latin America in general. It does not provide detailed requirements and restrictions on a country-by-country basis beyond some illustrative examples.

The structure of this annex is as follows. We begin by discussing the need for MFIs to create a medium-term strategy for the funding of all of its balance sheet assets. The creation of this capitalization plan is step one in the process of issuing debt or equity. We then examine the pros and cons of debt vs. equity issue, which sets the stage for step two of the issuance process: the choice between debt and equity. The next two sections provide specific guidance on how to go about issuing equity and debt, respectively, breaking the process down into three phases in each case: preparatory phase, structuring/negotiation phase and closing the transaction. A final section looks forward to possible future developments that could promote greater access by MFIs to stock and bond markets.

STEP 1: THE CAPITALIZATION PLAN

As microfinance institutions move toward formalization and commercialization, they are inevitably faced with the decision of whether to raise debt or equity financing, or some combination of the two. This decision plays a significant role in the governance, management and risk profile of the MFI. As a result, the first step MFIs should take when considering external sources of funding is to develop a capitalization plan or strategy that is appropriate to its individual circumstances. The capitalization plan needs to consider the MFI's culture, its approach to formalization, the requirements of its business plan, the MFI's risk tolerance, competitive factors, as well as local regulatory and environmental factors. At its simplest, the capitalization plan answers a basic question: how will the balance sheet assets be funded? At a more complex level, it determines the company's leverage, impacts profitability, creates governance issues, and can change the cultural values of the institution. If well done, the MFI is assured of sufficient funding to meet its growth and profitability objectives and to maintain its desired risk profile. However, if poorly done, the MFI can run into difficulty accessing funding or it can find its growth constrained, its profitability eroded, its risk profile deteriorating, and its competitive position undermined. A surprising number of MFIs lack a medium-term capitalization plan.

Prerequisites for a capitalization plan

- Dedicated management team
- A strong and proven business planning process
- A strategic plan in place
- Adequately staffed treasury/finance function
- Institutional preparation
- A risk management unit

Creating a capitalization plan

- Identify factors influencing capitalization strategy
- Quantify 5-year funding needs
- Evaluate different types of debt/equity structures
- Determine debt/equity structure
- Determine balance sheet structure
- Create a plan to manage new financial risks

Implementing a capitalization plan

- Dedicate adequate resources to implementation
- Stay in touch with industry stakeholders
- Constantly evaluate market conditions and alternative available structures
- Determine financial risk and cost of funding
- Make recommendations to management and board

[48] This annex is based on a document prepared by Greta Greathouse, GMI, LLC.

Creating a Capitalization Plan

There are several prerequisites for the development of a capitalization plan. The first is that the MFI must have a dedicated management team assigned to the project. Given that the development and implementation of a plan will absorb considerable amounts of management time, the task should be formally assigned to the MFI's finance team, with periodic progress reporting to the CEO and board to keep the process on track and provide a forum for discussing issues that arise. The responsibility should not be taken on solely by the CEO or a managing director.[49] The second prerequisite is that the MFI must have a strong and proven business planning process, one that has produced a reality-based business plan and strategy. The capitalization plan does not exist in isolation: it must relate to and support the funding needs that are identified in the business plan. Third, the MFI needs to have an adequately staffed treasury/finance function. Early on in the formalization process, the MFI should identify key personnel and functions that need to be strengthened and upgraded. Adequate capacity in the treasury/finance team is critical to development and implementation of a capitalization plan. Finally, the MFI must be well prepared institutionally to meet the demands for information, explanations, justification and clarification that are an intrinsic part of stock and bond issuance. This includes adequate forethought and preparation in such areas as risk management, credit risk and other policies and procedures.

In creating a capitalization plan, an MFI must systematically identify and understand the factors that can have an impact on its capitalization strategy. These include environmental, institutional and business factors, and are presented in Table A1. The MFI should quantify its current and future funding needs based on 5-year business plan projections and market conditions. Additionally, it should determine an appropriate (and evolving) debt/equity structure given the regulatory and market constraints, the MFI's own risk preferences and prudent shareholder protection. The treasury/finance team must also be prepared to understand the relevant types and sources of debt and equity that can be used to fund the MFI. The team must then select among the different options considering the chosen debt/equity structure, pricing and other pros and cons.

Implementing a Capitalization Plan

The substantial commitment of time required to develop and implement a capitalization plan makes it critically important that the team responsible for the process is adequately staffed and has had the necessary training. The implementation of a capitalization plan requires coordinated work, detailed follow-up, communication with senior executives and the board, and the participation of a number of stakeholders. The team responsible for the capitalization plan should consult on a regular basis with its donors, advisors, networks, other MFIs and individual board members. It should meet regularly with bankers, investment bankers, insurance companies, stockbrokers, pension funds, investors, regulators and rating agencies.

For both private and public issuances, the team will evaluate the market conditions, including the available types of investors, their size requirements and other needs and expectations, maturity options and risk spreads. This should include a thorough study of transactions that have occurred in the market and the terms and conditions that have been granted to comparable quality institutions. The evaluation should consider the anticipated market reception of proposed financings and should include plans to mitigate identified issues or concerns. The team will examine alternative debt and equity structures for

[49] It is fairly common for CEOs or managing directors to try to take sole responsibility for the growing funding needs of an MFI. Given the substantial amount of time required to properly develop and implement a capitalization plan, the responsibility should be shared with a team.

Table A1
Factors Influencing the Capitalization Strategy of an MFI

Environmental Factors	Institutional Factors	Business Factors
Regulatory • Capital adequacy ratio (Basel II) • Central bank minimum capital requirement for licensing and for ongoing regulatory review • Existence of interest rate ceiling • Limitations on types of legal structures permitted to MFIs • Limitations on types of shareholders (e.g., limitation on percent of foreign ownership) • Issuance requirements	**Structural Issues** • Role of NGO, past and future • Existing ownership structure: some MFI legal forms are more problematic for new investors, such as credit unions, MFIs with large shares of government ownership, and housing mutuals (*mutuales*) • Existence of appropriate risk management structures • Existence of adequate systems and managerial reporting • Adherence to best practices, particularly in risk management and transparency • Split of NGO investment into debt and equity of the MFI • Transfer of assets (move clients or portfolio to new entity)	**Microfinance Sector** • Level of market penetration • Competition from other MFIs • Competition from other nonbank financial institutions • Commercial bank engagement in the sector • Stability/volatility of clients' economic activities • Existence and level of covariant risk among client activities (e.g., client concentrations in monocrop activities)
Financial Market Development • Breadth and depth of local capital/financial markets • Investor liquidity preferences and availability of longer-term funding • Liquidity level of commercial banks • Capital markets instruments available • Yields on local treasury bill instruments • Market comfort with leverage • Rating agencies	**Cultural Issues** • Social mission vs. profitability • Outreach ambitions • Management/board comfort level with managing financial risk • Openness to change	**Business Strategy** • Projected growth • Target market • Credit risk concentrations • Competition constraints to profitability • New product introductions
Macroeconomic Conditions • General level of economic stability • Event risk • Country risk (for international investors)	**Governance Issues** • Role of board of directors • Fiduciary responsibilities • Allocation of board seats: shareholder representatives vs. independent directors • Potential for mission drift/conflict • Voting rights • Conflict-of-interest policies • Appropriate structure for risk management reporting • Senior management and board performance evaluations • Dividend policy • Board terms • Committees	**Financial Strategy** • Existing cost of funds • Impact of choices on projected funding costs • Sustainable interest rate requirements • Financial risk management capacity

relevance and availability. Finally, it will determine the financial risks associated with alternative funding structures and how best to manage these risks. This includes an analysis of appropriate asset/liability mismatch ranges, liquidity risks, foreign exchange exposure acceptability, funding concentration issues, counter-party risk, bank relationship policies and the impact of alternative funding choices on the cost of funding.

The impact of the proposed capitalization plan on the risk profile of the MFI should be discussed at all points of the process. The finalized plan and its recommendations should be approved by both the board and the risk management structure of the MFI. The risk management structures of MFIs vary considerably. As the MFI's financial sophistication increases the treasury and finance functions need to be expanded and reinforced. Additionally, the board of directors may create a risk management committee to which the finance, audit and other departments must report. There may be an Asset-Liability Committee (ALCO) as part of the risk management structure to deal with specific financial and other risks.[50] This committee has the responsibility for defining the institution's risk management policies and procedures as well as monitoring both the results of and compliance with these policies. In some markets, such as Bolivia and Peru, the supervisory agencies have mandated that a risk management unit exist in regulated MFIs.

Finally, a capitalization plan is not a static document. It changes to reflect any alterations in the business plan, market conditions, or other factors which could substantially alter the risk profile of the MFI, its market access, and the cost of funding.

STEP 2: CHOOSING DEBT VS. EQUITY

Pros and Cons of Debt vs. Equity

The balance between debt and equity financing can be critical to the development and growth of an MFI. As an MFI prepares its capitalization plan, it should consider the pros and cons given in Table A2 to help guide it in this choice.

Debt vs. Equity: An Investor's Perspective

From an investor's perspective, an MFI with a high growth potential over the next 3-5 years and with a strong gross margin to maintain its cash flow represents a strong equity investment candidate. MFIs that do not meet those criteria may still be desirable equity investment candidates, but with an investment structured to have lower risk.

Figure A1 provides a general overview of funding instruments that span the risk/return range from senior and securitized debt (least risky for investors) to common stock (most risky for investors). Although many of these debt and equity instruments are commonly used in the United States, their use in Latin American capital markets is much more embryonic.

STEP 3A: ISSUING EQUITY

The steps required to find and to obtain equity investments from private sources can be organized into three phases: the preliminary phase, the placement process and the closing phase. The degree of formality

[50] Among the types of risks for which such committees would be responsible would be credit, liquidity, term mismatch, interest rate, foreign exchange, capital adequacy, operational and governance.

Table A2
Advantages and Disadvantages of Debt vs. Equity

Debt	
Advantages	**Disadvantages**

• Often, there is greater local demand for debt than equity
• Greater administrative efficiency for the MFI
  ➢ Easier to negotiate
  ➢ Shorter negotiation time
  ➢ Less intensive relationship with lenders than with equity holders
• Interest payments may be deductible as expense for tax purposes
• MFI does not lose control of the enterprise
	• Regulatory constraints to leverage
	• Increased financial risk attached to managing higher leverage. Debt agreements can limit the MFI's alternatives when problems arise.

Equity	
Advantages	**Disadvantages**

• Longer-term commitment of funds (although some investors may require exit strategy)
• Shareholders can bring additional benefits to the MFI:
  ➢ Financial and business expertise of shareholders can help develop MFI capacity
  ➢ Some shareholders may be able to respond to emergencies with additional capital
  ➢ Some international and other shareholders can bring prestige, which can improve the reputation and risk rating of the MFI, facilitate access to credit lines and help with regulators
• Conservative dividend policy can facilitate capital accumulation
	• Difficulties in identifying equity partners who are fully dedicated to the MFI's social mission
	• Disputes may arise with new investors in numerous areas, such as exit strategy, personnel appointments, board control and dividend policy
	• The negotiation process can be longer, require greater management involvement, and result in a longer documentation process

of the processes, the degree to which the phases overlap or are separated in time, the time required to complete the phases and the overall project and the use of outside intermediaries (consultants, financial advisors, investment bankers, and underwriters) will vary considerably among MFIs. Factors that affect the length and complexity of the process include the degree of preparation by the MFI and its capitalization team, the local regulatory and business environments, the capacity of stakeholders and the board of directors to assist the process, the clarity and unanimity of existing stakeholders and the number and type of shareholders sought.

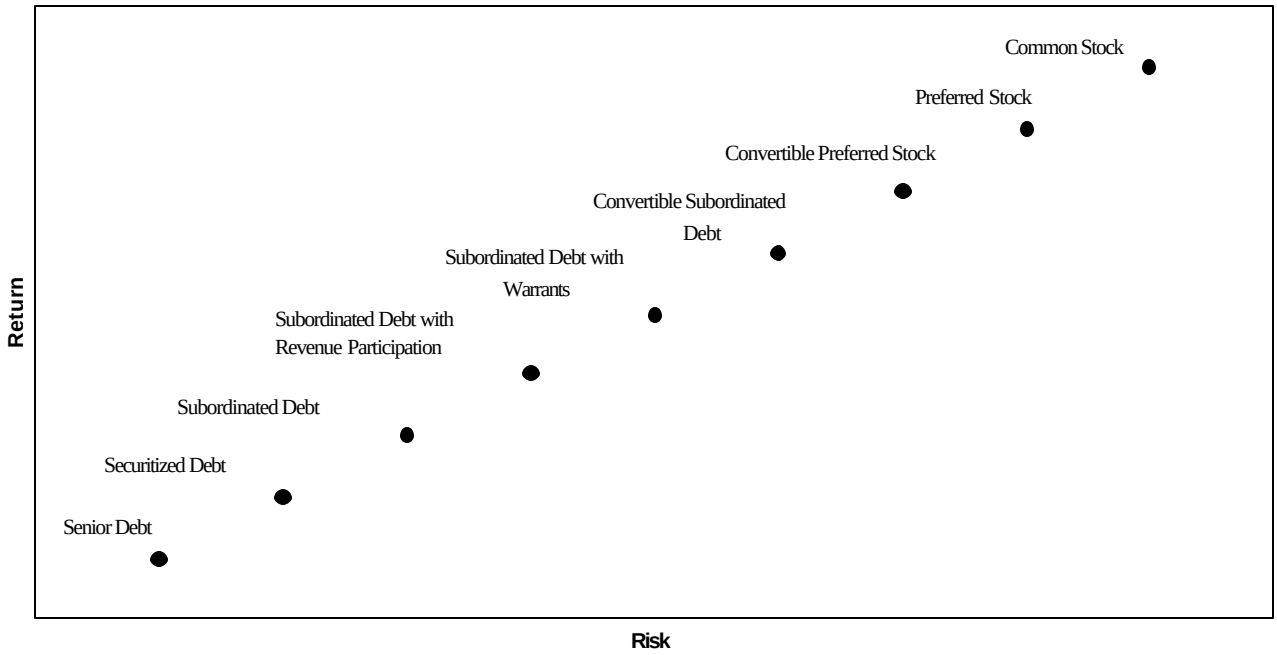
Equity Issue Phase 1: Preliminary Phase

The activities of the preliminary phase consist of the preparatory work that is required of the MFI prior to initiating the placement process. This work should be the responsibility of the capitalization team. Its recommendations should be communicated regularly to senior management, the board of directors, and the existing stakeholders such as networks, donors, lenders and others as appropriate. The preliminary phase has three main components:

Development of the Capitalization Plan

Step 1 above outlines the process of developing a capitalization plan. This is an essential and often overlooked step in both debt and equity issuance. As noted earlier, the development of the capitalization plan should include for either private or public stock issuances an identification of available types of

Figure A1
Risk/Return Profile of Debt and Equity Instruments



investors, their size and return requirements and expectations and any exit strategies or other needs they may have.

More Detailed Analysis of Potential Types of Investors, Including Their Pros and Cons

Gaining greater access to financial and capital markets will require that MFIs have a good understanding of investor needs, and how they vary by type of investor. The differences in concerns, expectations and strategies among the various types of investors mean that there may be unique strengths and weaknesses associated with each type of investor for any given MFI (Table A3). The types of equity investors can be categorized in a number of ways and sometimes overlap: local vs. international, social vs. commercial, public vs. private and MFI-specialized vs. general. Different investors will have distinctly different views on a number of issues. These include dividend policies, social mission, voting rights and control.

Understanding any Central Bank, Securities or Other Regulatory Restrictions

Various regulatory restrictions may be applicable to an equity issuance. It is critical to ensure that the MFI's legal structure is compliant with these share issuance regulations. Countries often regulate the size of total share capital. Requirements such as the number of years an MFI has been in business and the number of years of audited financial statements may also be in place. Ownership participation may be subject to restrictions on foreign ownership and ownership concentration, and restrictions on and approval of ownership of more than a stated percentage of total shares. Countries generally also require approval of individuals proposed for board membership.

Box A1: Descriptions of Debt and Equity Instruments

Senior debt is borrowed money that is repaid ahead of both subordinated debt and the company's shareholders in the event the company is liquidated.

Securitized debt is created by issuing bonds using future cash flows as collateral. For example, the future cash flows may be the repayments of loans that microentrepreneurs make to an MFI. Securitized debt may be more or less risky than senior debt. Securitized debtholders have first claim on the future cash flows that have been pledged as collateral in the securitization (for example, the proceeds of the MFI's entire loan portfolio or the housing loan component of its portfolio). Senior debtholders have first claim on all assets that have not been specifically pledged as collateral. Thus, securitized debt may be more or less risky than senior debt depending on which claim offers investors better protection.

Subordinated debt is borrowed money that is repaid after other debts but before the company's shareholders in the event the company is liquidated. Subordinated debt often has a long maturity and thus may be considered a form of quasi-equity. Sometimes subordinated debt contains a convertibility feature such as the following:

> *Subordinated debt with revenue participation.* This type of subordinated debt is frequently used in venture capital finance or in the financial structuring of relatively young companies. By providing a way for the debt investor to have a defined participation in the revenue of the company, the investor can enjoy potentially enhanced earnings on its investments without the company having to give up any ownership interest.
>
> *Subordinated debt with warrants.*[51] This type of subordinated debt is issued to investors with a warrant attached. The warrant holder is entitled to purchase a specified number of shares at a fixed price before a specified future date.

Convertible securities are debt or equity investments that can be exchanged for something else of value. The most common forms of convertible securities are convertible subordinated debt and convertible preferred stock, both of which are convertible into common stock. Convertible securities are viewed as a good way for investors to hedge their investments because they permit the investor to have a chance to participate in the company's equity appreciation.

> *Convertible subordinated debt* is a form of convertible debt in which the principal and/or interest due from the debt instrument is convertible at the election of the holder into common stock of the borrowing company at an agreed upon conversion rate. Because it is a form of debt, convertible subordinated debt has preference over common and preferred stock in the event of a company's liquidation.
>
> *Convertible preferred stock* can be converted into common stock according to a predetermined formula. It is often used by venture capital investors. As long as the preferred stock is held (and not converted), owners benefit from the preferences explained in the next paragraph.

Preferred stock is a form of equity ownership in a corporation that contains preferences over common stock. These preferences normally include the rights to receive dividends before any payments to the holders of common stock. Preferences could also include preferences in voting rights, certain defined veto rights, and rights to redeem their shares. In liquidation, preference shareholders are paid before common shareholders but after all creditors.

Common stock is the security most frequently issued by companies, representing an ownership interest in a company. In most cases, common stock carries the right to vote for directors and on other matters affecting the company. Holders of common stock participate last in any proceeds from the company's liquidation.

[51] Warrants are a form of stock option. In addition to being issued in conjunction with certain debt or equity instruments, they are also frequently included in the compensation paid to a broker or investment banker for successfully completing a capital-raising transaction. They are commonly referred to as "equity kickers."

Table A3
Attributes of Social vs. Commercial Investors: Pros and Cons from the MFI's Perspective

I. Social and Quasi-Commercial Investors	
a. Donors	
Pros	**Cons**
• Interest in demonstrating activity in sector • Can easily contribute significant percentage of total equity of an MFI, as the required funds are small in comparison to other projects	• Political issues and strategies may change • Exit strategy may be required • View of social mission may or may not coincide with other directors and owners • Continued participation and board representation can be subject to change
b. Governments	
Pros	**Cons**
• Gives political clout to the organization • Interest in demonstrating activity in sector	• Political interference may put commercial goals at risk • May not add value to board in terms of commercial or financial expertise • Political issues and strategies may change • May discourage other investors • Policy emphasis
c. International NGOs	
Pros	**Cons**
• Long-term commitment to investment • Contribution to institutional credibility and image	• Need to satisfy all stakeholders
d. Socially Responsible Investors (e.g., Triodos, Oiko, Calvert)	
Pros	**Cons**
• Are supportive of institutional mission • May have experience in other MFIs • Less emphasis on return on investment but more on preservation of capital	• Some have deteriorating returns, indicating a weak or failed effort which could impact their future investment capacity • May or may not add value to the board within the local context
II. Commercial Investors	
a. Institutional Investors (e.g., pension funds, insurance companies, mutual funds)	
Pros	**Cons**
• Can bring significant amounts of capital • Sharper interest in detecting early warning signs of potential problems	• Return and other criteria can make it difficult to attract them • Lack of familiarity with MFIs • Documentation, terms and conditions can be difficult
b. Individual Investors (privately-placed equity)	
Pros	**Cons**
• May have institutional familiarity, shared values and banking or business expertise	• Large private investors may have divergent views on institutional development and direction
c. Specialized Investment Funds	
Pros	**Cons**
• Accumulated expertise across a variety of institutions • Rapid response in decisionmaking	• High return expectations • Need for exit strategy • May require significant level of investment

Equity Issue Phase 2: Placement Phase

The placement phase typically consists of a number of distinct activities which are detailed below. These are the same whether the process is that of a formal "private placement"[52] using outside advisors or whether it is a process driven by the MFI's own local and international contacts. An MFI that is not using an outside advisor but is instead contacting various investors drawn from its knowledge of local and international funding sources would still follow the same general procedures and would benefit from patterning its activities after the more formal model given here. This is because few if any investors are willing to commit significant sums of money without receiving detailed information and making due diligence visits.

Preparation of an Offering Memorandum

An offering memorandum is a detailed document that provides information about the MFI's performance and history, placing it in the context of the local industry and highlighting its competitive differentiation and business strategy. This document should speak to investor needs and sensitivities and provide answers to the questions that would most likely be in the minds of the readers. MFIs should develop a professional format for presenting their financial performance, presenting it in the context of national, Latin American and international MFI performance. The offering memorandum should also provide a clear view of the future direction of the institution, including details from its 5-year business plan, financial projections and the strategy that drives these plans and projections.

Preparation of the "Road Show" or Investor Presentations

The MFI and its capitalization team should thoroughly prepare for individual and group meetings with proposed investors. Such meetings are frequently held on a less formal basis in the MFI sector because of the potential investors' familiarity with the institution. However, the MFI should not take investors for granted and should prepare presentations that are in-depth, up-to-the-minute and professional. Senior management and all staff who will be participating in the presentations should be well briefed about the areas of most likely concern to the investors, and they should prepare for and practice responding to potential questions.

Supporting materials to use for the road show should be developed well in advance and be available to all MFI executives in order to help them prepare for the meetings. Taking a broad view of what will be needed is best, and the MFIs should be particularly prepared to address such issues as credit risk management, financial risk management, internal control and auditing. The institution should have policy and procedures manuals on these topics. Such preparation is never wasted, as the next phase, that of due diligence, will require the existence of such documents.

Investors' Due Diligence

The MFI can expect to receive due diligence visits from all seriously interested investors. Prior to the visits, the MFI should prepare and send due diligence materials, which may include copies of financial statements, the 5-year business plan, assessments and ratings, materials provided to regulatory agencies

[52] In the United States, "private placement" is a specific legal term referring to the offer and sale of a security by a brokerage firm. Although not involving a public offering, it often involves specific regulatory compliance conditions and other regulatory restrictions attached to the transaction. Informally, the term is also used to simply describe the process of raising money from private sources, with or without the use of a brokerage firm.

and critical policy and procedures manuals. Individual investors may request additional information prior to or during the on-site visit. Regulated MFIs should expect potential investors to delve into the issue of the MFI's level of compliance with prudential norms.

The political and macroeconomic conditions of the country can influence the due diligence process. International investors will have concerns about country, exchange rate and transfer risks. Local investors may be highly knowledgeable about looming factors such as elections, event risks, and economic pitfalls, which could seriously impact the financial sector and therefore may generate requests for additional sensitivity analyses. An MFI that has risk management systems and procedures in place will be able to respond to many of these concerns. Investors will feel more comfortable taking on a certain level of risk if the MFI has a solid and transparent system for managing its risks.

On-site visits can be time consuming for management. They typically range from two to five days and require the availability of a conference room for the use of the visitors, a heavy schedule of meetings with each department, site inspections and meetings with senior executives. If possible, and if there are interested investors who agree, the MFI will benefit from having due diligence processes occurring simultaneously for some if not all of the visiting investors.

The management of the due diligence process is difficult, but advance preparation will help the MFI emerge from the process more efficiently. Typical due diligence does not end when the visitors leave; there may be ongoing requests for information and clarifications. The efficiency of the due diligence process will be affected by such issues as the investors' experience with MFIs and their own internal due diligence requirements. Experienced investors have their own due diligence formats which are based on their requirements for the initial approval of the investment. Although their processes may be more highly detailed, their organized structure make it quite clear to the MFI what is required. Traditional MFI investors will be more familiar with the nature of the MFI's business and how to measure its performance, which will facilitate the due diligence process. Local and international investors may have widely differing processes and requirements.

Structuring the Transaction

Next, the MFI must structure its shareholding; that is, it must decide on the overall composition of shareholders (the percentage of shares going to the NGO, donors, private investors, and others) and the terms and conditions of shareholding. This structuring should be based on conditions in the private equity markets and in the financial and microfinance sectors, as well as a complete evaluation of the company's business and financial requirements. The MFI must match its needs against investor sensitivities and requirements.

Some of the most difficult points for negotiation are typically:

- Valuing the company and pricing its shares. In developed markets, privately placed shares are usually priced below market valuation because they are less liquid.

- Asymmetrical terms for different stakeholders, in which insiders such as executives and employees receive preferential pricing, can lead to conflict with new investors.

- Conversion of existing loans from donors or social investors to equity. This may or may not be feasible because of policies, restrictions, country exposure and other factors.

- Requirement for exit strategies by some investors.

- Allocation of shares and the issue of who will control the MFI, for example, the NGO, outsiders, or a loose confederation of shareholders.
- How to allocate board seats fairly while incorporating needed independent directors.
- Return expectations: dividend policy and the issue of mission conflict.
- Rights of minority shareholders, particularly when an NGO intends to retain majority control. These rights might include, for example, the need for a supermajority to agree to certain changes, so that someone with 51 percent of the shares will not control every vote.
- Some investors may require anti-dilution clauses in their agreements. These clauses ensure investors of their relative price advantage or percentage of ownership.

The concerns of different types of investors frequently manifest themselves in the types of issues that are critical to them during the negotiations. The concerns of international investors may be more specific and at times more demanding than those of local investors. International investors often seek: guarantee of certain minority shareholder rights, payments for board participation and travel, payments of legal fees, restrictions on the right of the MFI to sell additional shares and the price required (book or better), foreign exchange coverage on the value of their equity, appropriate local and international co-investors, a documented exit strategy and a redesign of the executive structure to include additional positions such as chief operating officer or chief financial officer. Local investors may have different priorities. Local investors are often close to the initial founders of the MFI, who bring them in as investors and board members hoping to develop a shareholder base that is supportive of the founders.

Negotiating the Terms

Management, the board members and the potential investors negotiate the terms based on institutional needs, market conditions and other factors. The greater the number of investors that are involved in the transaction the longer and more difficult the process can be.

Investor Approval and Acceptance of Terms

Each investor will have its own internal procedures for investment approval, which may include approvals by its investment committee and board.

Equity Issue Phase 3: Closing the Transaction

The closing phase consists of both internal and external activities. The external activities are partly outside the control of the MFI and may cause the closing phase to take longer than anticipated.

Preparation of Timetable

At this point, the MFI should prepare a timetable for closing, which is communicated to all parties. The timetable will include a detailed list of activities to be accomplished prior to closing. This is particularly important for MFIs that are becoming regulated since such entities may have a phased-in need for capital in order to meet capital adequacy requirements as assets are transferred from the old entity to the new and as the new entity books new business. The MFI will also need to meet minimum capital standards (e.g., US$ 1 million). The timetable may need to allow for the issuance of capital in multiple tranches in order

to efficiently meet the MFI's capital adequacy requirements without carrying excessive levels of idle capital.

Issuing Commitment Letters

All investors will be required to issue a formal commitment letter stating the terms and conditions of their investment. The timetable should establish a deadline for the issuance of these commitments in order to keep the transaction on schedule.

Board of Directors's Acceptance of Commitments and Allocation of Shares

All offers should be reviewed by the MFI's management and presented to the board with recommendations. Allocation of shares, aside from regulatory constraints, should be guided by the MFI's capitalization plan.

Regulatory Clearance (as required)

There will typically be registration and regulatory approvals required of the proposed shareholders, particularly if the MFI is regulated by the banking superintendency. In some countries, there may be restrictions on the types of shareholders permitted, including a maximum percentage of foreign shareholding. In many countries, shareholders with more than five percent of total shares must be reviewed by the banking superintendency. Additionally, many countries require clearance of all proposed directors.

Documentation

There is little standardization of investment documentation in the microfinance sector. Standards tend to be driven by the larger international investors such as the IFC and IPC when they participate in a transaction. Reducing the time and expense of documentation can be facilitated by trying to get the investors to agree to use a single law firm and to conform their documentation processes.

Drawdown of Funds

The documentation should provide for the timing and means by which the MFI will receive the investors' funds. These means can include the use of an escrow account into which the investors place their funds, with release pending the MFI meeting certain prescribed terms, such as the delivery of documents showing all required filings and regulatory approvals. Alternatively, the investors may retain control of the funds and release them in tranches upon receiving a formal request from the MFI.

Composition of Board of Directors and Board Committees

For MFIs that are becoming regulated, the board of directors of the MFI will change as it achieves regulated status. The old NGO board will have to be altered to reflect the interests of all MFI shareholders. These changes can be difficult since not all of the original founders/directors may be included in the new board. Similarly, the governance requirements for a capital-based, regulated institution will be considerably more serious and may require substantial changes to the MFI's management's style and culture. These issues should have been fully discussed with the old board well in advance of the closing phase. Addressing these issues is, in fact, a suitable activity for inclusion in the capitalization plan—at the earliest stage of the equity issue process.

STEP 3B: ISSUING DEBT

Many of the steps for debt issuance are similar to those for equity issuance, although there are some important differences. The steps for issuing debt can also be organized into three phases: the preliminary phase, the structuring/negotiating phase and the closing phase.

Bond Issue Phase 1: Preparatory Phase

The in-house activities of the preparation phase enable the MFI to identify its financing options and to match them against its needs and strategy, identifying in the process the most likely sources of appropriate finance and the time needed to complete the financing. Thorough preparation by the MFI will greatly facilitate and expedite the debt issuance, and so this first phase of the process is not something that should be minimized.

Development of the Capitalization Plan

Step 1 above outlines the process of developing a capitalization plan. This is an essential and often overlooked step in both debt and equity issuance. When defining the debt issuance part of the capitalization plan, an MFI needs to pay particular attention to its cash flow projections, asset/liability structure and risk management processes. Projection of the funds an MFI needs to support its growth and maturing debt should be based on well-prepared cash flow estimates derived from the business plan and budget. The capitalization plan should include a realistic timeline for the activities necessary to have the proceeds from the debt issuance available when needed. The MFI should have updated business plans, budgets, operating history and other background information available for presentation to investors.

Analysis and Understanding of Existing Market Conditions

At least a part of the analysis and understanding needed here is undertaken in creating the capitalization plan (step 1). The MFI must evaluate market conditions, including maturity options, risk spreads and the available types of investors and their size requirements and return expectations. Because there is a limited track record of MFI bond issuance, comparable local or foreign issuances in the region should be analyzed and considered as possible benchmarks. These comparables could include issuances by banks, nonbank financial institutions and new issuers in other industries.

Identification of Potential Types of Investors and Structures

MFIs should consider the size, maturity, interest rate and structure of the proposed bond issue and match these factors against the available types of investors and their preferences. If there is a role for credit enhancements (including partial or total guarantees), securitizations or other structures, these should be explored as well. In identifying potential structures, an MFI should:

- Identify the appropriate type of debt obligation for its needs (see Figure A1, above).
- Determine a target interest rate, based on the analysis of other bond issues and its cost of funds from other sources (deposits, loans and stock issue).
- Define an appropriate structure, including the maturity of the bond issue and the use of a credit enhancement. Even if a credit enhancement is not required to issue the debt, its use may permit the MFI to achieve a longer maturity, lower interest rate or larger size bond issue.

- Understand the expenses of issuance, including the cost of a credit enhancement.

Evaluation of Credit Enhancements

As seen in Chapter 2, both Compartamos and Mibanco have used credit enhancements to issue bonds with more favorable conditions, such as longer maturities, larger amounts and lower interest rates. In both cases, partial third-party guarantees gave these MFIs access to institutional investors. Types of credit enhancements include: whole or partial third-party guarantees, the use of third-party deposits or MFI assets as collateral, the creation of senior/subordinated structures to achieve an improved overall ratings structure, and securitized structures. The cost of the credit enhancement must be calculated to obtain the "all-in" costs of the transaction for the MFI. Credit enhancements should be studied, not only as they are used by MFI borrowers but also by other types of domestic and international issuers.

Understanding the Regulatory Requirements for Bond Issuance

Bond issues must be sized to ensure that the MFI remains in compliance with the bank superintendency's capital adequacy requirements (or maximum leverage limits). Modern regulatory practices increasingly require that all financial institutions have asset/liability management policies and procedures in place and evidence of compliance with those policies and procedures.

The securities regulator typically requires that the MFI be rated by a qualified rating agency prior to issuing a bond. The definition of a qualified rating agency varies from country to country, with some requiring the use of internationally recognized raters and their local affiliates, rather than a local rating agency.

Bond Issue Phase 2: Structuring/Negotiation Phase

The components of this phase of bond issue have much in common with phase two of equity issue.

Reassess the Timeline

Based on the information gathered in phase one and a preliminary examination of the steps and options that will be considered in phases two and three, the MFI should establish a realistic timeline for the activities involved in completing the bond issue. Major roadblocks should be identified and resources made available to unblock them. Rating agencies, regulators, credit enhancements and investors can all be sources of frustrating delays. Mibanco spent two years getting its first bond issue to market, but its subsequent issues went much more quickly.

Prepare an Offering Memorandum

The preparation of this detailed document is very similar to what is required for an equity placement, and it should address the same investor sensitivities. In the case of a bond issue, an intermediary is generally used, that is, an investment bank or local commercial bank, which brings the issue to market. The presentation of the required information in a professional format will be managed by them; however, the need for the MFI to make the information available in usable form is not diminished. The MFI and its capitalization team will be thoroughly involved in the process. The offering memorandum for a bond issue is subject to content requirements that vary with local security regulations.

Prepare the "Road Show" or Investor Presentations

Again, this process is very similar to that required for equity issuance. If an intermediary is being used for the bond issue, it arranges the visits, produces the needed documents and slide shows and participates in the presentations. In all cases, senior management's participation in the presentations is a vital part of the process, and their preparation and "salesmanship" are key in giving credibility to the entire bond issue.

Investors' Due Diligence

As with an equity issuance, interested investors will undertake a due diligence process for debt issuances. A major difference between the two cases is that for debt issuances many institutional investors rely partly or even entirely on the ratings report issued on the MFI. Therefore, if institutional investors are important potential buyers of the MFI's bond issue, this step and the next should be reversed; that is, a rating should be obtained before the due diligence process begins. Many of the new social investors and specialized funds have developed detailed due diligence processes, often modeled after the IFC's very thorough procedures. As in the case of equity issuance, advance preparation and high quality documentation facilitate the process.

Obtain a Rating

Rating agencies are playing an increasing role in making financial markets accessible to MFIs. While specialized microfinance ratings may be acceptable to MFI investment funds and social investors, securities regulators usually require that bond issuers have ratings from internationally-recognized rating agencies such as Standard and Poor's, Fitch or Moody's or their local affiliates. Apart from making bond issues possible, ratings can benefit the MFI in several other ways:

- A rating allows the MFI to save time by knowing in advance what kinds of instruments, investors and interest rates it can target.

- A rating can underscore institutional weaknesses in an MFI, giving the institution an opportunity to address these weaknesses and improve its creditworthiness before issuing a bond.

- Ratings fulfill a key requirement of institutional investors who, in general, can only invest in rated debt instruments or debt from rated companies, and also have minimum rating requirements for the securities they buy.

- Ratings serve to educate institutional and other investors who may be looking at an MFI for the first time. Thus, they serve to broaden the investor base for the MFI's securities and may improve the pricing, size or maturity of the bond issue.

- Ratings can be given on the general creditworthiness (debt repayment capacity) of the MFI, but they can also be usefully issued on specific instruments, reflecting the risk of that instrument and its claims on payments vis-à-vis the MFI's other obligations.

Select the Appropriate Instrument

Products available to MFIs may be limited by regulatory requirements and the level of market development. They may include short-term notes, similar to U.S. commercial paper, as well as medium- and longer-term debt, including securitized debt. As MFIs establish a credit history and track record in the securities markets, they can often extend the yield curve on their bonds by issuing longer-term

instruments. This allows MFIs to price their instruments more efficiently while extending maturities and reducing interest rates. A more developed yield curve permits an institution to issue debt opportunistically, in step with market conditions and according to its own asset/liability structure.

Design the Appropriate Credit Enhancement, If Any

As noted earlier, a well-designed credit enhancement can widen the investor base and thus allow an MFI to issue bonds with more favorable conditions, such as longer maturities, larger amounts or lower interest rates. The MFI must evaluate whether these more favorable conditions are worth the cost of the credit enhancement.

Bond Issue Phase 3: Closing the Transaction

Preparation of Timetable

The MFI and its intermediary (the investment or commercial bank that is bringing the issue to market) should prepare a timetable for closing, which is communicated to all parties. The detailed list of activities to be accomplished prior to closing is similar to that for an equity issue. Some flexibility is required since market timing can be an important consideration. Short-term spikes in interest rates can drive up the cost of the bond issue, and so it is not uncommon to have an issue ready to go but to wait until a favorable market window opens. On the other hand, issuers need to be aware that some investors in both debt and equity instruments may have time pressures of their own to fill quotas for at least minimum amounts of approved investments for the quarter or year.

Pricing the Issue

The bond is priced close to the date at which it is finally issued. The offering memorandum may have indicated an approximate price, but this is now adjusted to reflect current market conditions. In some cases, the price of the bond will be determined through an auction mechanism. In Peru, for example, Mibanco's bonds were sold through a Dutch auction.[53]

Issuing Commitment Letters

The intermediary solicits expressions of interest and receives preliminary indications of interest levels by investors, a process known as "circling" amounts. Typically, each investor issues a formal commitment letter, with the commitment usually being subject to any issues that are still open or for which processes are still not completed. If a Dutch auction process is being used, the potential investors indicate the amount that they would be willing to purchase and at what rates.

Documentation

Documentation of bond issues is done prior to the sale of the securities. Covenants are typically included and may be either administrative or financial in nature. Administrative covenants include the requirement to maintain proper licensing, meet other regulatory and legal requirements and provide audited financial statements within specified time periods. Financial covenants may include restrictions on additional debt issue and compliance with certain financial ratios, such as leverage, current ratio, quick ratio and others.

[53] A Dutch auction is a competitive bidding technique in which the lowest price necessary to sell the entire amount of securities offered becomes the price at which all securities are sold.

Although there is little standardized documentation in the microfinance sector, the increasing role of specialized investors is beginning to result in conformed practices by groups of investors. Standards are also being driven by the needs of other large investors; for example, institutional investors often have standardized forms of documentation.

Drawdown of Funds

Proceeds from the sale of bond issues are deposited with the designated fiduciary agents or transfer agents and released to the MFI upon completion of the process.

LOOKING FORWARD

Improvements in certain areas of capital markets "infrastructure" would help to give MFIs a greater ability to issue stock and bonds. These improvements would help to assure future liquidity of debt and equity instruments and would promote the matching of buyers and sellers of such instruments.

Rating Agencies

The rating and independent evaluation of MFIs by rating agencies must become more widespread. At the same time, the rating agencies themselves need to work more toward regional and global standardization as well as building greater credibility with investors and regulators. This will require that the specialized MFI rating agencies further develop their evaluation expertise, for example, by integrating a more thorough analysis of MFI financial and operational risk management practices into their formal evaluations and ratings. Over time, there may be significant changes in the MFI ratings industry, including an increase in mergers and joint ventures between specialized and traditional rating agencies.

Credit Bureaus

Credit bureaus can play an important role in assuring outside investors that the credit risk of an MFI's loan portfolio is not too large and is under control. For most outside investors who are not familiar with the microfinance industry, an inherent wariness about the repayment capacity and track record of microborrowers continues to be a challenge to MFIs seeking greater access to commercial funding. Viable credit bureaus can play an important role in the process of evaluating MFIs and the underlying MFI clients. Credit bureaus should be put in place in those countries where they do not exist and should be extended down to cover the smallest loans in those countries that track only loans above a certain size threshold (such as US$ 10,000 or 20,000).

Execution of Transactions

Custodial management of equity and debt instruments must be improved, particularly in markets where there is potential for secondary market trading. A safe custodian can ensure the protection of capital and the liquidity of an instrument.

Settlement Procedures

Standardized settlement conditions are needed throughout Latin America to ensure the liquidity of debt instruments, particularly in secondary market trading. Improved settlement procedures would facilitate the circulation of documents and the adoption of standardized legal formats.

Annex B: Liabilities Structure and Capital for 61 Latin American MFIs, 2000-2003 (at end of year)

	Bonds (US$ millions)				Deposits (US$ millions)				Checking Accounts (US$ millions)				Negotiable Certificates of Deposit (US$ millions)				Savings Accounts (US$ millions)				Other Time Deposits (US$ millions)			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
BOLIVIA																								
1. Bancosol	0.0	0.0	0.0	0.0	58.3	62.7	63.7	69.9	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	11.7	11.4	14.9	20.6	46.4	51.1	48.7	49.2
2. Prodem	0.0	0.0	0.0	0.0	18.1	26.2	33.9	48.7	1.6	0.3	0.4	0.8	0.0	0.0	0.0	0.0	0.1	4.2	9.3	16.2	16.4	21.7	24.2	31.7
3. Caja Los Andes	0.0	0.0	0.0	0.0	14.4	21.7	34.6	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.7	6.8	10.2	12.3	17.9	27.8	36.8
4. FIE	0.0	0.0	0.0	0.0	12.3	11.3	17.2	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8	5.4	12.2	11.1	15.4	14.5
5. Ecofuturo	0.0	0.0	0.0	0.0	4.8	4.7	4.7	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.2	1.2	4.7	4.1	3.5	5.9
TOTAL Bolivia	**0.0**	**0.0**	**0.0**	**0.0**	**107.9**	**126.7**	**154.1**	**192.6**	**1.8**	**0.5**	**0.5**	**0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**14.0**	**20.1**	**34.0**	**53.6**	**92.0**	**106.0**	**119.6**	**138.1**
COLOMBIA																								
6. Finamérica	0.8	0.9	0.0	0.3	7.0	10.2	11.6	12.8	0.0	0.0	0.0	0.0	7.0	10.2	11.6	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. Compartir	0.0	0.0	0.0	0.0	2.7	3.6	4.1	5.3	0.0	0.0	0.0	0.0	2.7	3.6	4.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL Colombia	**0.8**	**0.9**	**0.0**	**0.3**	**9.7**	**13.7**	**15.7**	**18.1**	**0.0**	**0.0**	**0.0**	**0.0**	**9.7**	**13.7**	**15.6**	**18.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
ECUADOR																								
8. Banco Solidario	0.0	0.0	0.0	0.0	44.6	76.5	105.6	126.6	1.5	4.7	0.0	0.0	0.0	0.0	0.0	0.0	4.1	11.3	27.5	27.4	39.0	60.5	78.1	99.2
9. Financiera Ecuatorial	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.5
TOTAL Ecuador	**0.0**	**0.0**	**0.0**	**0.0**	**44.6**	**76.5**	**106.3**	**129.1**	**1.5**	**4.7**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.1**	**11.3**	**27.5**	**27.4**	**39.0**	**60.5**	**78.7**	**101.7**
EL SALVADOR																								
10. Financiera Calpiá	0.0	0.0	0.0	0.0	0.0	14.9	22.8	35.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	5.8	3.8	0.0	12.9	16.9	31.5
TOTAL El Salvador	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**14.9**	**22.8**	**35.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.0**	**5.8**	**3.8**	**0.0**	**12.9**	**16.9**	**31.5**
HONDURAS																								
11. Finsol	0.0	0.0	0.0	0.0	2.1	2.8	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.8	1.5	2.0
TOTAL Honduras	**0.0**	**0.0**	**0.0**	**0.0**	**2.1**	**2.8**	**1.5**	**2.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.1**	**2.8**	**1.5**	**2.0**
MEXICO																								
12. Compartamos	0.0	0.0	16.8	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. Fincomún	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	0.0	0.0	0.0	0.0
TOTAL Mexico	**0.0**	**0.0**	**16.8**	**18.1**	**0.0**	**0.0**	**0.6**	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.6**	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**
NICARAGUA																								
14. Findesa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1
15. Confia	0.0	0.0	0.0	0.0	14.1	15.2	11.3	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.7	4.0	4.0	11.0	11.6	7.3	8.1
TOTAL Nicaragua	**0.0**	**0.0**	**0.0**	**0.0**	**14.1**	**15.2**	**11.3**	**12.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**3.1**	**3.7**	**4.0**	**4.3**	**11.0**	**11.6**	**7.3**	**8.2**
PARAGUAY																								
16. Visión	0.0	0.0	0.0	0.0	17.4	17.3	14.7	26.7	0.0	0.0	0.0	0.0	14.1	14.2	10.8	20.7	2.0	2.3	3.1	4.9	1.3	0.8	0.8	1.1
17. Financiera El Comercio	0.0	0.0	0.0	0.0	10.8	8.8	6.2	8.9	0.0	0.0	0.0	0.0	9.2	7.7	4.9	6.0	0.7	0.9	1.3	1.5	0.9	0.2	0.0	1.3
18. Financiera Familiar	0.0	0.0	0.0	0.0	18.0	16.3	11.0	26.8	0.0	0.0	0.0	0.0	15.0	14.7	10.2	23.8	1.0	1.0	0.6	1.7	2.0	0.6	0.2	1.2
19. Interfisa	0.0	0.0	0.0	0.0	15.9	15.3	12.5	18.2	0.0	0.0	0.0	0.0	13.9	13.1	10.2	15.1	1.2	1.3	1.7	2.2	0.8	1.0	0.6	0.8
TOTAL Paraguay	**0.0**	**0.0**	**0.0**	**0.0**	**62.1**	**57.7**	**44.3**	**80.5**	**0.0**	**0.0**	**0.0**	**0.0**	**52.2**	**49.6**	**36.1**	**65.7**	**4.9**	**5.4**	**6.7**	**10.4**	**5.1**	**2.6**	**1.6**	**4.4**

	Bonds (US$ millions)				Deposits (US$ millions)				Checking Accounts (US$ millions)				Negotiable Certificates of Deposit (US$ millions)				Savings Accounts (US$ millions)				Other Time Deposits (US$ millions)			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
PERU																								
20. B. del Trabajo	0.0	0.0	0.0	0.0	77.2	102.4	138.4	175.7	0.7	0.4	0.5	0.6	0.0	0.0	0.0	0.0	10.4	14.7	20.0	21.2	66.1	87.3	118.0	153.8
21. Mibanco	0.0	0.0	5.7	14.4	9.4	25.8	43.2	66.1	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	1.4	4.2	10.4	14.7	8.0	21.6	32.4	51.2
22. CMAC Arequipa	0.0	0.0	0.0	0.0	37.8	54.5	67.5	92.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8	20.4	26.3	32.8	23.0	34.1	41.3	60.0
23. CMAC Chincha	0.0	0.0	0.0	0.0	0.1	0.6	1.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	0.0	0.5	1.6	3.0
24. CMAC Cusco	0.0	0.0	0.0	0.0	15.3	22.6	32.3	42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	11.5	16.9	20.4	6.8	11.2	15.4	21.6
25. CMAC Del Santa	0.0	0.0	0.0	0.0	2.3	5.1	8.6	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.3	2.7	3.4	1.1	3.8	5.9	8.7
26. CMAC Huancayo	0.0	0.0	0.0	0.0	8.6	16.2	26.9	34.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	4.7	9.2	13.2	5.4	11.4	17.7	21.5
27. CMAC Ica	0.0	0.0	0.0	0.0	6.5	8.9	12.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.2	4.8	5.9	3.9	5.7	7.2	9.4
28. CMAC Maynas	0.0	0.0	0.0	0.0	2.9	5.2	10.1	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1	3.5	3.7	1.7	3.1	6.6	9.9
29. CMAC Paita	0.0	0.0	0.0	0.0	2.4	4.6	6.4	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.6	1.8	3.6	1.3	3.1	4.6	8.3
30. CMAC Pisco	0.0	0.0	0.0	0.0	1.1	1.5	2.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.7	0.8	0.6	1.1	1.6	2.1
31. CMAC Piura	0.0	0.0	0.0	0.0	40.7	56.0	61.0	90.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	13.1	14.6	18.1	33.0	42.9	46.4	72.2
32. CMAC Sullana	0.0	0.0	0.0	0.0	9.4	14.1	18.7	30.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.0	5.9	10.0	6.8	10.1	12.8	20.4
33. CMAC Tacna	0.0	0.0	0.0	0.0	10.9	9.7	16.1	23.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	4.5	6.2	8.7	3.1	5.2	10.0	14.6
34. CMAC Trujillo	0.0	0.0	0.0	0.0	16.0	27.1	38.8	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	8.7	13.7	18.4	9.2	18.4	25.1	38.7
35. CMCP Lima	0.0	0.0	0.0	0.0	3.5	2.9	5.1	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.0	2.7	4.5	1.6	0.9	2.4	4.6
36. CRAC Cajamarca	0.0	0.0	0.0	0.0	1.7	2.2	2.9	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.9	2.2	2.2	0.4	0.4	0.7	0.9
37. CRAC Cajasur	0.0	0.0	0.0	0.0	3.2	5.2	7.8	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.3	4.5	6.3	1.2	1.9	3.3	4.4
38. CRAC Chavín	0.0	0.0	0.0	0.0	0.6	0.7	1.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.7	0.8	0.1	0.3	0.5	1.0
39. CRAC Cruz de Chalpón	0.0	0.0	0.0	0.0	2.5	4.1	5.3	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.8	2.0	1.7	1.1	2.3	3.3	4.3
40. CRAC Libertadores	0.0	0.0	0.0	0.0	3.2	3.0	4.1	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.4	3.0	3.8	0.5	0.6	1.1	2.2
41. CRAC Los Andes	0.0	0.0	0.0	0.0	0.2	0.3	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.1	0.1	0.4	0.5
42. CRAC Nor Perú	0.0	0.0	0.0	0.0	7.0	9.1	13.1	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	4.2	6.0	7.0	3.5	4.9	7.1	9.2
43. CRAC Profinanzas	0.0	0.0	0.0	0.0	2.3	1.9	3.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.1	2.4	2.8	0.8	0.8	0.8	1.5
44. CRAC Prymera	0.0	0.0	0.0	0.0	0.2	0.3	0.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.7	1.0
45. CRAC Quillabamba	0.0	0.0	0.0	0.0	3.3	4.3	5.3	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.5	2.0	2.6	2.2	2.8	3.2	5.1
46. CRAC San Martín	0.0	0.0	0.0	0.0	6.9	9.3	16.3	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.2	6.5	7.1	4.2	6.1	9.8	14.3
47. CRAC Señor de Luren	0.0	0.0	0.0	0.0	4.2	6.4	9.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	4.3	4.6	5.2	1.0	2.1	4.4	6.0
48. EDPYME Alternativa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49. EDPYME Camco Piura	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50. EDPYME Confianza	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51. EDPYME Crear Arequipa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52. EDPYME Crear Cusco	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53. EDPYME Crear Tacna	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54. EDPYME Crear Trujillo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55. EDPYME Credivisión	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56. EDPYME Edyficar 1/	0.0	0.0	0.0	0.0	0.0	1.5	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.0	0.6	0.0	0.0	0.0	0.0
57. EDPYME Nueva Visión	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58. EDPYME Proempresa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59. EDPYME Pro Negocios	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60. EDPYME Raíz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61. EDPYME Solidaridad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL Peru (without Edpymes)	**0.0**	**0.0**	**5.7**	**14.4**	**279.5**	**404.1**	**559.1**	**771.2**	**0.7**	**0.4**	**0.8**	**0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**91.6**	**120.6**	**174.1**	**220.0**	**187.1**	**283.0**	**384.1**	**550.2**
TOTAL Peru	**0.0**	**0.0**	**5.7**	**14.4**	**279.5**	**405.6**	**560.1**	**771.8**	**0.7**	**0.4**	**0.8**	**0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**91.6**	**122.1**	**175.2**	**220.7**	**187.1**	**283.0**	**384.1**	**550.2**
TOTAL (without Edpymes and Compartamos)	**0.8**	**0.9**	**5.7**	**14.8**	**520.0**	**711.6**	**915.6**	**1,242.0**	**4.0**	**5.6**	**1.4**	**1.7**	**61.9**	**63.4**	**51.7**	**83.7**	**117.8**	**163.2**	**252.8**	**320.4**	**336.3**	**479.4**	**609.7**	**836.2**
TOTAL	**0.8**	**0.9**	**22.5**	**32.9**	**520.0**	**713.1**	**916.7**	**1,242.7**	**4.0**	**5.6**	**1.4**	**1.7**	**61.9**	**63.4**	**51.7**	**83.7**	**117.8**	**164.7**	**253.8**	**321.0**	**336.3**	**479.5**	**609.7**	**836.2**

1/ Edpyme Edyficar has deposits. They are legal and represent deposits of their employees.

	Borrowing (US$ millions)				Liabilities (US$ millions)				Equity (US$ millions)				Paid-in Capital (US$ millions)				Reserves (US$ millions)				Profits for the Period (US$ millions)			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
BOLIVIA																								
1. Bancosol	19.9	19.2	23.9	23.2	79.8	83.4	89.8	97.7	15.1	14.5	14.8	16.8	11.0	12.7	11.6	11.1	0.8	0.8	2.9	3.4	0.6	0.1	0.3	2.2
2. Prodem	7.9	9.5	12.2	17.5	26.7	36.2	48.1	70.7	4.8	4.7	6.4	7.1	4.4	4.0	5.4	6.0	0.0	0.0	0.5	0.3	0.1	0.0	0.5	0.8
3. Caja Los Andes	27.5	24.8	26.5	31.9	44.1	49.8	66.4	86.9	5.7	6.3	7.0	11.7	2.3	2.1	2.9	4.7	0.7	0.7	0.9	1.2	0.7	0.8	1.2	1.8
4. FIE	9.8	12.6	13.6	16.9	22.9	24.8	32.4	39.7	4.5	4.4	5.2	6.3	3.2	2.9	2.9	3.6	0.1	0.1	1.1	1.4	0.4	0.4	1.1	1.3
5. Ecofuturo	4.9	4.0	0.8	2.7	10.1	11.0	5.8	9.9	2.7	2.3	1.8	1.7	3.0	2.9	2.1	1.7	0.0	0.0	0.2	0.1	-0.6	-0.9	-0.6	-0.1
TOTAL Bolivia	**69.9**	**70.2**	**77.0**	**92.2**	**183.5**	**205.2**	**242.4**	**305.0**	**32.8**	**32.2**	**35.2**	**43.6**	**24.0**	**24.7**	**24.9**	**27.1**	**1.6**	**1.6**	**5.6**	**6.5**	**1.1**	**0.4**	**2.4**	**6.1**
COLOMBIA																								
6. Finamérica	7.2	6.9	4.4	3.7	15.9	19.8	17.3	18.1	3.6	3.3	3.6	4.3	2.0	2.0	2.1	2.3	0.8	0.6	0.6	1.0	-0.2	-0.3	0.2	0.2
7. Compartir	2.8	3.6	4.0	8.9	5.7	7.5	8.4	14.8	4.9	5.2	4.5	4.9	2.4	2.3	2.0	2.0	0.3	0.2	0.4	0.8	-0.1	0.4	0.4	0.3
TOTAL Colombia	**10.0**	**10.5**	**8.4**	**12.6**	**21.6**	**27.2**	**25.7**	**32.9**	**8.4**	**8.4**	**8.1**	**9.2**	**4.4**	**4.3**	**4.0**	**4.4**	**1.1**	**0.9**	**0.9**	**1.7**	**-0.3**	**0.1**	**0.6**	**0.4**
ECUADOR																								
8. Banco Solidario	10.8	20.4	31.7	31.0	61.0	101.4	145.2	164.6	9.5	11.0	13.0	17.0	3.2	4.0	5.7	11.5	5.7	5.4	4.0	1.7	0.6	1.0	2.7	3.0
9. Financiera Ecuatorial	0.0	0.0	4.5	16.4	0.0	0.0	5.4	19.6	0.0	0.0	2.9	6.5	0.0	0.0	2.6	5.8	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.6
TOTAL Ecuador	**10.8**	**20.4**	**36.2**	**47.5**	**61.0**	**101.4**	**150.6**	**184.2**	**9.5**	**11.0**	**15.8**	**23.5**	**3.2**	**4.0**	**8.3**	**17.3**	**5.7**	**5.4**	**4.0**	**1.8**	**0.6**	**1.0**	**2.9**	**3.6**
EL SALVADOR																								
10. Financiera Calpiá	0.0	13.6	19.2	34.2	0.0	29.7	48.9	71.6	0.0	7.9	8.5	13.7	0.0	5.7	7.6	7.6	0.0	1.8	0.1	0.6	0.0	0.3	0.7	0.5
TOTAL El Salvador	**0.0**	**13.6**	**19.2**	**34.2**	**0.0**	**29.7**	**48.9**	**71.6**	**0.0**	**7.9**	**8.5**	**13.7**	**0.0**	**5.7**	**7.6**	**7.6**	**0.0**	**1.8**	**0.1**	**0.6**	**0.0**	**0.3**	**0.7**	**0.5**
HONDURAS																								
11. Finsol	0.8	1.7	1.8	1.8	5.0	5.0	4.2	4.8	1.9	3.5	3.7	4.9	0.0	3.1	2.9	4.1	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5
TOTAL Honduras	**0.8**	**1.7**	**1.8**	**1.8**	**5.0**	**5.0**	**4.2**	**4.8**	**1.9**	**3.5**	**3.7**	**4.9**	**0.0**	**3.1**	**2.9**	**4.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.3**	**0.5**
MEXICO																								
12. Compartamos	0.0	18.1	22.7	35.0	0.0	23.1	41.3	61.4	0.0	11.2	20.9	32.0	0.0	7.0	7.3	6.2	0.0	0.0	0.2	0.6	0.0	2.1	9.0	14.3
13. Fincomún	0.0	0.0	10.6	11.6	0.0	0.0	13.6	13.4	0.0	0.0	1.5	3.0	0.0	0.0	2.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
TOTAL Mexico	**0.0**	**18.1**	**33.3**	**46.6**	**0.0**	**23.1**	**54.9**	**74.8**	**0.0**	**11.2**	**22.3**	**35.0**	**0.0**	**7.0**	**9.7**	**10.0**	**0.0**	**0.0**	**0.2**	**0.6**	**0.0**	**2.1**	**9.1**	**14.6**
NICARAGUA																								
14. Findesa	0.0	0.0	9.8	17.4	0.0	0.0	10.7	19.1	0.0	0.0	2.6	4.1	0.0	0.0	2.2	2.8	0.0	0.0	0.0	0.1	0.0	0.0	0.4	1.1
15. Confia	1.7	2.6	7.1	14.2	17.5	18.9	19.4	27.2	2.2	2.2	2.3	3.8	2.9	5.4	5.7	2.2	0.1	0.1	0.1	0.0	-1.7	0.2	0.5	1.6
TOTAL Nicaragua	**1.7**	**2.6**	**16.9**	**31.6**	**17.5**	**18.9**	**30.1**	**46.3**	**2.2**	**2.2**	**4.9**	**7.8**	**2.9**	**5.4**	**7.9**	**4.9**	**0.1**	**0.1**	**0.1**	**0.1**	**-1.7**	**0.2**	**0.9**	**2.7**
PARAGUAY																								
16. Visión	1.7	1.1	0.3	3.7	24.5	23.7	19.7	33.2	4.1	3.6	2.7	3.6	2.8	2.1	1.7	2.2	0.6	0.7	0.7	1.0	0.6	0.8	0.4	0.5
17. Financiera El Comercio	0.1	0.2	0.0	0.0	11.7	11.1	7.4	9.7	3.3	2.5	1.5	2.2	2.6	1.9	1.3	1.6	0.3	0.3	0.3	0.2	0.4	0.5	-0.1	0.5
18. Financiera Familiar	0.3	0.5	0.0	0.3	21.0	18.7	12.2	28.1	6.6	6.0	4.3	6.3	2.6	1.9	1.3	2.1	2.0	1.9	1.7	3.2	1.7	1.7	0.8	1.0
19. Interfisa	0.0	0.0	0.0	0.0	18.2	16.8	13.7	19.4	3.5	3.1	2.0	2.4	2.4	1.9	1.3	1.4	0.8	0.7	0.6	0.8	0.4	0.5	0.1	-0.1
TOTAL Paraguay	**2.1**	**1.8**	**0.3**	**4.0**	**75.3**	**70.4**	**53.1**	**90.4**	**17.5**	**15.2**	**10.5**	**14.6**	**10.3**	**7.7**	**5.5**	**7.4**	**3.8**	**3.6**	**3.3**	**5.1**	**3.1**	**3.6**	**1.1**	**1.8**

	Borrowing (US$ millions)				Liabilities (US$ millions)				Equity (US$ millions)				Paid-in Capital (US$ millions)				Reserves (US$ millions)				Profits for the Period (US$ millions)			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
PERU																								
20. B. del Trabajo	23.0	28.6	42.2	29.3	115.8	139.7	192.1	220.8	18.6	17.6	23.9	29.6	13.3	14.0	14.3	16.8	1.7	2.0	2.2	3.1	3.5	1.4	7.4	9.7
21. Mibanco	18.2	21.8	27.3	17.1	30.6	55.5	84.5	107.1	15.1	18.3	23.8	31.9	13.8	14.6	16.9	23.0	0.0	0.5	1.5	1.7	1.2	3.2	5.4	7.3
22. CMAC Arequipa	6.0	5.0	9.3	4.8	47.8	63.5	81.5	102.7	5.9	9.1	14.7	19.8	3.5	4.6	7.1	7.4	0.8	1.0	1.3	4.9	1.6	3.5	6.2	7.4
23. CMAC Chincha	0.0	0.7	1.0	0.9	0.2	1.4	3.0	4.7	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
24. CMAC Cusco	0.8	0.2	0.4	1.7	17.0	23.7	33.7	45.4	3.1	4.0	5.4	8.8	1.7	2.0	2.5	3.8	0.6	0.7	0.9	1.4	0.8	1.3	2.0	3.6
25. CMAC Del Santa	1.5	2.0	2.6	3.6	4.3	7.5	11.8	16.7	1.0	1.2	1.6	2.2	0.6	0.8	0.9	1.1	0.2	0.2	0.3	0.5	0.2	0.2	0.4	0.6
26. CMAC Huancayo	4.6	4.3	3.3	2.2	13.9	21.6	32.0	39.1	2.6	3.8	5.1	7.5	1.3	1.7	2.4	3.2	0.1	0.2	0.2	0.6	0.7	1.2	1.5	2.2
27. CMAC Ica	3.2	3.7	2.2	1.7	10.6	13.0	14.6	18.1	2.8	3.2	3.2	4.4	1.5	1.9	2.0	2.1	0.4	0.4	0.6	0.9	0.4	0.4	0.4	1.3
28. CMAC Maynas	1.9	2.2	3.8	3.0	5.5	7.8	14.3	17.6	1.6	2.0	2.6	3.0	1.1	1.4	1.7	2.1	0.1	0.2	0.2	0.3	0.3	0.5	0.6	0.6
29. CMAC Paita	1.5	2.3	3.3	4.9	4.5	7.3	10.1	17.4	1.1	1.5	2.0	2.6	0.6	0.8	1.1	1.5	0.1	0.3	0.4	0.5	0.3	0.4	0.5	0.5
30. CMAC Pisco	0.4	0.3	0.5	1.1	1.7	1.9	3.0	4.2	0.5	0.6	0.6	0.8	0.4	0.5	0.5	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
31. CMAC Piura	22.8	27.8	31.2	29.7	67.4	86.0	96.6	123.3	7.5	9.5	13.3	18.9	4.6	6.2	7.8	11.4	0.6	0.9	1.1	1.6	2.2	2.5	4.5	6.0
32. CMAC Sullana	6.9	7.5	11.3	12.2	18.4	22.8	31.4	44.6	3.4	4.5	6.0	8.0	1.6	2.0	3.1	4.2	0.8	0.9	1.1	1.5	0.6	1.3	1.8	2.3
33. CMAC Tacna	1.4	3.2	7.0	7.7	13.3	13.3	23.6	31.8	2.4	3.3	4.1	5.4	1.2	1.7	2.3	2.9	0.4	0.6	0.8	1.0	0.7	0.9	1.0	1.4
34. CMAC Trujillo	3.7	3.5	12.7	21.2	21.1	31.9	53.4	81.2	5.3	6.9	8.7	13.6	3.4	4.4	5.2	7.2	0.9	0.9	1.1	1.3	1.1	1.6	2.4	5.1
35. CMCP Lima	0.6	0.7	3.9	11.0	6.3	5.1	10.9	22.0	3.1	5.1	7.1	9.4	1.7	2.2	4.0	5.9	0.4	0.8	1.0	1.3	1.0	2.1	2.2	2.3
36. CRAC Cajamarca	0.8	0.4	0.4	0.9	2.8	2.8	3.4	4.2	0.6	0.7	0.7	0.8	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
37. CRAC Cajasur	5.2	5.9	5.0	6.9	10.8	11.4	13.2	18.1	2.0	2.1	2.6	2.7	1.6	1.8	2.1	2.3	0.1	0.1	0.1	0.2	0.3	0.1	0.4	0.2
38. CRAC Chavín	1.4	0.9	0.5	0.3	2.1	1.8	1.7	2.1	0.7	0.8	0.8	0.9	0.7	0.7	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
39. CRAC Cruz de Chalpón	1.8	1.6	1.4	0.8	4.9	6.0	6.9	7.0	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
40. CRAC Libertadores	1.2	1.1	0.8	0.5	4.7	4.1	5.0	6.8	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1
41. CRAC Los Andes	1.3	0.8	0.4	0.2	1.7	1.2	1.2	1.2	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
42. CRAC Nor Perú	3.1	3.1	3.3	4.0	11.2	12.5	16.8	20.7	1.8	2.0	2.4	3.0	1.7	1.7	1.9	2.3	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.6
43. CRAC Profinanzas	4.3	3.9	2.9	2.5	7.4	5.9	6.1	6.9	1.0	0.7	0.5	0.6	1.1	1.3	1.3	1.3	0.0	0.0	0.0	0.0	-0.2	0.0	-0.3	0.1
44. CRAC Prymera	0.8	2.3	2.8	2.0	1.1	2.7	3.8	3.3	0.6	1.0	1.5	1.6	0.4	0.6	1.0	1.5	0.0	0.0	0.0	0.0	-0.3	0.1	0.2	0.1
45. CRAC Quillabamba	1.5	1.2	0.9	1.5	5.3	5.5	6.3	9.4	0.8	0.7	0.9	0.9	0.7	0.8	0.9	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
46. CRAC San Martín	8.3	9.6	9.7	6.1	17.9	19.1	26.2	27.7	2.7	2.6	2.8	2.7	1.7	1.7	1.7	2.0	0.3	0.3	0.2	0.1	0.2	0.0	0.2	0.0
47. CRAC Señor de Luren	4.7	5.3	5.6	6.7	11.2	12.1	14.9	18.4	2.1	2.2	2.3	2.3	1.9	1.9	1.9	2.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2
48. EDPYME Alternativa	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.0	0.4	0.5	0.6	0.0	0.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
49. EDPYME Camco Piura	0.0	0.3	0.2	0.1	0.0	0.3	0.2	0.1	0.0	0.3	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
50. EDPYME Confianza	1.4	2.7	4.8	9.0	1.6	3.0	5.1	9.4	0.5	0.8	1.1	2.1	0.5	0.5	0.8	1.3	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3
51. EDPYME Crear Arequipa	2.0	2.7	4.2	6.4	2.2	2.9	4.5	6.8	0.5	0.8	1.0	1.5	0.4	0.6	0.7	1.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.4
52. EDPYME Crear Cusco	0.5	0.8	1.2	1.3	0.5	0.8	1.3	1.4	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
53. EDPYME Crear Tacna	3.8	3.1	3.2	3.7	4.2	3.3	3.3	4.0	0.8	1.0	1.0	1.3	0.6	0.8	0.8	0.9	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.3
54. EDPYME Crear Trujillo	0.0	1.5	1.2	1.3	0.0	1.6	1.4	1.7	0.0	0.3	0.3	0.3	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
55. EDPYME Credivisión	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.8	1.1	1.2	1.4	0.5	0.5	0.5	1.3	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.2
56. EDPYME Edyficar 1/	5.3	14.8	17.2	27.6	10.5	17.3	19.1	29.7	3.5	4.2	5.5	6.8	1.0	1.0	3.9	4.8	0.1	0.5	0.7	0.8	0.3	0.8	0.8	1.2
57. EDPYME Nueva Visión	0.5	1.0	1.5	2.1	0.9	1.0	1.6	2.2	0.8	0.8	1.0	1.2	0.8	0.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
58. EDPYME Proempresa	4.4	5.6	6.7	7.7	5.3	5.8	7.1	8.0	1.4	1.5	1.6	1.8	1.2	1.2	1.4	1.5	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.2
59. EDPYME Pro Negocios	0.0	0.0	0.7	1.3	0.0	0.0	0.8	1.3	0.0	0.0	0.8	0.9	0.0	0.0	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
60. EDPYME Raíz	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	7.1	13.6	17.1	20.5	7.3	13.5	16.8	23.2	0.0	0.0	0.0	0.0	-0.1	0.4	0.3	-2.7
61. EDPYME Solidaridad	1.1	1.4	1.1	0.8	1.1	1.4	1.1	0.9	0.4	0.3	0.4	0.5	0.7	0.7	0.8	0.7	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.1
TOTAL Peru (without Edpymes)	**131.0**	**149.9**	**195.6**	**184.7**	**459.5**	**587.1**	**802.3**	**1,022.6**	**88.4**	**105.6**	**138.9**	**184.1**	**62.9**	**72.2**	**86.3**	**109.5**	**7.9**	**10.2**	**13.3**	**21.3**	**14.9**	**21.4**	**37.6**	**51.9**
TOTAL Peru	**149.9**	**183.8**	**238.1**	**246.5**	**485.8**	**624.8**	**848.5**	**1,089.0**	**104.6**	**131.0**	**171.2**	**223.9**	**76.3**	**93.2**	**115.2**	**147.8**	**8.1**	**10.7**	**14.2**	**22.4**	**15.4**	**22.6**	**39.7**	**52.1**
TOTAL (without Edpymes and Compartamos)	**226.3**	**270.6**	**366.1**	**420.0**	**823.5**	**1,044.9**	**1,370.8**	**1,771.2**	**160.8**	**186.1**	**227.1**	**304.6**	**107.8**	**127.1**	**149.9**	**186.1**	**20.1**	**23.5**	**27.5**	**37.2**	**17.8**	**27.4**	**46.6**	**67.8**
TOTAL	**245.3**	**322.6**	**431.4**	**516.9**	**849.8**	**1,105.7**	**1,458.4**	**1,899.1**	**177.0**	**222.8**	**280.2**	**376.3**	**121.1**	**155.1**	**186.2**	**230.5**	**20.3**	**24.1**	**28.6**	**38.9**	**18.2**	**30.7**	**57.6**	**82.4**

	Deposits / Liabilities				Borrowing / Liabilities				Deposits / Loans				Number of Deposit Accounts				Average Deposit (US$)				Liabilities / Equity			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
BOLIVIA																								
1. Bancosol	73%	75%	71%	72%	25%	23%	27%	24%	79%	85%	85%	81%	30,004	46,708	53,376	57,148	1,944	1,343	1,194	1,223	5.3	5.7	6.0	5.8
2. Prodem	68%	72%	70%	69%	30%	26%	25%	25%	79%	81%	79%	79%	854	16,725	35,222	66,089	21,244	1,567	961	737	5.6	7.7	7.5	9.9
3. Caja Los Andes	33%	44%	52%	54%	62%	50%	40%	37%	32%	46%	57%	59%	18,121	23,308	29,701	39,253	793	930	1,166	1,196	7.8	7.9	9.5	7.4
4. FIE	54%	46%	53%	50%	43%	51%	42%	43%	56%	45%	52%	51%	440	1,110	7,262	20,281	27,852	10,204	2,364	981	5.1	5.6	6.2	6.3
5. Ecofuturo	48%	43%	81%	72%	48%	37%	14%	27%	45%	51%	80%	73%	0	862	1,304	2,246		5,455	3,625	3,171	3.7	4.8	3.3	5.9
TOTAL Bolivia	**59%**	**62%**	**64%**	**63%**	**38%**	**34%**	**32%**	**30%**	**62%**	**67%**	**71%**	**70%**	**49,419**	**88,713**	**126,865**	**185,017**	**2,184**	**1,428**	**1,215**	**1,041**	**5.6**	**6.4**	**6.9**	**7.0**
COLOMBIA																								
6. Finamérica	44%	51%	67%	71%	45%	35%	26%	20%	44%	55%	76%	72%	793	1,102			8,840	9,246			4.5	6.0	4.8	4.2
7. Compartir	47%	48%	49%	36%	49%	48%	48%	60%	29%	30%	34%	29%									1.2	1.4	1.9	3.0
TOTAL Colombia	**45%**	**50%**	**61%**	**55%**	**46%**	**39%**	**33%**	**38%**	**38%**	**46%**	**58%**	**50%**	**793**	**1,102**			**12,229**	**12,472**			**2.6**	**3.2**	**3.2**	**3.6**
ECUADOR																								
8. Banco Solidario	73%	76%	73%	77%	18%	20%	22%	19%	123%	116%	107%	103%	43,733				1,020				6.4	9.2	11.2	9.7
9. Financiera Ecuatorial			12%	13%			84%	84%			10%	12%											1.9	3.0
TOTAL Ecuador	**73%**	**76%**	**71%**	**70%**	**18%**	**20%**	**24%**	**26%**	**123%**	**116%**	**101%**	**90%**	**43,733**				**1,020**				**6.4**	**9.2**	**9.5**	**7.8**
EL SALVADOR																								
10. Financiera Calpiá		50%	47%	49%		46%	39%	48%		50%	53%	54%										3.8	5.8	5.2
TOTAL El Salvador		**50%**	**47%**	**49%**		**46%**	**39%**	**48%**		**50%**	**53%**	**54%**	**0**									**3.8**	**5.8**	**5.2**
HONDURAS																								
11. Finsol	41%	56%	36%	42%	16%	34%	44%	37%	39%	43%	23%	25%									2.6	1.4	1.1	1.0
TOTAL Honduras	**41%**	**56%**	**36%**	**42%**	**16%**	**34%**	**44%**	**37%**	**39%**	**43%**	**23%**	**25%**	**0**								**2.6**	**1.4**	**1.1**	**1.0**
MEXICO																								
12. Compartamos		0%	0%	0%		79%	55%	57%		0%	0%	0%			0	0						2.1	2.0	1.9
13. Fincomún			5%	6%			78%	86%			10%	11%	9,500	14,531	15,336		0	0	41				9.2	4.4
TOTAL Mexico		**0%**	**1%**	**1%**		**79%**	**61%**	**62%**		**0%**	**1%**	**1%**	**9,500**	**14,531**	**15,336**	**0**	**0**	**0**	**41**			**2.1**	**2.5**	**2.1**
NICARAGUA																								
14. Findesa			0%	2%			91%	91%			0%	2%											4.1	4.7
15. Confia	81%	80%	58%	44%	10%	14%	37%	52%	110%	117%	76%	49%									7.9	8.5	8.5	7.2
TOTAL Nicaragua	**81%**	**80%**	**37%**	**27%**	**10%**	**14%**	**56%**	**68%**	**110%**	**117%**	**45%**	**29%**	**0**			**0**					**7.9**	**8.5**	**6.2**	**5.9**
PARAGUAY																								
16. Visión	71%	73%	75%	80%	7%	5%	2%	11%	82%	87%	102%	106%	5,038	7,728	12,217		3,458	2,239	1,201		6.0	6.6	7.2	9.2
17. Financiera El Comercio	92%	79%	84%	91%	1%	2%	0%	0%	95%	89%	104%	113%									3.6	4.4	5.0	4.4
18. Financiera Familiar	86%	87%	90%	95%	2%	3%	0%	1%	85%	85%	92%	105%									3.2	3.1	2.9	4.4
19. Interfisa	87%	91%	91%	94%	0%	0%	0%	0%	104%	117%	132%	139%									5.1	5.4	6.7	8.1
TOTAL Paraguay	**82%**	**82%**	**84%**	**89%**	**3%**	**3%**	**1%**	**4%**	**90%**	**93%**	**106%**	**112%**	**5,038**	**7,728**	**12,217**	**0**	**12,330**	**7,460**	**3,628**		**4.3**	**4.6**	**5.0**	**6.2**

	Deposits / Liabilities				Borrowing / Liabilities				Deposits / Loans				Number of Deposit Accounts				Average Deposit (US$)				Liabilities / Equity			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
PERU																								
20. B. del Trabajo	67%	73%	72%	80%	20%	20%	22%	13%	92%	98%	92%	94%									6.2	7.9	8.1	7.5
21. Mibanco	31%	46%	51%	62%	60%	39%	32%	16%	26%	44%	49%	61%									2.0	3.0	3.5	3.4
22. CMAC Arequipa	79%	86%	83%	90%	13%	8%	11%	5%	104%	118%	104%	107%	42,484	59,708	82,187	101,392	890	913	822	916	8.1	7.0	5.5	5.2
23. CMAC Chincha	75%	46%	62%	75%	0%	52%	34%	20%	171%	52%	77%	92%									0.4	4.2	8.1	9.1
24. CMAC Cusco	90%	95%	96%	93%	5%	1%	1%	4%	128%	140%	118%	106%	29,009	37,367	49,208		527	606	656		5.5	5.9	6.2	5.1
25. CMAC Del Santa	54%	68%	73%	72%	36%	26%	22%	22%	76%	89%	91%	93%									4.2	6.1	7.3	7.5
26. CMAC Huancayo	61%	75%	84%	89%	33%	20%	10%	6%	78%	96%	120%	109%									5.3	5.7	6.2	5.2
27. CMAC Ica	62%	68%	82%	84%	30%	29%	15%	10%	68%	82%	111%	97%									3.7	4.1	4.6	4.1
28. CMAC Maynas	53%	67%	71%	78%	34%	28%	27%	17%	65%	72%	80%	105%									3.4	3.8	5.6	5.8
29. CMAC Paita	55%	63%	63%	68%	33%	32%	32%	28%	67%	79%	95%	96%									4.0	4.8	5.1	6.8
30. CMAC Pisco	67%	76%	76%	68%	21%	15%	18%	26%	94%	107%	99%	87%									3.4	3.1	4.8	5.3
31. CMAC Piura	60%	65%	63%	73%	34%	32%	32%	24%	106%	112%	90%	106%									9.0	9.0	7.2	6.5
32. CMAC Sullana	51%	62%	60%	68%	38%	33%	36%	27%	70%	78%	76%	87%			32,981				568		5.5	5.1	5.3	5.6
33. CMAC Tacna	82%	73%	68%	73%	11%	24%	29%	24%	136%	102%	94%	97%									5.6	4.1	5.8	5.8
34. CMAC Trujillo	76%	85%	73%	70%	18%	11%	24%	26%	91%	105%	85%	77%									4.0	4.6	6.2	6.0
35. CMCP Lima	56%	58%	46%	41%	10%	14%	36%	50%	77%	51%	43%	38%									2.0	1.0	1.5	2.3
36. CRAC Cajamarca	62%	80%	86%	72%	28%	14%	11%	22%	21%	109%	125%	83%									4.7	4.3	4.8	5.0
37. CRAC Cajasur	30%	45%	59%	59%	48%	52%	38%	38%	169%	51%	78%	82%									5.3	5.5	5.0	6.7
38. CRAC Chavín	26%	39%	67%	84%	65%	50%	31%	13%	35%	42%	76%	85%									2.9	2.2	2.1	2.3
39. CRAC Cruz de Chalpón	51%	68%	76%	85%	37%	26%	20%	12%	71%	98%	103%	130%									8.6	8.6	8.7	8.5
40. CRAC Libertadores	68%	72%	82%	87%	25%	26%	16%	8%	128%	121%	122%	196%									9.9	8.7	10.4	16.5
41. CRAC Los Andes	13%	28%	60%	77%	78%	69%	36%	18%	15%	27%	70%	75%									2.7	2.1	2.0	1.8
42. CRAC Nor Perú	62%	72%	78%	78%	28%	25%	20%	19%	89%	115%	115%	110%		18,747	22,068			485	595		6.1	6.2	7.0	6.9
43. CRAC Profinanzas	31%	32%	52%	62%	58%	67%	47%	36%	45%	54%	100%	109%									7.8	7.9	11.9	11.6
44. CRAC Prymera	16%	11%	21%	36%	73%	86%	72%	61%	24%	15%	30%	35%									1.9	2.5	2.6	2.1
45. CRAC Quillabamba	61%	78%	83%	81%	29%	21%	15%	16%	82%	111%	140%	121%									6.4	7.5	7.2	9.9
46. CRAC San Martín	38%	49%	62%	77%	47%	50%	37%	22%	63%	84%	100%	129%									6.7	7.4	9.4	10.1
47. CRAC Señor de Luren	38%	53%	60%	61%	42%	44%	37%	36%	55%	74%	95%	84%		19,288	25,212			331	356		5.3	5.5	6.5	7.9
48. EDPYME Alternativa		8%	0%	0%		0%	93%	87%		0%	0%	0%										0.0	0.8	0.7
49. EDPYME Camco Piura		0%	0%	0%		93%	97%	90%		0%	0%	0%										0.9	0.7	0.3
50. EDPYME Confianza	0%	0%	0%	0%	90%	92%	95%	95%	0%	0%	0%	0%									3.0	3.5	4.8	4.5
51. EDPYME Crear Arequipa	0%	1%	0%	0%	92%	95%	95%	95%	0%	1%	0%	0%									4.0	3.8	4.4	4.6
52. EDPYME Crear Cusco	0%	0%	0%	0%	98%	99%	97%	96%	0%	0%	0%	0%									1.9	3.1	3.6	3.0
53. EDPYME Crear Tacna	0%	0%	0%	0%	89%	95%	95%	92%	0%	0%	0%	0%									5.0	3.5	3.4	3.2
54. EDPYME Crear Trujillo		0%	0%	0%		93%	84%	76%		0%	0%	0%										5.9	4.3	4.9
55. EDPYME Credivisión	0%	0%	0%	0%	0%	49%	47%	64%	0%	0%	0%	0%									0.0	0.0	0.0	0.1
56. EDPYME Edyficar 1/	0%	8%	5%	2%	51%	85%	90%	93%	0%	8%	5%	2%									3.0	4.1	3.5	4.4
57. EDPYME Nueva Visión	0%	0%	2%	0%	59%	98%	96%	95%	0%	0%	2%	0%									1.1	1.2	1.6	1.8
58. EDPYME Proempresa	0%	0%	0%	0%	83%	97%	96%	97%	0%	0%	0%	0%									3.8	3.8	4.4	4.4
59. EDPYME Pro Negocios			0%	0%			88%	94%			0%	0%											1.0	1.5
60. EDPYME Raíz	0%	0%	0%	0%	0%	0%	0%	22%	0%	0%	0%	0%									0.0	0.0	0.0	0.0
61. EDPYME Solidaridad	0%	0%	0%	0%	97%	97%	96%	93%	0%	0%	0%	0%									2.6	4.9	2.6	1.7
TOTAL Peru (without Edpymes)	**61%**	**69%**	**70%**	**75%**	**29%**	**26%**	**24%**	**18%**	**82%**	**91%**	**88%**	**92%**									**5.2**	**5.6**	**5.8**	**5.6**
TOTAL Peru	**58%**	**65%**	**66%**	**71%**	**31%**	**29%**	**28%**	**23%**	**76%**	**83%**	**80%**	**84%**									**4.6**	**4.8**	**5.0**	**4.9**
TOTAL (without Edpymes and Compartamos)	**63%**	**68%**	**67%**	**70%**	**27%**	**26%**	**27%**	**24%**	**79%**	**85%**	**82%**	**83%**									**5.1**	**5.6**	**6.0**	**5.8**
TOTAL	**61%**	**64%**	**63%**	**65%**	**29%**	**29%**	**30%**	**27%**	**75%**	**78%**	**73%**	**76%**									**4.8**	**5.0**	**5.2**	**5.0**

Annex C: MicroRate Data on MFI Borrowing
(US$ thousands, as of December 2003)

1. Caja Los Andes, Bolivia

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term				$1,132		$3,895		$749	**$0**	**$5,776**	**$5,776**	20%
Long term				$10,195		$8,925		$4,394	**$0**	**$23,515**	**$23,515**	80%
TOTAL	**$0**	**$0**	**$0**	**$11,327**	**$0**	**$12,820**	**$0**	**$5,143**	**$0**	**$29,291**	**$29,291**	100%
%	0%	0%	0%	39%	0%	44%	0%	18%	0%	100%	100%	

Note: For all tables in Annex C: LC = Local currency, FC = Foreign currency.

2. Bancosol, Bolivia

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term		$499							**$0**	**$499**	**$499**	7%
Long term				$3,496		$1,748	$1,489		**$1,489**	**$5,243**	**$6,732**	93%
TOTAL	**$0**	**$499**	**$0**	**$3,496**	**$0**	**$1,748**	**$1,489**	**$0**	**$1,489**	**$5,742**	**$7,231**	100%
%	0%	7%	0%	48%	0%	24%	21%	0%	21%	79%	100%	

3. FIE, Bolivia

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term									**$0**	**$0**	**$0**	0%
Long term				$6,356		$4,670		$2,798	**$0**	**$13,824**	**$13,824**	100%
TOTAL	**$0**	**$0**	**$0**	**$6,356**	**$0**	**$4,670**	**$0**	**$2,798**	**$0**	**$13,824**	**$13,824**	100%
%	0%	0%	0%	46%	0%	34%	0%	20%	0%	100%	100%	

4. Finamérica, Colombia

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term			$719						**$719**	**$0**	**$719**	18%
Long term			$3,389						**$3,389**	**$0**	**$3,389**	82%
TOTAL	**$0**	**$0**	**$4,108**	**$0**	**$0**	**$0**	**$0**	**$0**	**$4,108**	**$0**	**$4,108**	100%
%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	100%	

5. Calpiá, El Salvador

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term		$1,000							**$0**	**$1,000**	**$1,000**	3%
Long term				$18,240		$11,648			**$0**	**$29,887**	**$29,887**	97%
TOTAL	**$0**	**$1,000**	**$0**	**$18,240**	**$0**	**$11,648**	**$0**	**$0**	**$0**	**$30,887**	**$30,887**	100%
%	0%	3%	0%	59%	0%	38%	0%	0%	0%	100%	100%	

6. Compartamos, Mexico

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$23,232	$1,000				$833			**$23,232**	**$1,833**	**$25,065**	72%
Long term					$220	$5,415		$3,999	**$220**	**$9,414**	**$9,634**	28%
TOTAL	**$23,232**	**$1,000**	**$0**	**$0**	**$220**	**$6,248**	**$0**	**$3,999**	**$23,452**	**$11,247**	**$34,699**	100%
%	67%	3%	0%	0%	1%	18%	0%	12%	68%	32%	100%	

7. Fincomún, Mexico

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term									**$0**	**$0**	**$0**	0%
Long term			$3,981					$100	**$3,981**	**$100**	**$4,081**	100%
TOTAL	**$0**	**$0**	**$3,981**	**$0**	**$0**	**$0**	**$0**	**$100**	**$3,981**	**$100**	**$4,081**	100%
%	0%	0%	98%	0%	0%	0%	0%	2%	98%	2%	100%	

8. Procredit (Confía), Nicaragua

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term			$2,000	$550		$305		$8,375	**$2,000**	**$9,229**	**$11,229**	79%
Long term			$272	$205		$1,006		$1,473	**$272**	**$2,685**	**$2,957**	21%
TOTAL	**$0**	**$0**	**$2,272**	**$755**	**$0**	**$1,311**	**$0**	**$9,848**	**$2,272**	**$11,914**	**$14,186**	100%
%	0%	0%	16%	5%	0%	9%	0%	69%	16%	84%	100%	

9. Findesa, Nicaragua

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term				$381		$500		$400	**$0**	**$1,281**	**$1,281**	7%
Long term		$2,803		$8,420		$2,729		$2,000	**$0**	**$15,952**	**$15,952**	93%
TOTAL	**$0**	**$2,803**	**$0**	**$8,801**	**$0**	**$3,229**	**$0**	**$2,400**	**$0**	**$17,233**	**$17,233**	100%
%	0%	16%	0%	51%	0%	19%	0%	14%	0%	100%	100%	

10. El Comercio Financiera, Paraguay

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term									$0	$0	$0	0%
Long term			$476			$1,384			$476	$1,384	$1,860	100%
TOTAL	$0	$0	$476	$0	$0	$1,384	$0	$0	$476	$1,384	$1,860	100%
%	0%	0%	26%	0%	0%	74%	0%	0%	26%	74%	100%	

11. CMAC Arequipa, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$578		$1,852	$1	$76	$19			$2,506	$20	$2,526	54%
Long term			$1,363	$4	$753	$39			$2,116	$43	$2,158	46%
TOTAL	$578	$0	$3,215	$5	$829	$58	$0	$0	$4,622	$63	$4,685	100%
%	12%	0%	69%	0%	18%	1%	0%	0%	99%	1%	100%	

12. CMAC Cusco, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term									$0	$0	$0	0%
Long term			$1,445	$251					$1,445	$251	$1,697	100%
TOTAL	$0	$0	$1,445	$251	$0	$0	$0	$0	$1,445	$251	$1,697	100%
%	0%	0%	85%	15%	0%	0%	0%	0%	85%	15%	100%	

13. CMAC Ica, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$145	$450	$429	$179					$574	$630	$1,204	84%
Long term					$224				$224	$0	$224	16%
TOTAL	$145	$450	$429	$179	$224	$0	$0	$0	$798	$630	$1,428	100%
%	10%	32%	30%	13%	16%	0%	0%	0%	56%	44%	100%	

14. CMAC Santa, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$1,003		$95						$1,097	$0	$1,097	49%
Long term			$894		$240				$1,134	$0	$1,134	51%
TOTAL	$1,003	$0	$988	$0	$240	$0	$0	$0	$2,231	$0	$2,231	100%
%	45%	0%	44%	0%	11%	0%	0%	0%	100%	0%	100%	

15. CMAC Sullana, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$3,882		$3,652	$83					**$7,535**	**$83**	**$7,618**	63%
Long term			$3,148	$167				$1,251	**$3,148**	**$1,418**	**$4,566**	37%
TOTAL	**$3,882**	**$0**	**$6,800**	**$250**	**$0**	**$0**	**$0**	**$1,251**	**$10,683**	**$1,501**	**$12,184**	100%
%	32%	0%	56%	2%	0%	0%	0%	10%	88%	12%	100%	

16. CMAC Tacna, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$2,312	$250		$400					**$2,312**	**$651**	**$2,963**	38%
Long term	$115		$2,502	$688	$678	$480		$280	**$3,295**	**$1,449**	**$4,744**	62%
TOTAL	**$2,427**	**$250**	**$2,502**	**$1,088**	**$678**	**$480**	**$0**	**$280**	**$5,607**	**$2,099**	**$7,707**	100%
%	31%	3%	32%	14%	9%	6%	0%	4%	73%	27%	100%	

17. CMAC Trujillo, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$3,884	$1,106	$2,346	$2,217		$167			**$6,229**	**$3,489**	**$9,719**	46%
Long term		$374	$3,498	$7,245		$334			**$3,498**	**$7,953**	**$11,451**	54%
TOTAL	**$3,884**	**$1,480**	**$5,844**	**$9,462**	**$0**	**$500**	**$0**	**$0**	**$9,727**	**$11,442**	**$21,170**	100%
%	18%	7%	28%	45%	0%	2%	0%	0%	46%	54%	100%	

18. Edpyme Confianza, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$1,630	$291	$636						**$2,266**	**$291**	**$2,557**	28%
Long term			$641	$2,218	$814	$1,343		$1,406	**$1,455**	**$4,968**	**$6,423**	72%
TOTAL	**$1,630**	**$291**	**$1,277**	**$2,218**	**$814**	**$1,343**	**$0**	**$1,406**	**$3,721**	**$5,259**	**$8,979**	100%
%	18%	3%	14%	25%	9%	15%	0%	16%	41%	59%	100%	

19. Edpyme Crear Arequipa, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$305							$976	**$305**	**$976**	**$1,281**	20%
Long term			$3,445	$176	$553	$781		$200	**$3,999**	**$1,157**	**$5,156**	80%
TOTAL	**$305**	**$0**	**$3,445**	**$176**	**$553**	**$781**	**$0**	**$1,176**	**$4,304**	**$2,133**	**$6,436**	100%
%	5%	0%	54%	3%	9%	12%	0%	18%	67%	33%	100%	

20. Edpyme Crear Tacna, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$113		$425	$318		$209			**$539**	**$526**	**$1,065**	29%
Long term			$1,250	$1,074	$100	$167			**$1,350**	**$1,240**	**$2,590**	71%
TOTAL	**$113**	**$0**	**$1,675**	**$1,391**	**$100**	**$375**	**$0**	**$0**	**$1,888**	**$1,767**	**$3,655**	100%
%	3%	0%	46%	38%	3%	10%	0%	0%	52%	48%	100%	

21. Edpyme Edyficar, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$2,814	$105	$6,539	$2,884	$30	$1,192	$37	$3,037	**$9,420**	**$7,218**	**$16,638**	60%
Long term	$654	$10	$1,999	$6,664	$1,594		$122		**$4,368**	**$6,674**	**$11,042**	40%
TOTAL	**$3,468**	**$115**	**$8,538**	**$9,548**	**$1,624**	**$1,192**	**$158**	**$3,037**	**$13,788**	**$13,892**	**$27,680**	100%
%	13%	0%	31%	34%	6%	4%	1%	11%	50%	50%	100%	

22. Edpyme Nueva Visión, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term			$412	$156	$194	$160			**$606**	**$316**	**$922**	45%
Long term			$631	$164	$113	$239			**$744**	**$404**	**$1,148**	55%
TOTAL	**$0**	**$0**	**$1,043**	**$320**	**$307**	**$400**	**$0**	**$0**	**$1,350**	**$720**	**$2,070**	100%
%	0%	0%	50%	15%	15%	19%	0%	0%	65%	35%	100%	

23. Edpyme Proempresa, Peru

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$140	$490	$1,010	$707	$361	$1,081		$1,350	**$1,511**	**$3,627**	**$5,138**	57%
Long term		$160	$967	$750	$125	$1,262		$551	**$1,092**	**$2,724**	**$3,817**	43%
TOTAL	**$140**	**$650**	**$1,977**	**$1,457**	**$486**	**$2,343**	**$0**	**$1,902**	**$2,603**	**$6,351**	**$8,954**	100%
%	2%	7%	22%	16%	5%	26%	0%	21%	29%	71%	100%	

24. Peru*

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$16,805	$2,691	$17,396	$6,944	$662	$2,828	$37	$5,363	**$34,900**	**$17,827**	**$52,726**	48%
Cost	8.0%	8.0%	12.0%	5.5%	10.2%	6.7%	10.0%	9.3%	**10.0%**	**7.2%**	**9.1%**	
Long term	$769	$545	$21,783	$19,402	$5,194	$4,645	$122	$3,689	**$27,867**	**$28,281**	**$56,148**	52%
Cost	7.7%	8.1%	10.3%	6.2%	8.3%	7.8%	10.0%	7.8%	**9.8%**	**6.7%**	**8.3%**	
TOTAL	**$17,574**	**$3,236**	**$39,179**	**$26,347**	**$5,856**	**$7,472**	**$158**	**$9,052**	**$62,767**	**$46,107**	**$108,874**	100%
Cost	**8.0%**	**8.0%**	**11.0%**	**6.0%**	**8.5%**	**7.4%**	**10.0%**	**8.7%**	**10.0%**	**6.9%**	**8.7%**	
%	16%	3%	36%	24%	5%	7%	0%	8%	58%	42%	100%	

* Overall data, including weighted financial cost, for all Peruvian MFIs analyzed.

25. Bolivia*

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$0	$499	$0	$1,132	$0	$3,895	$0	$749	**$0**	**$6,275**	**$6,275**	12%
Cost		9.3%		4.0%		5.6%		6.7%		**5.8%**	**5.8%**	
Long term	$0	$0	$0	$20,047	$0	$15,343	$1,489	$7,192	**$1,489**	**$42,582**	**$44,071**	88%
Cost				4.0%		6.2%	14.5%	6.1%	**14.5%**	**5.1%**	**5.4%**	
TOTAL	**$0**	**$499**	**$0**	**$21,178**	**$0**	**$19,238**	**$1,489**	**$7,941**	**$1,489**	**$48,857**	**$50,346**	100%
Cost		**9.3%**		**4.0%**		**6.1%**	**14.5%**	**6.1%**	**14.5%**	**5.2%**	**5.5%**	
%	0%	1%	0%	42%	0%	38%	3%	16%	3%	97%	100%	

* Overall data, including weighted financial cost, for all Bolivian MFIs analyzed.

26. Rest of MFIs in Latin America*

	Local Commercial Banks		Gov't and Other Domestic Sources		Donors		Social and Other Foreign Investors		Total		TOTAL	%
	LC	FC	LC	FC	LC	FC	LC	FC	LC	FC		
Short term	$23,232	$2,000	$2,719	$931	$0	$1,638	$0	$8,775	**$25,951**	**$13,343**	**$39,294**	37%
Cost	10.3%	8.4%	6.7%	9.3%		3.8%		7.8%	**9.9%**	**7.5%**	**9.1%**	
Long term	$0	$2,803	$8,118	$26,865	$220	$22,182	$0	$7,573	**$8,338**	**$59,423**	**$67,761**	63%
Cost		12.0%	7.6%	5.9%	1.0%	5.4%		9.3%	**7.4%**	**6.4%**	**6.5%**	
TOTAL	**$23,232**	**$4,803**	**$10,837**	**$27,796**	**$220**	**$23,820**	**$0**	**$16,347**	**$34,289**	**$72,766**	**$107,055**	100%
Cost		**10.5%**		**6.0%**		**5.3%**		**8.5%**	**9.3%**	**6.6%**	**7.5%**	
%	22%	4%	10%	26%	0%	22%	0%	15%	32%	68%	100%	

* Includes all of the MFIs presented in this Annex except those in Peru and Bolivia (that is, all MFIs in Colombia, El Salvador, Mexico, Nicaragua and Paraguay).

Annex D: Cost Allocation Studies for Six MFIs

THE METHODOLOGY OF COST ALLOCATION BY ASSIGNMENT

There are various costing methodologies that can be used for MFIs, among which the most commonly employed are cost allocation by assignment and activity-based costing (ABC).[54] Cost allocation by assignment consists of distributing an MFI's costs among its products using different criteria to assign indirect costs; this is the method we have used in the case studies of the six MFIs. By contrast, activity-based costing (ABC) breaks costs down into a set of component activities. Costs are distributed among the various activities in accordance with the time and other resources used for the activity. Finally, the costs of all the activities are added up to obtain the cost of each product.

In the six costing studies undertaken here, we calculate the total cost of each deposit product, which consists of financial plus operating costs. Operating costs are broken down into personnel and administrative (non-personnel) costs. While there are direct and indirect costs in both categories, the great majority overall is indirect. Therefore, it is very important that the categories used for distributing indirect costs are the best ones possible, so that indirect costs are allocated to products as precisely as can be.

Financial Costs

The financial cost of each product was obtained directly from the trial balances of the MFIs, and in some cases, by examining the MFI's deposit database. These financial costs have been adjusted for reserve requirements (in the appropriate currency), but do not take account of other financial charges or possible revenue from fees.[55] Regarding this last point, all MFIs studied stated that they did not collect any significant amount of fees from depositors.[56]

Operating Costs

The calculation of each deposit product's operating costs is the heart of the costing exercise. The objective is to try to estimate as precisely as possible the operating costs that are generated by each deposit product. To that end, it is necessary to allocate total personnel and administrative costs among the various loan and deposit products.

In the six costing studies, most costs related to deposits are indirect. Few personnel or administrative cost categories are exclusively for deposits; therefore, almost all costs must be allocated to products by means of assignment rules.

Assignment Rules

Indirect costs are distributed among the various loans and deposit products using the assignment categories presented in Table D1.

[54] For a more detailed explanation of cost allocation by assignment and activity-based costing, see Helms and Grace (2004). For an application of these methodologies to MFIs in Peru, see Portocarrero and Tarazona (2003a; 2003b).
[55] The calculation of financial costs adjusted for reserve requirements does not take account of the remuneration received by the MFI for its required reserves since this remuneration is very small.
[56] Some of the MFIs collect a small amount of fees, for example, from clients with inactive accounts. In general, however, the MFIs do not collect monthly fees nor any fees related to the number of transactions.

Table D1
Assignment Categories Used in the Costing Studies

Assignment Category	Unit	Description
Intermediation	Volume	Considers the total volume of loans and deposits, broken down by product. In general, it is applied to high-ranking employees at MFIs, such as department managers.
Intermediation	Number	Similar to the preceding category, but using the number of accounts. It is applied more to operating personnel such as those in accounting, auditing, etc.
Transactions	Number	Uses the number of transactions carried out at teller windows for all products. Used for tellers, operating personnel and overhead costs. It is assumed that one month's transactions are representative of the entire period analyzed.
Deposits	Volume	Considers only the volume of deposits, by product. Applied to treasury personnel for example.
Loans		Assigns all costs to loans.
Equal		Assumes that both lending and deposit products derive equal "benefit" from a certain cost.

We have also categorized all personnel and administrative costs as either fixed or variable. Fixed costs do not increase as the volume of deposits rises and thus give rise to economies of scale. Economies of scale can also be generated in variable costs, for example, if the productivity of personnel increases as the total volume of deposits rises.

Categorization of costs as fixed or variable can be complicated because all MFI costs tend to be variable in the long run. However, in practice, some costs may increase much more slowly than deposit volumes, giving rise to economies of scale. In Table D2, costs are categorized as fixed or variable, where fixed costs are those that rise very slowly or not at all as deposit volumes increase, and variable costs tend to rise at approximately the same rate as deposit volumes.

Table D2
Categorization of Operating Costs as Fixed and Variable

Operating Cost	Category	Detail
Personnel	Fixed	• High-level personnel: general manager; managers of such departments as credit, savings, finance, risk, operations and maintenance, auditing, treasury and accounting
	Variable	• Branch and other personnel: branch managers, loan officers, tellers and all assistants including those in the main office
Administrative	Fixed	• All costs associated with the board of directors, travel and external auditors
	Variable	• Security services, communications, rent, miscellaneous supplies, advertising, insurance and other overhead costs

Personnel Costs

A detailed analysis was made of the breakdown by product of personnel costs since they represent more than 50 percent of total MFI operating costs. We begin this analysis by obtaining the monthly payroll statement, which gives each worker's name, salary and position. In accordance with each worker's position, a category was chosen that best approximates the time spent by that worker on each product. By summing these costs across all employees, we obtained the breakdown of total personnel costs by product.

Administrative Costs

Each of the MFI's administrative costs was assigned individually to products, using an assignment category chosen specifically for that cost. Table D3 shows the main administrative costs and the categories used.

Table D3
Categories for Assigning the Principal Administrative Costs

Category	Administrative Cost
Loans	Fuels and lubricants Court expenses Notary expenses External auditors Transport
Intermediation (Number of accounts)	Advertising Public relations and events Insurance
Intermediation (Volume)	Studies and plans Board of directors' expenses Taxes
Deposits	Deposit insurance
Transactions	Rent Communications Depreciation and amortization Electricity and water Photocopies Cleaning Repair and maintenance Electronic transfers Office and other supplies Security

Cost by Deposit Size Strata

The total operating costs of each deposit product can be broken down by account size strata. This is done using the same assignment categories already described but with the analysis carried out by strata.

In the transactions database of each MFI it was possible to relate each deposit account transaction to the client's end-of-month deposit balance. In this way, the total number of transactions carried out in each size stratum of each deposit product was obtained. These data were then used to allocate costs across strata for each deposit product whenever costs were assigned using the transactions category.

COST STUDY RESULTS

The following tables present the main results of the deposit costing studies carried out at the six MFIs. The following abbreviations are used in these tables:

SA = Savings Account
WA = Workers' Accounts, that is, accounts that accumulate payments for time in service
TD = Time Deposit
IFI = Intermediary Financial Institution
FC = Foreign Currency
LC = Local Currency
PO = Payment Orders (deposit accounts used by companies to make payments to third parties by means of drafts or to receive payments, typically with a the large number of transactions per account and, as a result, high operating costs)
Transact. = Transactions

Costing in CMAC Pisco, as of May 2004

General Indicators of Deposits

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Amount (US$)	883,751	294,108	1,307,112	494,630	**2,979,601**
Number of accounts	3,396	566	1,006	384	**5,352**
Average deposit (US$)	260	520	1,299	1,288	**557**
Average term (years)			1.1	1.0	
No. of transact. per month	336	31	23	2	**392**
Transact. per account	0.1	0.1	0.0	0.0	**0.1**

Cost of Deposits (%) - Financial Costs Adjusted for Reserve Requirements

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Financial costs (%)	**4.5%**	**4.0%**	**19.0%**	**9.0%**	**11.6%**
Operating costs (%)	**15.6%**	**8.5%**	**3.9%**	**4.1%**	**7.9%**
- Fixed	*4.6%*	*2.7%*	*1.6%*	*1.6%*	***2.6%***
- Variable	*11.0%*	*5.8%*	*2.3%*	*2.5%*	***5.3%***
Total costs (%)	**20.2%**	**12.5%**	**22.9%**	**13.2%**	**19.4%**

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Operating cost per account (US$ per month)	3.4	3.7	4.2	4.4	**3.6**

Financial Costs by Strata (%) - Financial Costs Adjusted for Reserve Requirements

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
US$ 0 to 100	5.0%	4.1%	19.4%	8.7%	**6.8%**
US$ 101 to 500	4.9%	4.1%	17.5%	8.1%	**8.0%**
US$ 501 to 1000	4.9%	4.1%	18.3%	8.0%	**9.8%**
US$ 1001 to 5000	4.8%	4.1%	18.4%	8.1%	**11.2%**
US$ 5001 to 10,000	4.7%	4.0%	19.5%	9.9%	**12.8%**
US$ 10,001 to 20,000	4.8%	3.0%	19.3%	10.6%	**15.6%**
US$ 20,001 to 50,000	4.3%	4.1%	20.0%	12.3%	**13.2%**
More than US$ 50,000	2.2%				
TOTAL	**4.5%**	**4.0%**	**19.0%**	**9.0%**	**11.6%**

Principal Operating Costs (%)

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Operating cost (%)	**15.63%**	**8.51%**	**3.86%**	**4.10%**	**7.85%**
Payroll	3.50%	1.63%	0.80%	0.75%	**1.67%**
Other services	2.22%	1.11%	0.44%	0.45%	**1.04%**
Taxes	1.51%	0.75%	0.30%	0.30%	**0.70%**
Board of directors	0.54%	0.54%	0.54%	0.54%	**0.54%**
Insurance	0.52%	0.52%	0.52%	0.52%	**0.52%**
Honoraria	0.92%	0.46%	0.18%	0.19%	**0.43%**
Depreciation	1.11%	0.31%	0.05%	0.01%	**0.39%**
Publicity	0.32%	0.97%	0.22%	0.58%	**0.38%**
Internships	0.39%	0.20%	0.08%	0.08%	**0.18%**

Number of Accounts by Strata (%)

Strata	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
TOTAL	**3,396**	**566**	**1,006**	**384**	**5,352**
US$ 0 to 100	75.7%	55.8%	48.0%	44.3%	**66.1%**
US$ 101 to 500	15.7%	22.3%	14.9%	11.6%	**16.0%**
US$ 501 to 1000	3.9%	9.9%	10.9%	11.1%	**6.4%**
US$ 1001 to 5000	4.0%	9.9%	20.2%	28.8%	**9.4%**
US$ 5001 to 10,000	0.3%	1.6%	3.1%	3.3%	**1.2%**
US$ 10,001 to 20,000	0.1%	0.4%	2.2%	0.8%	**0.6%**
US$ 20,001 to 50,000	0.2%	0.1%	0.7%	0.3%	**0.3%**
More than US$ 50,000	0.0%	0.0%	0.0%	0.0%	**0.0%**

Account Balances by Strata (%)

Strata	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
TOTAL (US$)	**883,751**	**294,108**	**1,307,112**	**494,630**	**2,979,601**
US$ 0 to 100	3.9%	2.0%	0.2%	0.2%	**1.5%**
US$ 101 to 500	14.3%	10.7%	3.2%	2.8%	**7.2%**
US$ 501 to 1000	10.7%	13.2%	6.1%	6.6%	**8.2%**
US$ 1001 to 5000	29.3%	36.3%	33.6%	53.7%	**35.9%**
US$ 5001 to 10,000	8.7%	20.7%	16.6%	19.3%	**15.1%**
US$ 10,001 to 20,000	6.7%	11.8%	23.9%	8.7%	**15.1%**
US$ 20,001 to 50,000	18.0%	5.3%	16.4%	8.7%	**14.5%**
More than US$ 50,000	8.4%	0.0%	0.0%	0.0%	**2.5%**

Operating Cost by Strata (%)

Strata	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
US$ 0 to 100	247.1%	186.6%	498.3%	687.0%	**265.5%**
US$ 101 to 500	20.5%	16.5%	13.5%	14.2%	**18.1%**
US$ 501 to 1000	8.4%	6.8%	6.1%	6.6%	**7.2%**
US$ 1001 to 5000	4.3%	3.3%	2.8%	2.5%	**3.1%**
US$ 5001 to 10,000	3.4%	2.2%	1.9%	1.9%	**2.2%**
US$ 10,001 to 20,000	1.9%	2.5%	1.5%	2.2%	**1.7%**
US$ 20,001 to 50,000	1.4%	3.8%	1.4%	2.1%	**1.5%**
More than US$ 50,000	1.6%				**1.6%**
TOTAL	**15.6%**	**8.5%**	**3.9%**	**4.1%**	**7.9%**

Costing in CMAC Chincha, as of May 2004

	Savings LC	Savings FC	TD FC	TD FC	**TOTAL**
Amount (US$)	751,653	228,567	2,440,284	515,986	**3,936,489**
No. of accounts	1,821	215	462	109	**2,606**
Average deposit (US$)	413	1,066	5,282	4,734	**1,511**
Average term (years)			0.8	0.6	
No. of transact. per month	6,828	304	291	33	**7,456**
Transact. per account	3.8	1.4	0.6	0.3	**2.9**

Cost of Deposits (%) - Financial Costs Adjusted for Reserve Requirements

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Financial costs (%)	**5.8%**	**5.2%**	**19.1%**	**10.9%**	**14.7%**
Operating cost (%)	**25.4%**	**7.6%**	**3.1%**	**3.1%**	**7.6%**
- Fixed	*5.9%*	*3.3%*	*2.3%*	*2.3%*	***3.0%***
- Variable	*19.5%*	*4.3%*	*0.8%*	*0.8%*	***4.6%***
Total cost (%)	**31.1%**	**12.9%**	**22.2%**	**14.0%**	**22.3%**

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Operating cost per account (US$ per month)	8.7	6.8	13.8	12.3	**9.6**

Financial Costs by Strata (%) - Financial Costs Adjusted for Reserve Requirements

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
0 to US$ 100	5.7%	5.7%	17.0%		**6.9%**
US$ 101 to US$ 500	5.8%	6.1%	15.0%	7.4%	**9.0%**
US$ 501 to US$ 1,000	5.7%	5.8%	15.2%	7.6%	**9.5%**
US$ 1,001 to US$ 5,000	5.7%	6.2%	15.7%	7.8%	**10.5%**
US$ 5,001 to US$ 10,000	4.9%	5.8%	17.1%	9.9%	**12.8%**
US$ 10,001 to 50,000	5.9%	5.8%	19.4%	10.6%	**17.2%**
US$ 50,001 to 100,000	5.9%		21.1%	13.6%	**15.3%**
More than US$ 100,000	5.9%				
TOTAL	**5.8%**	**5.2%**	**19.1%**	**10.9%**	**14.7%**

Principal Operating Costs (%)

	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
Operating cost (%)	**25.35%**	**7.62%**	**3.14%**	**3.12%**	**7.64%**
Payroll	10.51%	3.64%	1.90%	1.89%	**3.64%**
Depreciation	2.94%	0.43%	0.04%	0.02%	**0.61%**
Communications	2.86%	0.42%	0.04%	0.02%	**0.60%**
Board of directors	0.48%	0.48%	0.48%	0.48%	**0.48%**
Insurance	2.06%	0.30%	0.03%	0.01%	**0.43%**
General supplies	1.16%	0.45%	0.09%	0.10%	**0.32%**
SBS & FEPCMAC fees	0.99%	0.38%	0.08%	0.09%	**0.27%**
Deposit insurance	0.26%	0.26%	0.26%	0.26%	**0.26%**
Security	0.99%	0.14%	0.01%	0.01%	**0.21%**

Number of Accounts by Strata (%)

Strata	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
TOTAL	**1,821**	**215**	**462**	**109**	**2,606**
0 to US$ 100	77.7%	63.6%	13.1%	0.0%	**61.8%**
US$ 101 to US$ 500	13.9%	16.3%	29.4%	26.1%	**17.4%**
US$ 501 to US$ 1,000	4.1%	7.7%	13.0%	14.2%	**6.4%**
US$ 1,001 to US$ 5,000	3.2%	8.9%	22.5%	42.7%	**8.8%**
US$ 5,001 to US$ 10,000	0.3%	1.2%	4.5%	7.3%	**1.4%**
US$ 10,001 to 50,000	0.5%	2.1%	15.9%	6.9%	**3.6%**
US$ 50,001 to 100,000	0.1%	0.2%	1.5%	2.8%	**0.5%**
More than US$ 100,000	0.1%	0.0%	0.0%	0.0%	**0.0%**

Account Balances by Strata (%)

Strata	Savins LC	Savings FC	TD LC	TD FC	**TOTAL**
TOTAL (US$)	**751,653**	**228,567**	**2,440,284**	**515,986**	**3,936,489**
0 to US$ 100	2.3%	1.1%	0.1%	0.0%	**0.5%**
US$ 101 to US$ 500	7.5%	3.8%	1.4%	1.8%	**2.7%**
US$ 501 to US$ 1,000	7.1%	4.8%	1.8%	2.5%	**3.1%**
US$ 1,001 to US$ 5,000	17.0%	20.4%	9.3%	22.0%	**13.1%**
US$ 5,001 to US$ 10,000	5.8%	7.3%	6.2%	11.3%	**6.9%**
US$ 10,001 to 50,000	22.9%	51.1%	63.8%	25.4%	**50.2%**
US$ 50,001 to 100,000	23.9%	11.4%	17.5%	37.0%	**20.9%**
More than US$ 100,000	13.5%	0.0%	0.0%	0.0%	**2.6%**

Operating Cost by Strata (%)

Strata	Savings LC	Savings FC	TD LC	TD FC	**TOTAL**
0 to US$ 100	633.7%	348.8%	575.4%		**595.2%**
US$ 101 to US$ 500	60.9%	37.0%	51.2%	34.5%	**53.7%**
US$ 501 to US$ 1,000	19.3%	12.0%	18.2%	14.2%	**17.7%**
US$ 1,001 to US$ 5,000	14.4%	4.0%	6.5%	5.4%	**8.0%**
US$ 5,001 to US$ 10,000	23.9%	3.0%	2.5%	2.3%	**6.0%**
US$ 10,001 to 50,000	1.9%	1.0%	1.3%	1.4%	**1.4%**
US$ 50,001 to 100,000	0.9%	1.1%	1.0%	0.9%	**0.9%**
More than US$ 100,000	1.2%				**1.2%**
TOTAL	**25.4%**	**7.6%**	**3.1%**	**3.1%**	**7.6%**

Costing in CRAC Señor de Luren, as of April 2004

General Indicators of Deposits

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
Amount (US$)	2,577,474	2,014,966	534,832	61,262	2,886,371	3,437,236	**11,512,141**
Number of accounts	8,730	2,537	206	24	1,634	867	**13,997**
Average deposit (US$)	295	794	2,603	2,553	1,767	3,965	**823**
Average term (years)					0.6	0.7	
No. of transact. per month	17,040	2,095	14,013	99	644	248	**34,139**
Transact. per account	2.0	0.8	68.2	4.1	0.4	0.3	**2.4**

Cost of Deposits (%) - Financial Costs Adjusted for Reserve Requirements

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
Financial cost (%)	**3.3%**	**2.8%**	**2.2%**	**5.2%**	**14.8%**	**5.0%**	**6.6%**
Operating cost (%)	**13.1%**	**5.1%**	**31.6%**	**17.3%**	**3.5%**	**2.8%**	**7.1%**
- Fixed	*3.3%*	*1.7%*	*1.0%*	*1.0%*	*1.1%*	*0.9%*	***1.6%***
- Variable	*9.9%*	*3.5%*	*30.5%*	*16.3%*	*2.3%*	*1.9%*	***5.5%***
Total cost (%)	**16.5%**	**7.9%**	**33.7%**	**22.5%**	**18.3%**	**7.8%**	**13.7%**

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
Operating cost per account (US$ per month)	3.2	3.4	68.5	36.8	5.1	9.2	**4.9**

Financial Costs by Strata (%) - Financial Costs Adjusted for Reserve Requirements

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
0 to US$ 100	3.3%	2.8%	2.2%	5.2%	20.3%	5.1%	**4.3%**
US$ 101 to US$ 500	3.3%	2.8%	2.2%	5.2%	13.9%	3.9%	**5.3%**
US$ 501 to US$ 1,000	3.3%	2.8%	2.2%	5.2%	14.2%	3.8%	**5.9%**
US$ 1,001 to US$ 5,000	3.3%	2.8%	2.2%	5.2%	13.7%	4.0%	**6.4%**
US$ 5,001 to 10,000	3.3%	2.8%	2.2%	5.2%	15.2%	5.2%	**7.4%**
US$ 10,001 to US$ 50,000	3.3%	2.8%	2.2%	5.2%	16.7%	5.9%	**8.4%**
US$ 50,001 to US$ 100,000		2.8%			19.8%	7.4%	**9.2%**
More than US$ 100,000			2.2%		12.8%	4.6%	**5.6%**
TOTAL	**3.3%**	**2.8%**	**2.2%**	**5.2%**	**14.8%**	**5.0%**	**6.6%**

Principal Operating Costs (%)

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
Operating cost (%)	**13.15%**	**5.11%**	**31.57%**	**17.31%**	**3.45%**	**2.80%**	**7.10%**
Payroll	2.98%	1.24%	3.09%	0.90%	0.78%	0.55%	**1.39%**
Deposit insurance	0.85%	0.85%	0.85%	0.85%	0.85%	0.85%	**0.85%**
Depreciation	1.21%	0.19%	4.80%	0.30%	0.04%	0.01%	**0.54%**
Honoraria	1.45%	0.54%	0.16%	0.17%	0.24%	0.11%	**0.52%**
General supplies	1.15%	0.18%	4.58%	0.28%	0.04%	0.01%	**0.52%**
Communications	1.06%	0.17%	4.19%	0.26%	0.04%	0.01%	**0.47%**
Security	0.80%	0.13%	3.95%	0.37%	0.11%	0.04%	**0.43%**
Publicity	0.30%	0.39%	1.46%	12.74%	0.27%	0.23%	**0.41%**
Maintenance of accounts	0.75%	0.12%	2.97%	0.18%	0.03%	0.01%	**0.34%**

Number of Accounts by Strata (%)

Strata	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
TOTAL	**8,730**	**2,537**	**206**	**24**	**1,634**	**867**	**13,997**
0 to US$ 100	67.4%	37.3%	40.9%	41.7%	16.2%	4.3%	**51.7%**
US$ 101 to US$ 500	19.0%	26.6%	18.5%	16.7%	23.6%	10.1%	**20.4%**
US$ 501 to US$ 1,000	6.5%	14.2%	6.6%	8.3%	18.7%	21.2%	**10.2%**
US$ 1,001 to US$ 5,000	6.3%	19.9%	25.3%	14.6%	34.0%	45.0%	**14.7%**
US$ 5,001 to 10,000	0.5%	1.4%	5.6%	8.3%	5.0%	12.0%	**2.0%**
US$ 10,001 to US$ 50,000	0.2%	0.5%	2.9%	10.4%	2.4%	6.9%	**1.0%**
US$ 50,001 to US$ 100,000	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	**0.0%**
More than US$ 100,000	0.0%	0.0%	0.2%	0.0%	0.1%	0.2%	**0.0%**

Account Balances by Strata (%)

Strata	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
TOTAL (US$)	**2,577,474**	**2,014,966**	**534,832**	**61,262**	**2,886,371**	**3,437,236**	**11,512,141**
0 to US$ 100	3.6%	1.1%	0.4%	0.3%	0.2%	0.0%	**1.1%**
US$ 101 to US$ 500	15.5%	8.7%	1.9%	1.8%	4.1%	1.1%	**6.4%**
US$ 501 to US$ 1,000	15.9%	12.9%	1.9%	2.7%	7.6%	4.2%	**9.1%**
US$ 1,001 to US$ 5,000	43.4%	53.0%	23.1%	12.2%	40.6%	28.3%	**38.8%**
US$ 5,001 to 10,000	12.3%	12.1%	15.8%	21.8%	18.9%	23.5%	**17.5%**
US$ 10,001 to US$ 50,000	9.3%	9.1%	24.0%	61.2%	22.5%	31.4%	**20.1%**
US$ 50,001 to US$ 100,000	0.0%	3.2%	0.0%	0.0%	2.1%	3.6%	**2.2%**
More than US$ 100,000	0.0%	0.0%	32.9%	0.0%	4.0%	7.8%	**4.9%**

Operating Cost by Strata (%)

Strata	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	**TOTAL**
0 to US$ 100	161.8%	105.8%	5200.1%	988.6%	120.6%	163.3%	**229.8%**
US$ 101 to US$ 500	16.3%	11.4%	80.0%	138.0%	10.8%	11.5%	**15.1%**
US$ 501 to US$ 1,000	6.7%	5.3%	38.3%	83.1%	5.7%	6.5%	**6.6%**
US$ 1,001 to US$ 5,000	4.2%	3.1%	23.9%	24.5%	3.1%	3.1%	**4.0%**
US$ 5,001 to 10,000	2.9%	2.8%	12.0%	14.4%	2.4%	2.3%	**3.0%**
US$ 10,001 to US$ 50,000	16.6%	2.6%	6.9%	5.9%	2.1%	2.0%	**3.9%**
US$ 50,001 to US$ 100,000		3.6%			3.4%	2.6%	**3.4%**
More than US$ 100,000			4.5%		2.6%	2.2%	**3.0%**
TOTAL	**13.1%**	**5.1%**	**31.6%**	**17.3%**	**3.5%**	**2.8%**	**7.1%**

Costing in FFP FIE, as of June 2004

General Indicators of Deposits

	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
Amount (US$)	5,256,973	8,169,930	8,739,109	**22,166,011**
Number of accounts	21,729	974	91	**22,794**
Average deposit (US$)	242	8,388	96,034	**972**
Average term (years)		1.2	1.2	
No. of transact. per month	32,406	543	40	**32,989**
Transact. per account	1.5	0.6	0.4	**1.4**

Cost of Deposits (%) - Financial Costs Adjusted for Reserve Requirements

	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
Financial cost (%)	**2.9%**	**5.9%**	**5.9%**	**5.2%**
Operating cost (%)	**16.1%**	**1.7%**	**1.4%**	**5.0%**
- Fixed	*2.9%*	*1.1%*	*1.1%*	***1.5%***
- Variable	*13.2%*	*0.6%*	*0.3%*	***3.5%***
Total cost (%)	**19.1%**	**7.6%**	**7.3%**	**10.2%**

	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
Operating cost per account (US$ per month)	3.3	11.7	111.6	**4.0**

Financial Cost by Strata (%) - Financial Costs Adjusted for Reserve Requirements

	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
0 to US$ 500	2.9%	4.6%	3.6%	**3.1%**
US$ 500 to 1,000	2.9%	4.4%	0.0%	**3.2%**
US$ 1,001 to 5,000	2.9%	4.9%	6.5%	**3.6%**
US$ 5,001 to 10,000	2.9%	5.8%	6.4%	**4.9%**
US$ 10,001 to US$ 50,000	2.9%	5.6%	5.6%	**5.4%**
US$ 50,001 to 100,000	2.9%	6.7%	6.0%	**6.2%**
More than US$ 100,000	2.9%	6.7%	6.0%	**5.9%**
TOTAL	**2.9%**	**5.9%**	**5.9%**	**5.2%**

Principal Operating Costs (%)

	Savings Account	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
Operating cost (%)	**16.13%**	**1.68%**	**1.39%**	**4.99%**
Payroll	6.70%	0.99%	0.86%	**3.44%**
Taxes	1.51%	0.02%	0.00%	**1.03%**
Rent	0.95%	0.01%	0.00%	**0.65%**
Depreciation	0.94%	0.01%	0.00%	**0.64%**
Communications	2.08%	0.06%	0.01%	**0.52%**
Office supplies	0.56%	0.01%	0.00%	**0.39%**
Maintenance and repairs	0.55%	0.01%	0.00%	**0.38%**
Security	0.39%	0.02%	0.00%	**0.27%**
Computer services	0.37%	0.00%	0.00%	**0.25%**

Number of Accounts by Strata (%)

Strata	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
TOTAL	**21,729**	**974**	**91**	**22,794**
0 to US$ 500	90.2%	15.8%	0.6%	**86.6%**
US$ 501 to 1,000	3.9%	14.1%	1.1%	**4.3%**
US$ 1,001 to 5,000	5.3%	37.3%	4.4%	**6.7%**
US$ 5,001 to 10,000	0.5%	15.3%	4.4%	**1.1%**
US$ 10,001 to US$ 50,000	0.1%	14.6%	42.0%	**0.9%**
US$ 50,001 to 100,000	0.0%	2.2%	24.3%	**0.2%**
More than US$ 100,000	0.0%	0.7%	23.2%	**0.1%**

Account Balances by Strata (%)

Strata	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
TOTAL (US$)	**5,256,973**	**8,169,930**	**8,739,109**	**22,166,011**
0 to US$ 500	13.6%	0.5%	0.0%	**3.4%**
US$ 501 to 1,000	11.7%	1.4%	0.0%	**3.3%**
US$ 1,001 to 5,000	45.4%	12.0%	0.1%	**15.2%**
US$ 5,001 to 10,000	12.6%	13.8%	0.3%	**8.2%**
US$ 10,001 to US$ 50,000	10.5%	39.2%	13.9%	**22.4%**
US$ 50,001 to 100,000	2.8%	18.0%	18.7%	**14.7%**
More than US$ 100,000	3.5%	15.1%	67.0%	**32.8%**

Operating Cost by Strata (%)

Strata	Savings Accounts	Time Deposits Individuals	Time Deposits Companies	**TOTAL**
0 to US$ 500	92.1%	36.7%	335.3%	**89.1%**
US$ 501 to 1,000	7.9%	12.1%	147.3%	**8.7%**
US$ 1,001 to 5,000	3.2%	4.1%	38.7%	**3.6%**
US$ 5,001 to 10,000	6.9%	1.8%	15.3%	**3.8%**
US$ 10,001 to US$ 50,000	2.9%	1.0%	3.2%	**1.7%**
US$ 50,001 to 100,000	1.2%	0.7%	1.7%	**1.2%**
More than US$ 100,000	0.7%	0.6%	0.8%	**0.8%**
TOTAL	**16.1%**	**1.7%**	**1.4%**	**5.0%**

Costing in CMAC Arequipa, as of June 2004

General Indicators of Deposits

	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
Amount (US$)	11,659,429	17,418,926	27,477,732	24,975,220	2,516,698	1,290,263	5,363,305	1,013,010	**91,714,581**
No. of accounts	57,409	27,288	4,599	5,810	3,526	1,517	25	21	**100,194**
Average deposit (US$)	203	638	5,975	4,299	714	851	214,532	48,239	**915**
Average term (years)			2.0	1.1			0.3	0.9	
No. of transact. per month	202,852	38,463	2,755	2,128	6,827	2,789	3,947	1,106	**260,867**
Transact. per account	3.5	1.4	0.6	0.4	1.9	1.8	157.9	52.7	**2.6**

Cost of Deposits (%) - Financial Costs Adjusted for Reserve Requirements

	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
Financial costs (%)	**2.0%**	**1.3%**	**14.5%**	**7.1%**	**17.6%**	**6.0%**	**5.6%**	**2.9%**	**7.7%**
Operating costs (%)	**19.2%**	**4.6%**	**1.3%**	**1.4%**	**4.7%**	**4.1%**	**1.5%**	**1.8%**	**4.4%**
- Fixed	*2.5%*	*1.0%*	*0.4%*	*0.4%*	*0.9%*	*0.8%*	*0.3%*	*0.4%*	***0.8%***
- Variable	*16.6%*	*3.7%*	*0.9%*	*1.0%*	*3.8%*	*3.2%*	*1.2%*	*1.4%*	***3.6%***
Total costs (%)	**21.1%**	**6.0%**	**15.8%**	**8.5%**	**22.4%**	**10.0%**	**7.1%**	**4.7%**	**12.1%**

	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
Operating cost per account (US$ per month)	3.2	2.5	6.6	5.0	2.8	2.9	268.7	70.5	**3.4**

Financial Costs by Strata (%) - Financial Costs Adjusted for Reserve Requirements

	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
0 to US$ 100	2.2%	1.4%	7.7%	4.1%	17.6%	6.0%			**3.3%**
US$ 101 to US$ 500	2.1%	1.3%	8.7%	5.9%	17.6%	6.0%			**3.6%**
US$ 501 to US$ 1,000	2.1%	1.3%	9.0%	5.9%	17.6%	6.0%			**3.7%**
US$ 1,001 to US$ 5,000	2.1%	1.3%	10.7%	6.0%	17.6%	6.0%		0.7%	**4.6%**
US$ 5,001 to US$ 10,000	1.9%	1.3%	12.5%	6.4%	17.6%	6.0%	3.8%	1.3%	**5.8%**
US$ 10,001 to US$ 50,000	1.7%	1.4%	15.3%	7.1%	17.6%	6.0%	1.3%	0.9%	**9.2%**
US$ 50,001 to US$ 100,000	1.4%	0.7%	16.2%	8.2%	17.6%	6.0%	1.3%	0.7%	**13.1%**
More than US$ 100,000	1.5%		15.6%						
TOTAL	**2.0%**	**1.3%**	**14.5%**	**7.1%**	**17.6%**	**6.0%**	**5.6%**	**2.9%**	**7.7%**

Principal Operating Costs (%)

	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
Operating cost (%)	**19.17%**	**4.65%**	**1.32%**	**1.40%**	**4.74%**	**4.07%**	**1.50%**	**1.75%**	**4.39%**
Payroll	6.57%	1.73%	0.50%	0.54%	1.73%	1.49%	0.52%	0.60%	**1.57%**
Insurance	1.88%	0.60%	0.06%	0.09%	0.54%	0.45%	0.00%	0.01%	**0.42%**
Depreciation and amortization	2.28%	0.29%	0.01%	0.01%	0.36%	0.28%	0.10%	0.14%	**0.37%**
Deposit insurance	0.36%	0.36%	0.36%	0.36%	0.36%	0.36%	0.36%	0.36%	**0.36%**
Future works	1.31%	0.42%	0.04%	0.06%	0.37%	0.31%	0.00%	0.01%	**0.29%**
Security	1.40%	0.18%	0.01%	0.01%	0.22%	0.17%	0.06%	0.09%	**0.23%**
Rent	1.20%	0.15%	0.01%	0.01%	0.19%	0.15%	0.05%	0.08%	**0.20%**
Office supplies	0.83%	0.11%	0.00%	0.00%	0.13%	0.10%	0.04%	0.05%	**0.14%**

Number of Accounts by Strata (%)

Strata	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
TOTAL	**57,409**	**27,288**	**4,599**	**5,810**	**3,526**	**1,517**	**25**	**21**	**100,194**
0 to US$ 100	79.9%	62.9%	3.3%	0.1%	76.2%	57.1%	0.0%	0.0%	**66.6%**
US$ 101 to US$ 500	12.7%	15.5%	30.7%	14.4%	11.0%	20.9%	0.0%	0.0%	**14.5%**
US$ 501 to US$ 1,000	3.4%	7.3%	16.6%	18.8%	3.1%	6.5%	0.0%	0.0%	**6.0%**
US$ 1,001 to US$ 5,000	3.5%	11.6%	33.4%	48.7%	5.7%	10.9%	0.0%	14.3%	**9.9%**
US$ 5,001 to US$ 10,000	0.3%	1.8%	6.6%	11.2%	2.2%	3.0%	8.0%	4.8%	**1.8%**
US$ 10,001 to US$ 50,000	0.1%	0.9%	7.3%	6.3%	1.8%	1.6%	28.0%	42.9%	**1.1%**
US$ 50,001 to US$ 100,000	0.0%	0.0%	1.1%	0.3%	0.1%	0.1%	16.0%	9.5%	**0.1%**
More than US$ 100,000	0.0%	0.0%	1.0%	0.3%	0.0%	0.0%	48.0%	28.6%	**0.1%**

Account Balances by Strata (%)

Strata	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
TOTAL (US$)	11,659,429	17,418,926	27,477,732	24,975,220	2,516,698	1,290,263	5,363,305	1,013,010	**91,714,581**
0 to US$ 100	4.7%	1.3%	0.0%	0.0%	1.5%	1.4%	0.0%	0.0%	**0.9%**
US$ 101 to US$ 500	14.6%	6.0%	1.4%	1.2%	3.6%	5.8%	0.0%	0.0%	**3.9%**
US$ 501 to US$ 1,000	11.7%	8.0%	2.0%	3.3%	3.0%	5.4%	0.0%	0.0%	**4.7%**
US$ 1,001 to US$ 5,000	33.7%	39.1%	12.4%	26.2%	19.6%	29.4%	0.0%	1.0%	**23.5%**
US$ 5,001 to US$ 10,000	10.4%	19.4%	7.5%	17.6%	22.2%	24.3%	0.2%	0.6%	**13.0%**
US$ 10,001 to US$ 50,000	12.8%	23.2%	25.2%	25.7%	44.3%	29.4%	4.2%	20.6%	**22.7%**
US$ 50,001 to US$ 100,000	2.8%	2.9%	12.1%	4.2%	5.8%	4.4%	4.3%	9.8%	**6.2%**
More than US$ 100,000	9.3%	0.0%	39.4%	21.8%	0.0%	0.0%	91.3%	68.0%	**25.0%**

Operating Cost by Strata (%)

Strata	SA LC	SA FC	TD LC	TD FC	WA LC	WA FC	IFI LC	IFI FC	**TOTAL**
0 to US$ 100	281.8%	187.1%	61.3%	78.2%	205.9%	138.7%			**247.8%**
US$ 101 to US$ 500	19.0%	11.9%	15.0%	10.2%	13.3%	13.2%			**15.5%**
US$ 501 to US$ 1,000	8.0%	4.6%	6.3%	4.9%	5.1%	5.1%			**6.0%**
US$ 1,001 to US$ 5,000	4.2%	2.0%	2.5%	2.1%	2.0%	2.0%		9.9%	**2.5%**
US$ 5,001 to US$ 10,000	3.0%	1.1%	1.3%	1.1%	1.1%	1.1%	29.8%	10.2%	**1.4%**
US$ 10,001 to US$ 50,000	2.2%	0.9%	0.8%	0.8%	0.8%	0.8%	5.7%	2.3%	**1.0%**
US$ 50,001 to US$ 100,000	2.9%	0.8%	0.7%	0.7%	0.7%	0.7%	2.7%	1.3%	**0.9%**
More than US$ 100,000	1.1%		0.7%	0.7%			1.2%	1.5%	**0.8%**
TOTAL	**19.2%**	**4.6%**	**1.3%**	**1.4%**	**4.7%**	**4.1%**	**1.5%**	**1.8%**	**4.4%**

Costing in CMAC Piura, as of June 2004

General Indicators of Deposits

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
Amount (US$)	5,875,167	4,132,643	5,530,145	1,660,318	38,838,187	39,124,278	581,482	768,183	**96,510,402**
Number of accounts	38,671	7,947	2,909	393	17,166	12,571	3,116	2,683	**85,455**
Average deposit (US$)	152	520	1,901	4,225	2,263	3,112	187	286	**1,129**
Average term (years)					0.4	0.3			
No. of transact. per month	40,962	4,807	1,367	56	6,055	2,941	1,397	710	**58,295**
Transact. per account	1.1	0.6	0.5	0.1	0.4	0.2	0.4	0.3	**0.7**

Cost of Deposits (%) - Financial Costs Adjusted for Reserve Requirements

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
Financial costs (%)	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**11.6%**	**7.2%**	**18.4%**	**8.1%**	**8.1%**
Operating costs (%)	**27.7%**	**6.2%**	**2.3%**	**1.4%**	**1.9%**	**1.6%**	**12.8%**	**6.7%**	**3.6%**
- Fixed	*1.2%*	*0.5%*	*0.3%*	*0.2%*	*0.3%*	*0.3%*	*0.8%*	*0.6%*	***0.3%***
- Variable	*26.5%*	*5.7%*	*2.0%*	*1.1%*	*1.6%*	*1.3%*	*11.9%*	*6.2%*	***3.3%***
Total costs (%)	**29.6%**	**8.1%**	**4.2%**	**3.3%**	**13.5%**	**8.7%**	**31.2%**	**14.9%**	**11.7%**

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
Operating cost per account (US$ per month)	3.5	2.7	3.6	4.8	3.6	4.0	2.0	1.6	**3.4**

Financial Costs by Strata (%) - Financial Costs Adjusted for Reserve Requirements

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
0 to US$ 100	1.9%	1.9%	1.9%	1.9%	8.1%	6.1%	26.2%	14.0%	**6.6%**
US$ 101 to US$ 500	1.9%	1.9%	1.9%	1.9%	8.2%	6.3%	22.7%	11.5%	**5.9%**
US$ 501 to US$ 1,000	1.9%	1.9%	1.9%	1.9%	8.6%	6.3%	19.9%	8.5%	**6.0%**
US$ 1,001 to US$ 5,000	1.9%	1.9%	1.9%	1.9%	10.5%	6.4%	15.6%	6.7%	**6.7%**
US$ 5,001 to US$ 10,000	1.9%	1.9%	1.9%	1.9%	11.5%	6.7%	17.0%	6.6%	**7.3%**
US$ 10,001 to US$ 50,000	1.9%	1.9%	1.9%	1.9%	12.7%	7.3%	17.1%	7.0%	**8.8%**
US$ 50,001 to US$ 100,000	1.9%	1.9%	1.9%	1.9%	16.7%	8.6%			**11.5%**
More than US$ 100,000	1.9%	1.9%	1.9%	1.9%	10.5%	8.3%			**8.8%**
TOTAL	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**11.6%**	**7.2%**	**18.4%**	**8.1%**	**8.1%**

Principal Operating Costs (%)

	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
Operating cost (%)	**27.67%**	**6.18%**	**2.25%**	**1.36%**	**1.90%**	**1.56%**	**12.77%**	**6.75%**	**3.63%**
Payroll	10.07%	2.15%	0.67%	0.34%	0.55%	0.42%	4.68%	2.44%	**1.19%**
Security	3.34%	0.56%	0.12%	0.02%	0.07%	0.04%	1.15%	0.44%	**0.29%**
Rent	3.04%	0.51%	0.11%	0.01%	0.07%	0.03%	1.05%	0.40%	**0.26%**
Communications: telephone	2.89%	0.48%	0.10%	0.01%	0.06%	0.03%	1.00%	0.38%	**0.25%**
General supplies	2.43%	0.40%	0.09%	0.01%	0.05%	0.03%	0.84%	0.32%	**0.21%**
Publicity and publications	1.22%	0.36%	0.10%	0.04%	0.08%	0.06%	0.99%	0.65%	**0.16%**
Insurance	0.93%	0.27%	0.07%	0.03%	0.06%	0.05%	0.76%	0.50%	**0.13%**
Other services	0.75%	0.22%	0.06%	0.03%	0.05%	0.04%	0.61%	0.40%	**0.10%**

Number of Accounts by Strata (%)

Strata	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
TOTAL	**38,671**	**7,947**	**2,909**	**393**	**17,166**	**12,571**	**3,116**	**2,683**	**85,455**
0 to US$ 100	81.7%	67.1%	64.0%	57.3%	21.5%	0.2%	85.5%	73.2%	**58.6%**
US$ 101 to US$ 500	12.3%	16.3%	15.4%	13.2%	37.4%	28.1%	9.7%	17.7%	**19.2%**
US$ 501 to US$ 1,000	3.0%	6.0%	6.1%	5.3%	13.8%	17.9%	2.1%	3.7%	**7.1%**
US$ 1,001 to US$ 5,000	2.7%	8.6%	9.9%	15.0%	19.4%	35.9%	1.8%	4.4%	**10.7%**
US$ 5,001 to US$ 10,000	0.2%	1.3%	2.2%	3.8%	3.4%	8.9%	0.5%	0.7%	**2.1%**
US$ 10,001 to US$ 50,000	0.1%	0.7%	1.9%	3.8%	4.0%	8.3%	0.4%	0.4%	**2.0%**
US$ 50,001 to US$ 100,000	0.0%	0.0%	0.3%	0.8%	0.4%	0.6%	0.0%	0.0%	**0.2%**
More than US$ 100,000	0.0%	0.0%	0.3%	0.8%	0.3%	0.3%	0.0%	0.0%	**0.1%**

Account Balances by Strata (%)

Strata	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
TOTAL (US$)	5,875,167	4,132,643	5,530,145	1,660,318	38,838,187	39,124,278	581,482	768,183	**96,510,402**
0 to US$ 100	5.9%	1.7%	0.4%	0.2%	0.4%	0.0%	8.7%	8.2%	**0.7%**
US$ 101 to US$ 500	18.7%	7.3%	2.0%	0.7%	3.3%	1.8%	11.9%	13.0%	**3.8%**
US$ 501 to US$ 1,000	13.7%	8.1%	2.3%	0.9%	3.5%	3.1%	7.3%	8.9%	**4.1%**
US$ 1,001 to US$ 5,000	34.2%	35.5%	11.5%	8.1%	14.8%	19.4%	20.7%	32.3%	**18.6%**
US$ 5,001 to US$ 10,000	10.8%	16.6%	8.2%	6.6%	8.3%	15.0%	19.9%	17.7%	**11.6%**
US$ 10,001 to US$ 50,000	13.8%	22.7%	19.9%	15.6%	27.7%	36.8%	31.5%	19.9%	**29.6%**
US$ 50,001 to US$ 100,000	0.5%	4.6%	9.7%	10.6%	8.7%	9.2%	0.0%	0.0%	**8.2%**
More than US$ 100,000	2.4%	3.5%	45.9%	57.3%	33.3%	14.7%	0.0%	0.0%	**23.3%**

Operating Cost by Strata (%)

Strata	SA LC	SA FC	PO LC	PO FC	TD LC	TD FC	WA LC	WA FC	**TOTAL**
0 to US$ 100	333.0%	177.6%	167.4%	118.3%	57.3%	64.3%	118.0%	53.7%	**211.1%**
US$ 101 to US$ 500	25.7%	14.9%	13.6%	10.5%	12.7%	12.3%	10.5%	8.9%	**16.5%**
US$ 501 to US$ 1,000	9.3%	6.0%	4.9%	4.1%	5.0%	5.0%	4.2%	3.3%	**5.9%**
US$ 1,001 to US$ 5,000	4.1%	2.9%	2.6%	2.0%	2.2%	2.2%	1.9%	1.6%	**2.5%**
US$ 5,001 to US$ 10,000	2.2%	1.6%	1.3%	1.2%	1.3%	1.3%	1.2%	1.1%	**1.3%**
US$ 10,001 to US$ 50,000	1.2%	1.1%	1.2%	1.0%	1.0%	1.0%	1.0%	1.0%	**1.0%**
US$ 50,001 to US$ 100,000	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%			**0.9%**
More than US$ 100,000	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%			**0.9%**
TOTAL	**27.7%**	**6.2%**	**2.3%**	**1.4%**	**1.9%**	**1.6%**	**12.8%**	**6.7%**	**3.6%**