Safe Money
Building Effective Credit Unions in Latin America

Glenn D. Westley and Brian Branch
Editors
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Distributed by The Johns Hopkins University Press
for the Inter-American Development Bank
and the World Council of Credit Unions

Washington, D.C.
2000
Dedication

To our fathers, William Westley and William Branch, for their guidance, love, and support.
Acknowledgments

The editors would like to thank the following individuals for contributing important ideas and suggestions to the conference on which this book is based: Gloria Almeyda, Marguerite Berger, Guillermo Collich, Mark Flaming, Bernardo Guillamón, Ana María Rodríguez, and Mark Wenner. The editors also gratefully acknowledge the very able translation and editing work by Charlie Roberts and Sandra Gain and word processing support by Carla Moore and Mariela Semidey. The Norweigan Fund for Microenterprise Development generously provided financial support for the production of this book, together with the IDB and WOCCU.
Foreword

Although Latin America’s economic growth rates have recovered significantly from the stagnation of the 1980s, the number of people living in poverty remains at an unprecedented level of between 180 and 200 million.

Faced with this contradiction, policymakers in the region increasingly are recognizing the need for policies that open up opportunities for the people. Those policies have both high economic rates of return and a favorable impact on income distribution. Providing financial services to small businesses and poor households—which normally lack such services—is a key approach to secure growth with equity.

Credit unions have particular advantages in these markets and tend to serve many groups at the lower end of the economic spectrum. Credit unions provide nearly US$2 billion to microenterprises, making them a major source of credit for struggling entrepreneurs. Considering that micro and small enterprises account for about 40 percent of GDP in the region, credit unions are an important financial institution simply in terms of the services they provide to this sector of the economy alone. Credit unions are second only to banks in lending and providing deposit services to low-income clients.

Credit unions benefit from being very much community-based. They provide simple, accessible deposit services to a diverse base of clients. And they have the capacity to lend to self-employed clients and obtain adequate repayment performance.

Despite their important advantages, credit unions in many countries of the region have significant financial and policy weaknesses, many of them vestiges of donor-directed credit programs that operated from the 1960s through the mid-1980s. Those programs tended to undermine local deposit mobilization and credit quality. Today, credit unions face new challenges from increased competition from commercial banks.

The Inter-American Development Bank hosted the conference “Building Modern and Effective Credit Unions in Latin America” in March 1998 in Washington to discuss these issues. The conference was attended by more than 400 representatives from credit union movements, regulatory bodies of financial institutions, the donor community, and academia. Participants shared their experiences in strengthening the role of credit unions in order to further growth with equity. This book draws on the conference to analyze major problems facing credit unions today. It looks at what credit unions can do, with support from countries and donors, to realize their potential as effective financial institutions.
Credit union performance can be improved through aggressive mobilization of savings, stricter attention to controlling loan delinquency, and a policy of earning and capitalizing profits. Credit unions require prudential regulation and supervision to ensure their future as sound financial intermediaries with a substantial share of the market.

Many credit unions in the region continue to struggle with problems of governance, which can undermine financial health and operational efficiency and even lead to bankruptcy. These problems occur when the interests of borrowers (low interest rates, tolerance for high levels of loan delinquency, and weak prudential controls) override the interests of savers (prudential management).

The challenges faced by Latin America’s credit unions today are likely to force them to further modernize and consolidate, fine tune inherent advantages, improve mechanisms for prudential regulation and supervision, and enhance opportunities to increase their share of low- and middle-income markets.

Enrique V. Iglesias
President
Inter-American Development Bank
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The papers and conference that led to this book reflect a new wave of thinking about the role of credit unions in Latin America. The new wave has come in reaction to previous decades of stagnancy of the credit unions in the region, followed more recently by a resurgence of credit union membership and savings growth. Although the lofty social aims of self-help and assistance to the poor that guided the establishment of so many credit unions in the region in the 1950s, 1960s, and 1970s are admirable, the failure to simultaneously create financially healthy and sustainable institutions is now clearly seen as the key failing of those years. And there is also consensus that donors and governments, which propped up so many of these credit unions with subsidized, targeted credit programs, also played a major role in diverting credit unions away from the path of becoming efficient, sustainable intermediaries.

With the drying up of donor funding and subsidies beginning in the mid 1980s and the intensifying competition from commercial banks in the 1990s, especially in the consumer lending area, many credit unions throughout the region found themselves confronting a profound crisis.1 The banks’ incursion into consumer lending has been a direct result of Latin America’s financial liberalization reforms of the 1990s, which have fueled competition and pushed banks and other intermediaries toward serving the middle- and lower-income classes that had been the traditional preserve of the credit unions. Although many more credit unions undoubtedly will enter into crisis when faced with this rapidly widening competition, these competitive forces have also spurred greater financial discipline and service innovation among progressive credit unions. These last factors, in turn, have played an important role in the upsurge in growth in credit union membership and savings since 1994.

This new environment of greater competition and greatly reduced official funding presents both challenges and opportunities. In facing up to this new environment, Latin American credit union movements will have to grapple with

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1 See Marulanda (chapter 1) for a discussion of the new push by commercial banks in the consumer lending area, often in direct competition with credit unions.
four key issues: rehabilitation, regulation and supervision, governance, and consolidation. This book explores these issues and presents the new thinking on how credit unions can compete effectively in modern financial markets while still retaining their social mission. In this overview chapter, we provide a synthesis of what we believe are the main conclusions and recommendations in these four areas.

The Importance of Credit Unions

We believe credit unions are important in Latin America for three main reasons. First, credit unions are, by far, the most important semi-formal or formal source of credit to microenterprises in the region, and microenterprises are a sizable component of the economy. Commercial banks, financieras, and nongovernmental organizations (NGOs) provide a total of about $800 million in loans to microenterprises in Latin America, compared with $2.6 billion for credit unions (Westley 2000). This makes credit unions the major source of credit from financial institutions to microenterprises in the region. Westley and Shaffer (chapter 3) show that microenterprises account for about 50 percent of employment and 20 percent of gross domestic product (GDP) in Latin America, and that micro and small enterprises together account for about 40 percent of GDP. Westley and Shaffer argue that, given these large shares, macroeconomically significant employment and growth gains can be achieved by bringing greater financial intermediation services to these sectors, which are rather poorly served.

Second, credit unions have great potential for expansion and growth. Credit union loans and deposits are only one to three percent of banking system loans and deposits in most Latin American countries, compared with 10–20 percent in several industrial countries. That is, in Latin America, credit union movements are still severely stunted. Several chapters in this book show that credit unions can expand and grow rapidly and sustainably if they act as businesses, rather than as charities.

Third, credit unions reach the poor in large numbers. Cuevas (chapter 2) shows that, although they are not exclusively oriented toward serving the poor, credit unions reach large numbers of poor people. Credit unions often reach more poor people than village banks, whose clients typically are all poor. Credit unions are usually much larger than village banks, which in turn derives from the large amounts of deposits that credit unions mobilize; by con-

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2 It is therefore curious indeed that credit unions receive so little attention in most of the conferences and literature on microfinance and relatively small amounts of donor technical assistance funds. Banks and NGOs receive most of the attention and funding.
Contrast, village banks rely mostly on scarce donor funding to finance their lending operations.

Rehabilitation

Credit unions were initially set up in Latin America not by bankers who had the vision of building strong, sustainable financial institutions, but by people like Catholic priests and Peace Corps volunteers who wanted to assist the poor. Credit unions were typically driven by their social aims. They generally lacked professional management, were weak at loan recovery and at earning and retaining profits for future expansion, and usually kept loan rates very low in order to benefit borrowing members. Low lending rates meant that deposit rates were also normally kept low. However, substantial grant and soft loan funds available from donors enabled many credit unions to grow rapidly despite the lack of deposit mobilization, loan recoveries, and retained earnings.

With the elimination of most of their donor funding in the 1980s and 1990s, credit unions all over Latin America entered a period of crisis and of opportunity. In those cases in which credit unions have regained vigorous growth and have achieved at least some significant measure of financial health, they have generally done so through an aggressive campaign to mobilize savings, combined with much stricter attention to delinquency control and a policy of earning and capitalizing profits.

Formal Empirical Evidence

Westley and Shaffer (chapter 3) argue that although successful deposit mobilization is largely a question of appropriate pricing, delinquency and profitability are more complex matters, and so were selected as the focus of their empirical research. It is important to retain profits as a cushion to ride through bad times and to help credit unions expand. Delinquency has been termed the number one killer of credit unions in Latin America, often being a major cause of credit union decapitalization and insolvency.

Westley and Shaffer examine 55 credit unions in Bolivia, Guatemala, and Honduras. They analyze credit unions with higher and lower delinquency rates and higher and lower profitability levels in much the same way as medical researchers study people with and without heart disease. Medical researchers used statistical methods to determine that heart attacks are associated with high blood pressure, smoking, high cholesterol, and lack of exercise. Westley and Shaffer find healthier and sicker credit unions and examine the differences in their characteristics. They use a statistical model to quantify the impact of the characteristics on the outcomes, that is, on delinquency rates and profitability.
Delinquency

Westley and Shaffer find that delinquency rates depend in important ways on credit union policy variables, particularly those that affect borrower repayment incentives. Happily, this means that credit unions have great scope to motivate loan clients to choose not to default. The following table shows the most important variables found to significantly affect the delinquency rate:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Change</th>
<th>Impact on delinquency rate (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real deposit rate</td>
<td>+10 points</td>
<td>-3</td>
</tr>
<tr>
<td>Real loan rate</td>
<td>+10 points</td>
<td>-4</td>
</tr>
<tr>
<td>Collateralized share of loans</td>
<td>+20 points</td>
<td>-1.5 to -2</td>
</tr>
<tr>
<td>Return on assets, lagged one yeara</td>
<td>+0.10</td>
<td>-3</td>
</tr>
<tr>
<td>Relative wagesb</td>
<td>+0.5</td>
<td>-3 to -5</td>
</tr>
</tbody>
</table>

a. The lagged rate of return varies from -0.30 to 0.11.
b. Relative wages vary from 0.27 to 1.68.

The table shows that reasonable size changes in these variables are associated with important changes in the delinquency rate.

Higher real deposit rates motivate greater loan repayment because borrowers do not want to lose access to a now more valuable savings service. In addition, higher real deposit rates result in greater deposit mobilization, less loan rationing, and hence in a greater probability of borrowers obtaining future loans. The result is that borrowers are more inclined to repay present loans.3

Higher real loan rates also increase loan repayment because such rates reduce credit rationing and a culture of insider lending, favoritism, and even corruption that flourishes at low loan rate levels, all of which result in poorer loan selection and weaker collection efforts, and thus in higher delinquency rates. The collateralized share of loans is the share of the loan portfolio that is backed by real or movable property collateral. Such guarantees represent an additional threat to the borrowers’ assets and thus encourage loan repayment.

Last year’s return on assets is a measure of credit union financial health that can be observed in the current year. The borrowers’ incentives to repay diminish greatly if they think the credit union will not be around in the future or will only be around in diminished capacity (for example, with limited credit

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3 Interest rates are often measured in real terms in order to adjust for (that is, net out) the effect of general price inflation. For example, a deposit rate of 12 percent with 5 percent inflation yields approximately the same 7 percent real deposit rate as a deposit rate of 22 percent with 15 percent inflation.
availability). Although the rate of return is not a policy variable per se, it is influenced strongly by the set of policy variables considered here.

Relative wages, that is, the ratio of credit union wages to wages paid in the overall financial sector, have an important impact on delinquency rates. A major problem in credit unions in Latin America is that credit union wage levels are often held down by a membership that insists that credit union officials make no more than the members themselves, who often have low incomes. Low credit union wage levels relative to those paid in the overall financial sector make it difficult to attract and retain high quality staff. Low wages result in high turnover and low effort and morale, all of which leads to poorer loan selection and weaker recovery efforts, and hence to higher delinquency rates.

As also shown in the table above, fairly reasonable size changes in each of these variables can have a noticeable impact on delinquency rates. For example, raising real deposit rates by 10 percentage points (for example, from –5 percent to +5 percent) reduces the delinquency rate by about 3 percentage points (for example, from 20 percent to 17 percent). Although 10 percentage points may seem like a lot, it is not so much in the context of Westley and Shaffer’s data sample, where some credit unions have highly negative real deposit rates. The impact on delinquency is particularly large if several of these variables are changed at once, as credit union rehabilitation programs attempt to do. In addition to the variables shown in the table above, the strength of collection efforts was also found to be important in raising repayment rates. The study employed two indirect or proxy measures of this factor, both of which were highly significant and had quantitatively important impacts on credit union delinquency rates as well.

**Profitability**

Delinquency rates average nearly 20 percent in Westley and Shaffer’s sample, and reach almost 50 percent in some credit unions. Delinquency is so important in determining credit union profit levels that many of the variables that were found to affect delinquency also were found to impact profitability. However, the effects can sometimes be surprising, as revealed by the estimated translog profit functions.

One of the most consistent and significant findings was that higher credit union wage rates resulted in higher credit union profits. The likely explanation for this is that higher wage rates result in lower delinquency levels and may also bring better financial management, less retraining and other turnover costs, and general increases in labor productivity. These positive effects on profits are likely to be especially strong in credit unions because wage levels in these institutions are particularly repressed. In fact, Westley and Shaffer find that these positive
effects are more than enough to offset the increase in the wage bill that results directly from higher wage rates.

Similarly, Westley and Shaffer find that higher real deposit rates are often associated with higher real profits. This probably reflects the earlier result that higher real deposit rates motivate greater loan repayment, with the repayment effect strong enough to offset the increased costs that directly result from the higher real deposit rates. Higher real loan rates are also found to lead to higher real profits, as would be expected because higher real loan rates are associated with lower delinquency rates, an effect that reinforces the positive direct impact that higher real loan rates have on real credit union revenues and hence profits.

A General Result

These findings support the general conclusion that credit unions have great potential to reduce delinquency rates and increase profitability levels by changing policies over which they have immediate control. These include such policies as credit union loan, deposit, and wage rates, as well as loan collateral requirements and the strength of collection efforts.

Case Studies

Richardson (chapter 4), Arbuckle and Adams (chapter 5), and O’Donnell (chapter 6) present case studies of successful credit union rehabilitation efforts in Guatemala, Honduras, and Kenya. The chapters discuss and illustrate the strategies for rehabilitating credit unions and building sustainable, competitive financial institutions.

Richardson, known for his exemplary work in rehabilitating the Guatemalan credit union system in the late 1980s and early 1990s, discusses many of the dos and don’ts of credit union rehabilitation. He prescribes ways credit unions can avoid the “seven deadly credit union sins.” These sins can be summarized as follows:

1. **External dependency.** Credit unions should not rely on donors or governments for much, if any, of their funding; they should focus on deposit mobilization. Reliance on external funding sources builds an unhealthy dependency on outside programs that may one day be scaled back or eliminated, jeopardizing the long-term sustainability of credit unions. External funding has often undercut the quality of credit union loan portfolios as well because donors often specify that their funds go to certain favorite activities or sectors regardless of risk, and because credit union members often view donor credit programs as quasi-grants
that do not really have to be repaid. Reliance on external program funds also builds a culture and expertise within credit unions of courting donors rather than providing good service to depositors, undercutting efficient, client-oriented credit union management. External borrowing unbalances the natural equilibrium in credit unions between net depositors and net borrowers, often leading the credit union to be borrower dominated. Such credit unions tend to offer low deposit rates and to be weak on enforcing loan recovery and maintaining prudential controls. Finally, deposit mobilization should be stressed because a liquid deposit facility is an important financial service in its own right and should have a prominent place among the products offered by credit unions.

2. Confusing financial information. To properly administer a credit union, managers and directors must have meaningful balance sheets and income statements, devoid of smoke-and-mirrors accounting gimmicks such as overstated asset values or operating expenses that are deferred or amortized over time.

3. Uncompetitive products and services. Deposit rates must be competitive, so that the credit union can attract savings to it and grow. Loan rates need to be set high enough that the credit union can earn profits and build an adequate capital cushion.

4. Poor public image. Many credit unions are in great need of upgrading their physical facilities, instituting a professional dress code, and launching a marketing and promotional campaign.

5. Undisciplined fiscal operations. Credit unions need discipline and good financial management in five key areas: delinquency control, adequate loan loss provisioning, sufficiency of institutional capital, maintenance of adequate liquidity reserves, and proper asset-liability management.

6. “Cookie-cutter” loan analysis. Credit unions should not give loans to all members as a “right” and should not set the loan amount as a simple multiple of the amount of the member’s shares (for example, the traditional 3:1 loan-to-share ratio). Rather, credit unions must base whether and how much to lend on the capacity and willingness of the borrower to repay, and must adequately monitor loan repayment and strictly enforce collection.

7. Social philosophy over common business sense. A credit union must be financially strong before it can effectively help the poor. It must be run first as a business, not as a social welfare institution.

At least three other important principles or approaches to rehabilitation can be gleaned from these three case studies:

- Bottom-up approach. This principle is articulated by Arbuckle and Adams (chapter 5) and is employed in all three cases. It maintains that it is best to begin by directly strengthening the individual credit unions, not the na-
tional credit union federation (as frequently has been done in the past). The primary goal is strengthening credit unions and their intermediation activities. In the past, the national federation often got in the way of achieving this aim when the rehabilitation program tried to strengthen the credit unions through the federation. Once the credit unions have been strengthened, they will often reinvigorate the federation, of which they are the owners. The credit unions will demand services of the federation of greatest interest to them, which the federation can then provide and charge for, so as to become sustainable itself. These services may include training, technical assistance, and the provision of a central liquidity facility.

- **Stabilization fund.** This is a tool that may be used in rehabilitation programs, in which a contract is written annually with each individual credit union. This contract promises to award a grant or zero percent interest loan to the credit union if it meets the annual targets set out in the contract. These targets commonly include improving specified financial ratios (for example, delinquency rates, capital/asset ratios, and administrative cost/asset ratios), writing off bad loans and increasing provisioning, making management and other personnel changes, and changing price policies (such as raising loan, deposit, and wage rates). Stabilization funds have often helped credit unions to undertake unpopular courses of action that they might not have otherwise chosen. The danger of stabilization funds is that they could turn into giveaways in which adequate quid pro quo is not demanded or received.

- **The black box: how can we effect change?** How can credit unions following traditional operating modalities and committing many of the seven deadly sins be persuaded to change their ways? Richardson lays out an elaborate recipe. He describes the most effective ways to use financial resources, the types of competencies and character traits that people should possess to help shake credit unions out of their traditional ways, and the practical programs and tools that can be brought to bear in facilitating the process of change. Richardson discusses how to harmonize the products and services that credit unions offer with their financial and institutional capacity, and the need for financial discipline to be imposed from several directions at once, both from within and from outside the credit union.

**Regulation and Supervision**

If credit unions are to have a long-term future as sound financial intermediaries with a substantial share of the market, they almost certainly will have to be supervised. As Richardson (chapter 4), Poyo (chapter 7), Pabst (chapter 10), and others discuss, outside supervision helps credit unions stay on the straight and
narrow path of maintaining financial discipline and prudent management, something which so many Latin American credit unions still have difficulty doing today. Further, Benston (1986) observes that, unlike commercial banks, credit unions are not monitored by stock and bond market investors. A handful of countries in Latin America already supervise credit unions, a few others are about to begin, and still others are considering taking this step. Still, most Latin American countries do not supervise credit unions.

The general rationale for supervising credit unions is much the same as for banks. Both are deposit-taking institutions, and so supervision is needed to protect the large numbers of small depositors who do not have the information or ability to monitor the risky behavior of the financial institutions in which they may have put a sizable share of their life savings. However, there are important institutional differences between banks and credit unions, and these lead to important differences in the types of regulations and supervision that are appropriate for each. Perhaps the most important institutional differences in this regard are that credit unions have a cooperative ownership and governance structure, they are often very small institutions, and they are geographically less well diversified in both their deposit bases (funding sources) and loan portfolios. Here we consider some of the principal regulatory and supervisory differences between credit unions and banks.

**Regulatory Differences**

Important regulatory differences between credit unions and banks include those related to capital adequacy, minimum capital in nominal terms and permissible operations, governance, multipurpose cooperatives, nonmember deposits, external debt, and fixed assets.

**Capital Adequacy**

The capital adequacy regulation is the single most important regulation for limiting risk-taking by financial institutions. This regulation normally specifies that a financial institution should maintain at least a minimum ratio of capital to risk-weighted assets. In the case of Latin American commercial banks, the minimum ratio is typically set at around 8–12 percent. In the case of credit unions in Latin America, there are at least three distinct schools of thought—and no clear consensus—on how to treat share capital and set capital adequacy ratios: the method used in Bolivia, a method suggested by Poyo (chapter 7), and the World Council of Credit Unions (WOCCU) method. All three methods agree that, for purposes of meeting the capital adequacy requirement, institutional capital should be counted toward capital, where institutional capital consists of credit
union reserves plus retained earnings. Institutional capital is freely available long-term resources that may be used to protect member deposits or handle emergencies, and thus clearly qualifies as capital for purposes of meeting the capital adequacy requirement.

The three methods disagree on whether to treat member shares as capital. Credit unions are generally obliged to refund the total value of the member’s shares to any member who decides to leave the credit union. Suppose, then, that we were to count shares as capital, and consider, for example, a credit union whose capital consists mostly of shares. If there were a sudden exodus of members from this credit union, perhaps because an adverse shock made the credit union’s finances look very shaky, the credit union would rapidly become decapitalized. Moreover, the credit union would not have its capital cushion at precisely the time when it most needed it to deal with the shock. By contrast, a stock corporation does not have this problem because it has not pledged to redeem its owners’ shares. Rather, owners wishing to sell their shares must sell them to other interested parties, leaving the stock corporation’s capital cushion intact and available to meet emergencies.

The WOCCU method simply does not count shares as capital (Richardson, chapter 4). WOCCU suggests that credit unions should maintain a ratio of institutional capital to assets of at least 10 percent. Initially, superintendencies will have to allow credit unions several years to earn and capitalize sufficient profits to reach this level of institutional capital. Once they have achieved this level, credit unions will have a significant cushion to protect both the deposits and shares of members, to meet emergencies, and to fund long-term growth. Hence, this approach, which is similar to that used in the U.S., appears to be simple, workable, and in many ways quite satisfactory.

The other two methods for defining capital adequacy ratios both count shares fully as capital, adding them to institutional capital in order to derive total capital; however, they rewrite the standard credit union rules on share redemption for withdrawing members. Poyo (chapter 7) suggests that credit unions regularly compute the current book value (net asset value) of shares and create a secondary market in which withdrawing members would sell their shares at this value to new members entering the credit union. Credit unions would no longer redeem member shares, but act only to facilitate their transfer in this way. Under these rules, credit union shares would become like stock corporation shares and clearly should be counted as capital.

The Bolivian credit union regulations leave the obligation for share redemption with the credit union, but suspend members’ rights to redeem their shares whenever any one of three situations occurs: the credit union capital adequacy ratio is below the minimum legal limit, the credit union has current or cumulative losses, or the value of all shares is less than 90 percent of their value at the
outset of the fiscal year (that is, not more than 10 percent of shares can be retired in any given year, unless new members join). Hence, the Bolivian regulations allow members to redeem shares from the credit union at some times but not others, depending on the circumstances. However, these regulations ensure that member redemptions never undercut a minimum long-term funding base because redemptions cease whenever credit union capital falls below the minimum specified percentage of assets.

Both the Poyo and the Bolivian approaches to capital adequacy have two potentially serious problems, but also one possible advantage over the WOCCU approach. Thus, the choice of approach depends at least somewhat on local circumstances.

The first problem with the Poyo and Bolivian approaches is that they could lock members into credit unions and strand their share capital there for many years. This could be a significant problem with the Poyo proposal in areas of declining population, which may include many rural areas, where credit unions have a particularly strong presence in many countries. Members who wish to move away from the area may not be able to find incoming members to whom they can sell their shares, leading to the creation of large amounts of frozen wealth all over the countryside. The creation of such stranded capital could also be a problem with the Bolivian approach for members of credit unions that barely pass the capital adequacy requirement (and hence may continue to operate but cannot redeem many shares), that consistently fail to become profitable, or that have extremely high desertion rates.\(^4\)

The second problem with these two approaches to share redemption is that member share capital could also be decimated or totally lost over a period of months or years, with members being unable to redeem their shares as they could under the standard redemption rules employed in the WOCCU approach. If the credit union is being badly managed but members cannot redeem their shares, the members have no effective exit mechanism when the credit union starts to become insolvent and the shares lose much or all of their value.\(^5\)

These two problems, somewhat paradoxically, are also the source of a potential advantage. The threat to members of losing their shares or of having them stranded for a long period of time enhances incentives for members to take a more active role in credit union politics and governance and, in particular, to become greater advocates for prudent credit union management. Poyo’s suggested creation of a secondary market in which the current value of member

\(^4\)To the extent that the superintendency liquidates or merges such credit unions, which may especially occur under the last two conditions, stranded member shares may eventually be liberated.

\(^5\)Prompt intervention by the superintendency may rescue some value for the shareholders. However, many superintendencies in Latin America and elsewhere have failed to intervene in much larger commercial banks in time to save any shareholder equity.
shares is periodically published further strengthens the incentives for prudential management by making clear in a single number the losses associated with imprudent management.

The WOCCU approach to capital adequacy may also provide incentives for good governance and prudent financial management, which may be weaker or stronger than the incentives provided by the other two approaches, depending on the circumstances. Good governance incentives could be generated by the WOCCU approach because in many Latin American countries today, most credit unions would fall well short of the required 10 percent ratio of institutional capital to assets. A credible threat of penalties from the superintendency (for example, monetary penalties, intervention, or closure) for all credit unions not meeting this standard within a specified time period could motivate credit unions to improve their prudential management and efficiency so as to earn and capitalize the required profits.

Whichever of the three methods is used to define capital, there are strong reasons to set the minimum capital adequacy ratio somewhat higher for credit unions than for banks. These reasons include the generally much more limited geographical diversification of the credit union loan portfolios and funding sources, the more problematic governance structure of credit unions, and their generally lower level of professionalism in management. Problems in credit union governance structure include lack of strategic investors who are motivated by profit and who are also available to meet capital calls. In general, commercial banks fare much better than credit unions in these areas.

*Minimum Capital in Nominal Terms and Permissible Operations*

The issues of whether to set minimum capital levels in nominal terms (for example, at $1 million) for credit unions and whether and how to restrict the operations that smaller credit unions are permitted to engage in are unsettled questions that have sparked intense debate. The regulations recently issued in Bolivia, a variation of which is now being considered in Paraguay, illustrate the issues.6

To be supervised by the Bolivian Superintendency of Banks and Financial Entities and be allowed to accept deposits, a credit union must have capital of at least 150,000 special drawing rights (SDR), roughly $200,000 in 1999. Below this threshold, the credit union is overseen only by the cooperative development agency (INALCO), rather than the Superintendency. In addition, credit unions with capital below SDR 150,000 are not allowed to accept deposits; they may accept only shares, which members can at best withdraw only when they leave

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6 Trigo (chapter 8) discusses the Bolivian regulations.
the institution. Shares do not provide members with a liquid savings facility, which is what most depositors are looking for. This type of regulatory scheme has raised several contentious and important issues.

Other Latin American countries that supervise credit unions, such as Mexico and Ecuador, generally supervise only the largest credit unions (as is also the case in Bolivia), but they do not restrict the operations of the unsupervised entities so severely. In particular, they allow unsupervised credit unions to continue to mobilize deposits. By restricting the possibilities for deposit mobilization to only those credit unions above a minimum size such as SDR 150,000, some observers fear that many small communities will be harmed. This problem would especially impact communities that are too small to attract a bank branch and are unable to form a credit union on any significant scale. Small communities may be unable to do this because, although many potential members would be interested in putting their money into liquid deposit instruments, few want to tie up their funds in illiquid shares. Enforcing restrictions on deposit mobilization may cause many small credit unions already located in rural areas to shrink dramatically in size or even become unviable, because members who were attracted to them by the availability of a liquid deposit facility would withdraw their funds. This would also leave these credit unions without the resources to attend to the needs of many of their members who desire loans.

Is this outcome preferable to the current situation, in which small credit unions mobilize deposits but also commit abuses (such as theft and fraud), some of which could be prevented by curtailing credit union operations? Credit unions are much like rotating savings and credit associations (ROSCAs) in which people who wish to borrow and save come together and do exactly that, lending to and receiving interest from each other. A small credit union is essentially a formalized version of a ROSCA, providing rudimentary savings and loan services. If governments restrict the ability of small credit unions to take deposits, what is the justification for letting ROSCAs continue to operate? And if governments restrict the ability of small credit unions to broker this savings and lending process, are they really improving the welfare of the members? Presumably the members know that there is the possibility of theft and other problems and have decided, knowing what they know of their neighbors, to participate in the credit union anyway in light of all the benefits of their participation, as weighed against the risks. Some would argue that it is paternalistic, and perhaps quite harmful, for governments to assume that they know more than the participants themselves, and to ban all small-scale credit unions in their current form. If participation is voluntary, it is presumably expected to be welfare enhancing on balance.

7 By deposits, we mean savings and time deposits that members can withdraw without having to leave the credit union.
At the same time, under the proposed restrictions, these small community credit unions would be very strongly capitalized. With deposits prohibited and borrowing unlikely, the ratio of capital to assets would likely be one to one, reducing risk (but also greatly circumscribing intermediation). In addition, these small credit unions would have the option of merging with each other or with a larger credit union in order to meet the mandated minimum capital requirements for deposit-taking, such as Bolivia's SDR 150,000. The resulting credit unions would be potentially more viable financial institutions in view of economies of scale, greater diversification, and other benefits of greater size and geographical spread.

But is it possible for many of the original, smaller credit unions, some of which are so small that manual information systems are still the most appropriate technology for handling their operations, to overcome the management diseconomies imposed by the distance between them and form a single credit union? Are there trusted and respected managers and directors available locally who are up to the task of running such a multi-branch credit union? Or are there larger credit unions that would find it worthwhile to absorb these small credit unions and keep service going in the local community? Are the leaders of small credit unions willing to give up local control and merge with or be absorbed by other credit unions?

The answers to these questions depend on the local circumstances in the country. Countries contemplating these sorts of restrictive regulations should gather information on their likely impact before putting such regulations into effect. If the answers to these questions in many small communities is "no," then the proposed restrictions may eliminate financial services in many areas, rather than make them more efficient. Thus, the answer to the larger question of whether to impose Bolivian-type restrictions on small credit unions is still an issue of intense debate. 

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8 We understand that precisely because of the sorts of problems cited here, Bolivia may allow small, unsupervised credit unions to make their share accounts withdrawable. This means that share accounts would be much more like savings accounts, in which a member could withdraw share funds at any time so long as the amount in his or her account did not go below an absolute minimum balance specified by the credit union. These withdrawable share accounts would differ from savings accounts in two important regards, however. First, these shares would still be considered part of the capital of the credit union, and so no shares could be withdrawn under any of the three circumstances cited earlier (if the credit union had current or cumulative losses, deficient capital, or a large member outflow). Second, interest would not be paid on share accounts; rather, they would be remunerated by whatever end-of-the-year dividend the credit union declared. Hence, while withdrawable share accounts would go part of the way toward satisfying member needs for a liquid savings facility that protects the real value of the principal against erosion by inflation, their possible illiquidity and the uncertainty surrounding the remuneration rate of these accounts makes them only a partial substitute.

Another partial substitute for a liquid savings account, though not as good a substitute even as withdrawable share accounts, is share accounts with the right to automatic loans. An automatic loan
Another innovative aspect of the Bolivian minimum capital regulations is that the credit unions supervised by the Superintendency are divided into four groups by their level of capital: over SDR 150,000, over SDR 250,000, over SDR 630,000 (the level of capital required of Bolivia's Private Financial Funds, another regulated financial entity), and over SDR 5.5 million (the level of capital required of a commercial bank). Credit unions with successively higher capital levels are permitted a wider range of operations on both the assets and liabilities sides of the balance sheet. In addition, although the smallest category of credit unions must maintain ratios of capital to risk-weighted assets of 20 percent, the second smallest needs only 15 percent, and the two largest categories only 10 percent. This tiering of permissible activities reflects the notion that larger credit unions are more able to handle a wider range of activities safely, and the tiering of capital adequacy requirements reflects the notion that larger credit unions are safer. Although they are theoretically plausible, both of these assertions should be examined empirically. In Latin America, there are many small, well-managed credit unions and many large credit unions that are financial disasters. In fact, there are so many exceptions to the rule that larger is safer that we wonder if it has any usefulness at all in setting regulations.\footnote{Although it seems that a credit union must be reasonably efficient and well managed to have become large, there are many reasons why this is often not true in practice. For example, many credit unions outgrow the capacity of their managers or established systems to administer them effectively. Still others grow to a size that they then represent a tempting target for fraud or manipulation.}

\textit{Regulations Aimed at Strengthening Governance}

Regulations recently put forth in Bolivia and Mexico address important credit union governance issues (see Trigo, chapter 8, on Bolivia, and Vargas, chapter 9, on Mexico). Bolivia has prepared a particularly extensive set of regulations meant to improve credit union governance. Moreover, in order to assist credit unions in bringing their bylaws into compliance with these regulations, the Bolivian Superintendency has issued model credit union bylaws that the credit unions may adopt wholesale or use as a guide to modify their existing bylaws. Among
the major provisions of the Bolivian governance regulations are those that define the principal functions of the board of directors—as distinct from the functions of management—and the numbers, qualification and disqualification criteria, and liability of credit union board members.

The regulations define the functions and authority of the supervision committee—as the internal controller of the credit union with oversight over all credit union operations including those of the board of directors and management—as well as the liability of the supervision committee members. The Bolivian regulations mandate that credit unions have an internal auditor and that the auditors should be free to carry out their work fully and without restrictions. Loans to directors, senior management, and their families are prohibited. The Bolivian governance regulations put into practice many of the suggestions that Branch and Baker (chapter 11) make in discussing governance problems and help the superintendency to prevent and control many types of credit union mismanagement problems.

Mexico has some very large credit unions, with tens of thousands of members located all over the country, which has led to governance problems. In such institutions, the usual credit union governance mechanism of a single annual general assembly of all members electing a board of directors and a supervision committee may break down, as it has in some instances in Mexico. With such a large and dispersed membership, most members do not find it worthwhile to attend the annual meeting, hoping instead that fellow members will look after credit union governance matters properly. In particular, members may be tempted to free-ride in monitoring the performance of the credit union, both at the annual meeting and on an ongoing basis, especially in view of the credit union’s size, complexity, and geographical dispersion. With limited oversight, the credit union manager, board of directors, and supervision committee in some cases have colluded to protect one another’s interests and draw high salaries, insider loans, and other perquisites, to the detriment of the credit union and its membership.

To solve this problem, recent Mexican regulations call for the establishment of representative assemblies, with representatives elected by the members of each branch office or group of branch offices of the credit union. The elected delegates then choose and monitor board and supervision committee members. As Vargas (chapter 9) notes, this system will hopefully provide the additional layer of oversight needed in large credit unions to ensure effective monitoring of those in power and to prevent excessive benefits from going to them. Heller (chapter 12) describes a similar system that has been used in large cooperative banks in Argentina to preserve democratic decisionmaking, make good use of local-level information, and help to ensure adequate oversight of the board of directors and bank operations.
Multipurpose Cooperatives

Multipurpose cooperatives with a savings and loan department should be prohibited. They have generally not worked well in Latin America. It is difficult enough to run a purely financial cooperative (that is, a credit union) well without introducing the complications and distractions of additional business lines.

Nonmember Deposits

A major line of defense of the safety and soundness of a credit union is the vigilance and activism of its depositors. Allowing deposits from nonmembers undermines one of the credit union's primary sources of stability. Although nonmember depositors have some incentive to monitor the performance of the credit union, they cannot participate in its annual assemblies or effectively influence its policies. Their only option when difficulties appear is to withdraw their savings. By contrast, member depositors can be an active force in credit union politics and governance in favor of good prudential management. In view of the small share capital contributions generally required to become a credit union member and the difficulties so many credit unions have with borrower domination and other problems that lead to imprudent management, nonmember deposits should be prohibited.

External Debt

A credit union's level of external debt (external to the membership) should be strictly regulated in order to avoid situations in which these intermediaries are used as conduits for targeted credit programs, such as the agricultural credit programs of the past or the microenterprise credit programs of today. For example, Bolivia limits external debt to less than one-third of total assets.\(^\text{10}\) In light of the many pernicious effects of targeted credit programs (see the discussion in the first of Richardson's "seven deadly sins," above), we believe even lower ratios are advisable on prudential grounds, perhaps 10–15 percent of total assets.

Fixed Assets

The total value of all fixed assets (premises and equipment) should be restricted to prevent credit union directors or managers from spending lavishly on unpro-

\(^{10}\) The Bolivian regulation actually refers only to external debt contracted with the government. We believe external debt should be defined more broadly to cover all government and donor sources and perhaps all other external sources as well.
ductive, showy fixed assets in order to serve their social goals or desires for self-aggrandizement. For example, the Bolivian regulations limit the total value of fixed assets to less than the net worth of the credit union, including all shares. This is a good start, but we believe the limits should be set much lower than this, perhaps at only 5–10 percent of total assets. Some exceptions to this regulation may have to be granted for startup or very small credit unions in which total assets are quite limited but the purchase of fairly expensive information systems, premises, or other fixed assets is necessary or desirable.

**Supervisory Considerations**

Here we discuss four issues on the supervision of credit unions: the role of the banking superintendency vis-à-vis the cooperative development agency, specialized credit union superintendencies, access to the safety net, and the issue of delegated supervision and self-supervision.

**Banking Superintendency or Cooperative Development Agency**

There is widespread agreement that because of the highly technical nature of prudential supervision, it should be carried out by the banking superintendency, not by the cooperative development agency. The latter is charged with promoting and rather superficially overseeing all of the different types of cooperatives that exist in the country, such as those for taxicabs, pharmacies, and grocery stores. Cooperative development agencies are not equipped in any case we know of to carry out prudential supervision of credit unions.

**Specialized Credit Union Superintendencies**

There is fairly widespread agreement that if the government is to supervise credit unions directly, the responsibility should be given to the existing banking superintendency—assuming that it has displayed reasonable competency in supervising banking institutions—rather than creating a separate credit union supervisory agency. Creating a new agency would be costly and inefficient in view of the substantial expenditures that would have to be duplicated in state-of-the-art information systems and specialized personnel. Keeping banking and credit union supervision together in one institution would also facilitate a consistent regulatory approach to and treatment of different types of supervised financial

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11 Richardson (chapter 4) notes that the PEARLS goal for total nonearning assets (including not only fixed assets, but also cash and checking accounts and other assets that do not directly generate income) is to maintain their value at below five percent of total assets.
institutions, and help avoid giving one institution an unfair advantage over another.

It may at the same time be efficient to create a specialized credit union intendency or department within the overall superintendency. Although credit unions are engaged in intermediation activities just like all of the other banking institutions, they also have a unique ownership and governance structure and other special characteristics. Effective supervision of credit unions requires, therefore, that supervisors possess specialized knowledge and an understanding of the problems commonly encountered in these institutions, all of which may be best acquired in a specialized department.

Access to the Safety Net

Superintendencies that are beginning to regulate credit unions for the first time face the question of whether to grant credit unions the same access that other supervised banking institutions have to the public sector safety net, including the lender-of-last-resort liquidity facility, government bailouts, and deposit insurance. As Poyo (chapter 7) notes, the key is to be sure that credit unions are well controlled by supervision before allowing them this access. Otherwise, credit unions may be tempted to operate in an overly risky fashion, reasoning that there is great upside potential to the risks they are taking while the downside potential is now limited by the safety net. This response could have serious repercussions for the financial stability of the entire credit union system. Therefore, the superintendency needs to be able to detect and control excessive risk-taking by credit unions before it grants them access to the safety net.

Delegated Supervision and Self-Supervision

Poyo (chapter 7) and others argue that, as a matter of fairness and in order to preserve regulatory neutrality, all credit unions should be supervised because, all else equal, depositors will choose a supervised credit union or bank branch over an unsupervised credit union. However, most superintendencies in Latin America have so far been unwilling to supervise any credit unions, much less all of them. This reluctance might be overcome in some cases if the superintendencies were to charge cost-covering or nearly cost-covering supervision fees for their services. They would then have the resources to properly supervise credit

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12 Violating the principle of regulatory neutrality can introduce serious economic inefficiencies into the financial system. Clients may patronize less efficient, higher-cost financial intermediaries over more efficient, lower-cost intermediaries simply because the former are supervised and the latter are not. This drives up the total systemwide cost of intermediation.
unions without having to call on commercial banks and other supervised financial institutions to cross-subsidize credit unions.

We believe that it would be in the credit unions’ long-run interest to pay even the full cost for good quality supervision, given the benefits conferred by such oversight. Credit unions might have to raise their loan rates somewhat to cover these added costs, but this should not be a major problem. Credit union loan rates are often below what banks charge even for much larger loans and credit union loan rates are almost always below what the credit unions themselves could charge for the small loans they make. Also, many credit unions are located in rural areas, where they have captive markets and even greater discretion to increase loan rates. In any case, good supervision may result in the credit unions making substantial efficiency gains, which may obviate the need for any loan rate increases at all. In addition, good supervision benefits the credit union by providing the external controls that help it to become a more stable and financially sustainable institution. This enhanced stability and safety bolsters public confidence in credit unions and helps these intermediaries to attract deposits, thus providing resources for growth, service expansion, and further cost reductions through scale economies.

If the superintendency is unwilling to supervise credit unions, then a system of either delegated supervision or self-supervision may be considered instead, provided that a responsible organization exists which is capable of shouldering these duties. Typically, this organization would be a second-tier institution, such as the national credit union federation. In delegated supervision, the superintendency would delegate routine data collection and much or all of the on-site inspection duties to the credit union federation. And the superintendency would place greater emphasis on the use of auditing firms as a further check on the financial condition of the credit unions. The superintendency would oversee all of the work of the federation rather closely and would retain the powers to intervene in and liquidate or merge ailing or insolvent credit unions. In self-supervision, the superintendency would delegate all powers to the federation, including the power to intervene in and liquidate or merge troubled institutions.

Both of these systems suffer from a severe conflict-of-interest problem that stems from the fact that the national credit union federation is being asked to play two roles at once. In addition to its normal role as promoter of credit unions, it is now being asked to serve as the regulator of credit unions. Because the federation is owned by the credit unions, it may be reluctant to close down or help close down these institutions, especially the largest ones, which have the greatest stake in the federation and wield the most political power. History shows repeatedly the importance of promptly closing down insolvent financial institutions before losses mount further within the institution and panicky depositors possibly spread the contagion to other intermediaries, as occurred recently, for
example, in the Colombian credit union system. Clearly, self-supervision has much less chance of success than delegated supervision because the latter benefits from the presence of a neutral superintendency looking over the shoulder of the federation and intervening in and liquidating or merging ailing credit unions, tasks that present the federation with its greatest conflicts of interest. Christen and Rosenberg (1999, p. 25) in fact declare that, “in poor countries, self-supervision of . . . [credit unions] has been tried dozens of times and has consistently proven to be ineffective.”

Delegated supervision may be problematic as well, even if the superintendency takes seriously its responsibility to oversee the federation’s work. The danger again stems from the basic conflict of interest in the federation’s mission. The federation, out of sympathy for the problems and plight of ailing credit unions, may attempt to hide these problems from the superintendency, with the unintended but likely consequence that the problems will fester and grow. The federation’s reluctance to reveal information that might lead the superintendency to intervene in or shut down credit unions may cause particularly acute problems during economic downturns when several credit unions may begin to fail and need prompt intervention or liquidation. These credit unions may appeal to the federation to let them keep operating, arguing poignantly that it is outside circumstances, not their own mismanagement, that is at the root of their current difficulties and that the problems will pass as soon as good times return. The problem is that it is impossible to foresee when good times will return and whether the credit union will recover then. Meanwhile, as is often seen among distressed financial institutions, an ailing credit union may “gamble for resurrection,” taking imprudent risks in hopes of earning large profits and restoring itself to financial health.

Pabst (chapter 10) discusses how the creation of a stabilization fund can greatly reduce the federation’s conflict-of-interest problem and enhance the chances for delegated supervision to work effectively. The purpose of the stabilization fund is to shore up ailing credit unions before they slide irreversibly into insolvency. The stabilization fund may or may not offer deposit insurance as well. The fund obtains its resources from the contributions of all supervised credit unions, giving incentives to these credit unions to keep the system of delegated supervision strong and independent. These incentives will be particularly strong for the largest (and most powerful) credit unions because they typically provide a large share of the stabilization fund’s resources.

However, introducing a stabilization fund creates moral hazard problems in individual credit unions. Credit unions may be tempted to operate in an overly risky fashion whenever an external safety net device such as a stabilization fund limits the downside potential of their gambles. In order to control the moral hazard introduced by the stabilization fund, credit unions must be very well supervised and the extent of any bailouts and deposit insurance must be cir-
It is difficult, although not impossible, for the federation to overcome its conflict of interest problems and achieve a high level of supervisory control absent the stabilization fund. The federation must overcome these problems by deciding that building a safe and financially strong credit union system must take precedence over its role as credit union promoter. The fact that the superintendency is looking over its shoulder, hopefully with great vigilance, will help, but by no means guarantee that the federation will arrive at this decision. The federation must establish discipline within the credit union system first and then introduce the stabilization fund later on to help maintain its strength and independence as a delegated supervisor.

Governance

One of the principal challenges which credit unions in Latin America face in order to expand and become more significant actors in the financial marketplace is that of establishing proper governance systems. It is important to analyze whether one of the very strengths of credit unions, client ownership and control, could at the same time create some of their major problems. Branch and Baker (chapter 11) explore the nature of the governance problems that credit unions commonly face and suggest several means to control or overcome them. Two major problems of governance arise: the principal-agent problem and the borrower domination problem.

Principal-Agent Problem

The principal-agent problem occurs when the interests of the elected directors and contracted management (the agents) diverge from the interests of the credit

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13 See Rojas-Suarez (1997) on the need to limit the scope of deposit insurance and other elements of financial system safety nets, particularly in Latin America.

14 Although Guatemala does not have a delegated supervision system, the national federation there has taken a decision much like this, as Cifuentes describes in chapter 13. However, the federation arrived at this decision only after years of highly successful international technical assistance had paved the way, underscoring the fact that such a decision is alien to the prevailing credit union culture in most Latin American countries. For this reason, achieving good results with delegated supervision is difficult, but not impossible.

15 It may be helpful at some point after the federation has achieved a certain degree of control over the credit unions, but before any stabilization fund is introduced, for it to pass the delegated supervision function to a subsidiary or to some other institution that is at least partially autonomous from the federation. The board of directors of this subsidiary or other institution would consist of people such as representatives of the banking superintendency, the finance ministry, and perhaps the credit union federation. An institution with such a board may have a much better chance of maintaining supervisory control and credit union discipline (absent the stabilization fund) than the federation, whose board consists of representatives of the credit unions being supervised.
union members (the principals). Resolution of this problem depends on clearly and properly specifying and enforcing the institutional rules that define the roles and responsibilities of the actors involved in the governance of the credit union. These rules are specified in credit union bylaws. Many bylaws do not adequately resolve principal-agent problems because the membership and elected board of directors are not fully aware of the problems or simply do not know how best to go about solving them. In addition, many credit unions are still not forced by competition to increase their efficiency levels, which might push them to look harder at resolving many of these issues. Branch and Baker (chapter 11) suggest the following seven key bylaw provisions to control principal-agent problems:

1. Define the decision oversight role of the directors.
2. Address the problem of unqualified personnel in decision oversight by making sure that bylaws establish criteria for who is qualified to assume a position as a director.
3. Establish the appropriate functions of the supervision committee.
4. Make credit decisions on technical risk analysis criteria by technical staff with appropriate preparation.
5. Establish clearly the fiduciary responsibility of directors and their responsibility for monitoring the decisions of management, as well as the penalties for failing to meet these responsibilities.
6. Establish ethical codes of behavior and controls on insider loans to avoid conflicts of interest.
7. Provide for staggered rotation of board members.

**Borrower Domination Problem**

The second major problem of governance is the tendency of borrowers to dominate the boards of directors of credit unions and to run the institution primarily in the interests of borrowers. Many credit union movements in Latin America have a long history of borrower domination that dates back to their establishment by church groups, the Peace Corps, and other similar institutions whose primary goal was to help the poor, rather than to build a strong and financially sustainable institution. These credit unions usually kept loan rates very low in order to benefit borrowing members, and this usually meant that deposit rates were kept low as well. Credit unions were also used as conduits for subsidized donor or government money to reach the poor.

Under these circumstances, people joined credit unions mainly to access cheap loans, not deposit services. Loan screening and repayment pressure were often lax. High loan delinquency rates undercut the financial solidity of the credit
unions, rendering many of them technically insolvent. Although donor funding has largely disappeared, many credit unions today are still run primarily in the interests of borrowers, still offering sub-market loan rates and tolerating high rates of loan delinquency.

To resolve the borrower domination problem and resulting financial problems, credit unions should provide balanced and updated services that will attract not only borrowers, but also savers to the credit union and its board of directors. These services should include savings instruments remunerated at competitive interest rates. The presence of net savers on boards of directors will lead to more effective pressure on credit union management for prudent financial administration. That will, in turn, protect the interests of savers and help ensure the credit union’s long-run sustainability.

At least three other lines of attack can be employed to overcome borrower domination problems. First, credit unions should avoid becoming conduits for donor- or government-funded credit lines, particularly if these lines are subsidized, because such programs undercut deposit mobilization and the establishment of balance in the credit union and its board. Second, credit unions should produce timely and transparent financial information in order to assist managers and directors in the prudent management of the credit union, including the maintenance of loan repayment discipline. And third, credit unions should restrict or prohibit loans to board members and their families in order to help counteract borrower domination, or at least ameliorate one of its resulting problems, insider lending.

The Role of Regulation and Supervision in Governance

Even where structural rules are clearly specified and enforced, updated savings services are in place, and the other measures described above are taken, governance problems can still occur. External supervision serves as a final check against governance problems. It not only establishes the rules for behavior and the responsibilities of actors, but also monitors performance and enforces a prudential financial framework that protects the members and their savings. Regulations aimed at controlling governance problems are much more necessary for credit unions, with all their governance issues, than for stockholder-owned banks. Credit unions have problems with borrower domination, highly fragmented ownership structure (in which each member has one vote), and frequent lack of driving motivation toward greater efficiency and solvency levels. Although the preceding discussion suggests many regulations aimed at overcoming governance problems, this is clearly an area that merits further development.
Consolidation

One of the ways to confront the increasing competition credit unions now face from banks and other financial institutions is to seek scale economies and other potential benefits that come with greater size. Heller (chapter 12) and Cifuentes (chapter 13) present two models for achieving these benefits: (i) mergers and (ii) branching and networking.

Credit Union Mergers and Cooperative Banks

Heller (chapter 12) examines the case of Argentina, where cooperative banks were formed from the merger of a large number of credit unions, which then became the branch offices of the bank. Although legal changes pushed through by the military government in 1976–77 essentially forced the merger of most Argentine credit unions into cooperative banks (in order to be able to continue offering checking accounts, which were the predominant form in which deposits were held), such mergers can be contemplated on cost economy and other grounds.

Advantages of Larger Cooperative Banks

Larger cooperative banks have five main advantages over smaller credit unions. First, larger cooperative banks are generally able to achieve economies of scale in their operations, particularly by economizing in the area of central services. The lower unit costs that larger cooperative banks would typically enjoy would be a source of competitive advantage over smaller credit unions.

Second, cooperative banks typically have the resources, sophistication, and regulatory approval to offer a much wider range of products, including, for example, demand deposits, foreign exchange transactions, and other services that credit unions may not be able or permitted to offer.

Third, cooperative banks are generally much more diversified in both their loan portfolio and funding sources (including deposits) because they are likely to have branches in many regions of the country and to have significant dealings with a wider variety of economic sectors and subsectors. By contrast, a small, rural credit union may be seriously compromised or even wiped out by a single adverse weather event in the local area or a sustained drop in the price of a single agricultural commodity.

Fourth, the larger branch networks of cooperative banks provide greater convenience to consumers, both within a city and when they travel to other cities or towns.
Fifth, cooperative banks offer economies of supervision. It is simpler and much less costly to supervise one cooperative bank with 50 branches than 50 individual credit unions. If financial intermediaries pay the full cost of their own supervision, this would be the source of a cost advantage for cooperative banks. More likely, as is true in most Latin American countries today, the superintendency may not be willing to supervise a large number of small credit unions. Hence, the credit unions may not receive the outside monitoring and the stimulus many need to become better managed, more solvent, and perhaps more efficient financial intermediaries. By contrast, in view of their size and their status as banks, cooperative banks most likely will receive formal supervision from the superintendency, which should raise their level of performance and increase public confidence in them, giving them a competitive edge over unsupervised credit unions.

Advantages of Credit Unions

At the same time, credit unions have four major advantages over cooperative banks. First, credit unions may avoid diseconomies of management. When credit unions are merged into cooperative banks, they achieve economies of scale only if management is capable of effectively administering a much larger financial institution. If management is not capable of so doing, diseconomies of management are encountered, and the smaller, unmerged credit unions may have lower unit costs. This consideration may be particularly relevant in the case of mergers of credit unions because credit unions often suffer from a lack of professionalization of management. Low-quality management could have disastrous consequences for the much larger and more complex merged financial institution. The new entity would have to overcome such problems in order to survive and prosper and realize its potential scale economy advantages.

Second, credit unions may offer greater flexibility. Local credit unions may be better attuned to local community needs and may have more flexibility to meet those needs. Bank branches may have less independent scope for action.

Third, credit unions have cost advantages at very small sizes. Particularly in rural areas, credit unions may enjoy clear unit cost advantages over cooperative banks and their branches. A credit union’s board of directors may know most or all of the credit union members intimately and may have multistranded business, social, and other relationships with them. These factors can give the credit union a decided advantage in loan screening, monitoring, and collection, and allow it to operate with very low cost margins. This advantage would appear to be an exception to the general rule that larger financial institutions enjoy lower unit costs.
Fourth, credit unions may better maintain a focus on the target group. That is, they may serve poor and rural households and smaller businesses to a greater extent than cooperative banks. Although this characteristic is not the source of a competitive advantage over cooperative banks, it would imply that credit unions may offer social advantages over these banks.

These four advantages provide reasons for leaving credit unions unmerged rather than merging them into a cooperative bank. In addition, certain types of credit unions should not and probably never will be part of a cooperative bank branch network. These would include, for example, credit unions in very remote areas where there are serious transportation and communications difficulties and credit unions in small villages where only rudimentary financial services are demanded. Merging the latter type of credit unions into a cooperative bank that offers a great range and sophistication of financial products could well entail too many cost diseconomies to be worthwhile for a bank.

Although some cooperative banks in Argentina were formed from the merger of dozens of credit unions, one may also think in terms of less far-reaching mergers, involving only a handful of credit unions at a time. The pros and cons discussed here would still largely apply to such mergers, although the strength of the effects would be diminished because the two types of institutions would be more similar to each other.¹⁶

Branching and Networking

Cifuentes (chapter 13) describes an alternative route that credit unions can take to increase their competitiveness, which is currently being employed by a group of financially strong credit unions in Guatemala. First, these credit unions have increased their scale (and outreach) by branching into neighboring communities, many of which did not have financial services before. This increase in scale has yielded some cost economies and increased competitiveness. Second, these credit unions have linked all of their main offices and branches together into a single integrated national network. Members of any of the participating credit unions can walk into any of the more than 80 network offices and deposit or withdraw funds or make loan payments. This network offers clear convenience benefits to clients, further increasing competitiveness. Additional cost econo-

¹⁶ The distinction between a credit union with branches and a cooperative bank is often fuzzy, and varies by country. Typically, the main differences are size and the possibly arbitrary legal or regulatory distinction of calling one institution a bank (with all of a bank’s rights and responsibilities) and another a credit union (generally with fewer permitted operations and fewer responsibilities). In some countries, another difference is that cooperative banks can take deposits from and make loans to nonmembers, while credit unions cannot. In other countries, credit unions are permitted to engage in these nonmember operations, eliminating this distinction in those cases.
mies have been obtained through the national federation’s provision of common services such as a common information technology, a joint marketing program, and a central liquidity facility.

Guatemala’s networking system offers some of the benefits of merging into a cooperative bank (primarily the convenience of a large network), but it certainly does not offer all the advantages of doing so; for example, it does not yield diversification gains. However, additional competitive benefits are obtained through branching and the federation’s provision of common services. This model offers an interesting alternative to mergers as a way to improve credit union efficiency, solvency, and competitiveness, and may warrant particular examination by those who propose forced credit union mergers as a way to achieve these ends.

The authors would like to thank Ramón Rosales and Bob Vogel for helpful comments.
REFERENCES


PART I

WHO NEEDS A CREDIT UNION?
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I am honored to initiate this important seminar, convened by the Inter-American Development Bank and the World Council of Credit Unions, which will take up the question of the future of credit unions in Latin America. The organizers have thought it appropriate to begin with case studies that illustrate the recent incursions by commercial banks in the consumer loan market, precisely because the boom in this type of lending in Latin American financial markets poses a worrisome competitive challenge to credit unions.

The development of this new line of bank activity cannot be understood in isolation from the development of the financial markets in Latin America. In the 1980s, most of the countries in the region faced financial crises of varying intensities and origins, but with several patterns in common. The structure of most financial systems was highly specialized by type of institution. In this context, state banks that served a specific purpose, such as agricultural banks, industrial banks, housing banks, and others, played a major role. The financial systems had a very low level of competition, with high barriers restricting the entry of new institutions (either because of very high minimum capital requirements or because of the subjective criteria applied by the banking superintendents). Domestic banking institutions enjoyed full protection from international competition. In addition, there was a high concentration of bank ownership in the hands of groups that owned enterprises in the real sector; these enterprises received large volumes of credit from the groups’ financial institutions.

All this, together with weak supervisory structures and a highly unstable macroeconomic environment, led inexorably to financial crises that would make it necessary to redesign the operation of Latin America’s financial systems. The financial sector reforms that have been undertaken, although different from one another in several respects, coincide in their objective of attaining greater liberalization of the financial sector, with a marked tendency toward eliminating specialization. Competition has been fostered, not only among the already existing institutions, but also by the creation of new, locally owned institutions, and by the facilitation of foreign investment, through either the privatization of the state banks or the start-up of new institutions. At the same time, macroeconomic reforms have been adopted to reduce inflation and create more stability.
In this new environment, personal banking services can be developed on a mass scale, mainly through consumer loans. In this chapter, I analyze the development of consumer lending by looking at the role played in several Latin American countries by Chilean finance companies and Spanish banks.

Chilean Finance Companies

The Chilean finance companies arose in the 1970s and, like all other financial institutions, they had to weather Chile’s economic crisis. Some of the finance companies specialized exclusively in personal banking, aiming to reduce the high credit concentration that had been at the root of the country’s financial difficulties. They sought a new market niche represented by middle-income workers who had not had access to commercial loans.

The first three finance companies to dedicate themselves exclusively to this segment were Financiera Atlas, Financiera Condell, and Financiera Conosur; many others followed them. By 1997, there were 15 institutions, both banks and finance companies, with a major line of consumer loans.

As of December 1997, the three largest finance companies, which were those mentioned above, had a portfolio of $380 million, and a clientele of close to 1.5 million people (table 1.1). The other four financial institutions shown in table 1.1 were all leading banks that in recent years had absorbed finance companies in order to gain greater knowledge of this line of business. They had a portfolio of $600 million, with 1.3 million clients, as of the same date. The average balances of the loans in these seven institutions, which range in value from $196 to $576, reflect the extreme deconcentration of credit that has been achieved. The average balances also clearly suggest that the typical borrowers are middle- and lower-middle-income persons.

Table 1.1. Leading Chilean Financial Institutions Involved in Consumer Lending, December 1997

<table>
<thead>
<tr>
<th>Institution</th>
<th>Consumer credit outstanding (millions of dollars)</th>
<th>Number of borrowers</th>
<th>Average balance of consumer loans (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financiera Atlas</td>
<td>184</td>
<td>548,825</td>
<td>336</td>
</tr>
<tr>
<td>Financiera Conosur</td>
<td>100</td>
<td>511,361</td>
<td>196</td>
</tr>
<tr>
<td>Financiera Condell</td>
<td>98</td>
<td>407,265</td>
<td>240</td>
</tr>
<tr>
<td>BanF-Banco Santander</td>
<td>242</td>
<td>595,750</td>
<td>407</td>
</tr>
<tr>
<td>Solución (Banco Santiago)</td>
<td>182</td>
<td>316,378</td>
<td>576</td>
</tr>
<tr>
<td>Credichile (Banco Crédito)</td>
<td>147</td>
<td>296,701</td>
<td>495</td>
</tr>
<tr>
<td>Alcance (BHIF)</td>
<td>38</td>
<td>152,641</td>
<td>246</td>
</tr>
</tbody>
</table>
Today the consumer credit market is highly competitive, with a clear downward trend in the intermediation margins, but also with a worrisome increase in delinquent loans, requiring the superintendency to increase the provisioning requirements for such lending. It is precisely the decline in the intermediation margins in the Chilean market that led some of the Chilean finance companies to look to other Latin American markets beginning in 1994. Initially they invested in Peru, but later extended their reach to other countries; in the majority of cases they established new institutions (for examples, see table 1.2).

The Chilean finance companies have the largest presence in Peru, where they generally operate as banks devoted almost exclusively to consumer lending. By contrast, in Chile the banks entered this new market by absorbing finance companies, which they run as one of their lines of business. Such cross-country differences are typical in this new lending area; what is the same is the credit technology being used.

### Credit Technology

An analysis of the type of credit technology these institutions use provides a better understanding of the extent to which they compete with credit unions. The market niche in which the finance companies focus their efforts is cen-
tered on formal-sector workers with monthly salaries equivalent to two to three times the minimum salary (approximately $150–200 per month, on average), that is, typically middle- and lower-class workers in various countries in Latin America.

The products that the Chilean finance companies offer to this segment of the population are mostly loans that may be used for any purpose, with fixed monthly installments that amortize principal and interest. They also offer credit cards, although normally only to clients with a proven credit history. In addition, they enter into alliances with large automobile or electrical appliance dealers, offering financing plans to their customers.¹

In general, the initial amounts of the loans range from $500 to $1,000, with amortization periods of 18 to 36 months. Interest rates are generally very high, although they depend on the competition in each market. (In the case of Peru, the interest rates reach 50 to 70 percent in real terms.) The other important characteristic of these loans is that they do not require any type of collateral (physical property or the guarantees of co-signers).

These consumer finance institutions operate in large urban areas, where they use aggressive practices to promote their loans. They only offer savings as an additional product; they seek funding for their operations primarily in the capital markets or by issuing certificates of deposit.

The sales force is commonly made up of representatives who are paid a low fixed salary plus an incentive-based sum that depends on the total amount of loans they disburse. This incentive structure normally—although decreasingly—also covers the supervisors of the sales teams.

Although the sales representatives (or “promoters”) initially verify certain data about each prospective client, all client information is sent to a risk analysis center. Using credit scoring procedures, the risk analysis center determines whether the applicant is eligible to receive a loan and what the maximum loan amount should be. Verification of the applicant’s information by a credit bureau is crucial in the evaluation process.² Due to technologically sophisticated processes of data verification and risk analysis, the consumer lending institutions are able to respond to a loan request in just three days. In some cases I observed in Peru, individuals with a good credit history who have paid

¹ The CARSA chain, which sells electrical appliances and has branches in much of Latin America, has also established finance companies (or banks, depending on the legislation in each country) through which it offers financing to its customers.

² One of the difficulties that affected consumer credit in Peru in 1997 was an increase in loan delinquency caused by the over-indebtedness of persons who received loan offers from several different financial institutions. It was not possible to detect this problem on a timely basis because the Superintendency’s credit bureau did not keep information on loans below $5,000. This problem has since been corrected as this credit bureau began tracking all loans regardless of size.
down part of their loan are offered additional credit at the same window where they make their monthly payments. However, the total balance outstanding of the old loan plus the new one always falls within the loan amount originally approved.

A team of personnel distinct from the sales force handles collection and recovery of delinquent loans. This team also makes use of outside collection companies on all loans overdue more than a certain number of days. These companies obtain their income by charging a commission on the amount collected.

Two Examples

The loan volume figures for Chilean finance companies in Peru and Ecuador illustrate the enormous growth potential of this line of business.

Peru

In Peru in 1997, six institutions devoted to consumer loans could be identified, most of which had direct investment from Chile (table 1.3). Table 1.3 shows that just three years after the Chilean finance companies entered the Peruvian market, the total value of the loans outstanding of the six banks, which specialize almost exclusively in consumer credit, came to $450 million. The largest of these banks, Banco del Trabajo, had 180,000 clients by 1996 and more than 200,000 in 1997, despite the strong competition that year in the Peruvian market.

Another fundamental characteristic of consumer lending is its surprising growth capacity, despite Latin America’s limited financial depth. Table 1.4 illustrates the growth of Banco del Trabajo.

The nature of consumer lending can be better understood by analyzing the institutions’ structure of revenues and costs. Financial margins fluctuated between

<table>
<thead>
<tr>
<th>Table 1.3. Total Disbursements and Credit Outstanding of Six Institutions Engaged in Consumer Lending in Peru, 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>(millions of dollars)</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Banco del Trabajo</td>
</tr>
<tr>
<td>Orión</td>
</tr>
<tr>
<td>Solventa</td>
</tr>
<tr>
<td>Serbanco</td>
</tr>
<tr>
<td>Credisur</td>
</tr>
<tr>
<td>Solución</td>
</tr>
</tbody>
</table>

\(^a\) Estimate by local operators.  
\(^b\) Data from the Superintendency of Banking and Insurance of Peru.
Table 1.4. Growth of Banco del Trabajo, Peru, 1994–96

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1994</th>
<th>1995</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices</td>
<td>4</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Employees</td>
<td>317</td>
<td>988</td>
<td>2,343</td>
</tr>
<tr>
<td>Disbursements (millions of dollars)</td>
<td>0.7a</td>
<td>41.8</td>
<td>119.0</td>
</tr>
<tr>
<td>Portfolio (millions of dollars)</td>
<td>0.7a</td>
<td>39.6</td>
<td>93.4</td>
</tr>
<tr>
<td>Number of loansb</td>
<td>–</td>
<td>75,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Delinquency rate (percent)</td>
<td>–</td>
<td>0.4</td>
<td>4.6</td>
</tr>
</tbody>
</table>

- Not available.
  a. Figures are for one month of operations.
  b. Approximate figures.
  Source: Annual Report of Banco del Trabajo.

23 and 38 percent of average assets for the period from January to November 1997; the exceptions were institutions that were just starting up their consumer lending operations, such as Orión and Credisur (table 1.5). The average level for the Peruvian financial system was 9.3 percent, the difference being explained essentially by the much higher interest rates charged on consumer loans.

Operating costs accounted for between 18 and 23 percent of average assets (table 1.5)—with the exceptions once again of the institutions just venturing into this market—as compared with the average of 5.3 percent for the financial system as a whole. These high cost levels reflect the greater overall operating burden entailed in working with consumer loans, from marketing to collection. The high operating costs and financial margins are reminiscent of the typical revenue and cost structures of nongovernmental organizations involved in microfinance.

Another special feature of consumer lending, compared with the rest of the financial system, lies in the very high levels of provisioning, which impacts on net income. Loan loss provisions account for 10 percent of average assets in the institutions with the longest experience in this line of business (table 1.5). This fact partially explains the high interest rates charged by these institutions.

The profitability of consumer lending is still not clear. Although the largest bank in the group analyzed had a higher than average rate of return on assets—4.2 percent, compared with the financial system's average of 1.3 percent (table 1.5)—three others showed losses in the period analyzed, which could be explained in part by their limited size in a business very much driven by economies of scale. In addition, in 1997, there was an unusual increase in competition in the Peruvian market and there was no adequate credit bureau. This situation resulted in the over-indebtedness of many individuals, and their consequent
### Table 1.5. Financial Margins and Costs of Institutions Engaged in Consumer Lending in Peru, 1997

(percentage of average assets)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Financial margin</th>
<th>Loan loss provisions</th>
<th>Operating costs</th>
<th>Rate of return&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banco del Trabajo</td>
<td>38.5</td>
<td>10.3</td>
<td>18.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Orión</td>
<td>10.0</td>
<td>2.1</td>
<td>8.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Solventa</td>
<td>31.4</td>
<td>10.3</td>
<td>23.0</td>
<td>-1.8</td>
</tr>
<tr>
<td>Serbanco</td>
<td>23.1</td>
<td>8.6</td>
<td>17.8</td>
<td>-3.2</td>
</tr>
<tr>
<td>Credisur</td>
<td>17.7</td>
<td>3.0</td>
<td>4.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Solución</td>
<td>37.1</td>
<td>6.1</td>
<td>22.3</td>
<td>-8.1</td>
</tr>
<tr>
<td>Financial system</td>
<td>9.3</td>
<td>2.3</td>
<td>5.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

<sup>a</sup> The financial margin is defined as the difference between financial revenues and costs, divided by average assets.

<sup>b</sup> The rate of return is not necessarily equal to the financial margin minus provisions and operating costs because of the possible existence of nonoperating costs and revenues, for which we do not have data. These could include items such as extraordinary revenues from the sale of property received as collateral, among other items.

Note: Data are for January to November 1997. Due to the lack of information on consumer lending exclusively, the figures refer to all operations of the respective financial institutions.

Source: Superintendency of Banking and Insurance of Peru.

Inability to pay. The percentage of loans past due increased from 8 percent in 1996 to 15–16 percent in 1997, leading the superintendency to take measures to improve information and monitoring in the consumer lending business. The first such measure was to require the publication, in clear and transparent form, of the effective interest rate on loans, including all fees, something that had not been adequately communicated to the clientele in the past. Second, changes were made in the Superintendency’s credit bureau so that it now included all loans regardless of size.

**Ecuador**

The development of Ecuador’s consumer loan market also began with the investment of a Chilean finance company (Financiera Condell) in an Ecuadorean bank, in 1995. Operators in the market estimate that by 1997 total monthly disbursements of consumer loans in Ecuador came to approximately $9 million, once again confirming the dynamism of this product. Table 1.6 shows the main financial institutions involved in consumer lending in Ecuador and table 1.7 presents their revenue and cost structures.

Comparison of the revenue and cost structures of these institutions with those in Peru reveals similarities and confirms that this is an industry that
Table 1.6. Total Credit Outstanding of the Leading Banks Engaged in Consumer Lending in Ecuador, 1996–97

<table>
<thead>
<tr>
<th>Bank</th>
<th>1996</th>
<th>1997</th>
<th>Growth, 1996–97 (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unibanco</td>
<td>14</td>
<td>17</td>
<td>21.4</td>
</tr>
<tr>
<td>La Previsora</td>
<td>115</td>
<td>193</td>
<td>67.8</td>
</tr>
<tr>
<td>Banco de Préstamo</td>
<td>153</td>
<td>145</td>
<td>-5.2</td>
</tr>
<tr>
<td>Centro Mundo</td>
<td>15</td>
<td>26</td>
<td>73.3</td>
</tr>
</tbody>
</table>

Source: Superintendency of Banks of Ecuador.

uses similar lending technologies in different countries.\(^3\) Again, the financial margins are high and are largely absorbed by operating costs in those institutions in which this line of credit has become most important. Operating costs in these institutions are much higher than the average for the financial system. Profits for 1997, expressed as the rate of return on average assets, are much higher in Ecuador than in Peru, although similar to the first years of mass-scale consumer lending in the latter country, demonstrating the earnings potential of this line of business if arrears are kept in check and major provisioning charges can be avoided.

Table 1.7. Financial Margins and Costs for Institutions Engaged in Consumer Lending in Ecuador, 1997

(percentage of average assets)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Financial margin</th>
<th>Operating costs</th>
<th>Rate of return (on average assets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centro Mundo</td>
<td>53.1</td>
<td>28.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Banco de Préstamo</td>
<td>10.1</td>
<td>5.8</td>
<td>4.2</td>
</tr>
<tr>
<td>La Previsora</td>
<td>24.3</td>
<td>10.1</td>
<td>25.5</td>
</tr>
<tr>
<td>Unibanco</td>
<td>46.6</td>
<td>23.4</td>
<td>7.6</td>
</tr>
<tr>
<td>Financial System</td>
<td>14.3</td>
<td>7.0</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Note: The financial margin and rate of return are defined as in table 1.5. Bank-level data were not available for provisions or for nonoperating costs and revenues. These items have, in fact, been deducted from the financial margin in order to calculate the rate of return, but cannot be shown individually.

Source: Superintendency of Banks of Ecuador.

\(^3\) As in the case of Peru (table 1.5), the data in tables 1.6 and 1.7 for Ecuador refer to total credit outstanding, revenues, costs, and total assets of the overall banks, not just of their consumer loan operations.
Spanish Banks in Latin America

In recent years, Latin America’s financial markets have awakened great interest in the international banking community, especially among Spanish banks. In this section, I analyze the subsidiaries of two Spanish banks, Banco Santander and Banco Bilbao y Vizcaya (BBV), which I have chosen mainly because of their emphasis on mass-scale personal banking, which represents another competitive threat to credit unions. Both of these banks are large in their home market, with BBV accounting for 14.3 percent of the assets of the Spanish commercial banking system in 1997 and Banco Santander 10.5 percent.

The wave of investment by Spanish banks in Latin America was begun in 1994 by Banco Santander, although this bank was present in Chile since 1991. Banco Santander consolidated in 1995–96 with the incorporation of Financiera Fusa and Banco de Osorno y La Unión.4 Banco Santander’s most recent acquisition was in Brazil.

BBV became involved in Latin American markets when it acquired Banco Continental in Peru’s privatization auctions in 1995. BBV’s most recent acquisition came in 1998, when it gained a controlling interest in Banco BHIF, one of Chile’s largest banks.

Tables 1.8 and 1.9 show that both Spanish banks have focused on the largest countries in the region. In 1998, both announced that beginning that year they intended to consolidate the institutions in which they had acquired an equity interest, meaning that for the time being they were not contemplating new acquisitions.

The Chilean finance companies enter foreign markets by creating new institutions over which they have absolute control. By contrast, the Spanish banks’ strategy has been to acquire a controlling minority interest (30 to 40 percent of the shares) in already existing local banks, always choosing from among the largest of these banks. They have taken on local partners, but the finance companies always ensure that they have administrative control of the newly purchased banks.

BBV, for example, acquired no more than a 40 percent equity interest in its purchases in Peru, Colombia, Argentina, and Venezuela (table 1.10). Mexico is an exception to this pattern, where BBV acquired a 63.6 percent equity share, but in the smallest institution of all those it purchased, according to its market ranking. Nonetheless, in 1997, it was no longer the smallest bank because BBV ac-

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4 Most of the information on the subsidiaries of these two banks was obtained from the annual reports of the parent companies and their subsidiaries, the latter being more difficult to obtain. This information was supplemented by direct interviews at the banks’ offices in Peru, Colombia, and Mexico.

5 As of this writing, no data were available on this institution.
quired another Mexican bank and consolidated both into an institution with assets of $7.9 billion.

Special mention should be made of the capacity for growth displayed by both Banco Santander and BBV. Once they take possession of a bank, an intense phase of technological transfer ensues that includes training personnel, overhauling the software and hardware platforms, and executing their strategy for large-scale expansion. Table 1.11 indicates the extent of BBV’s expansion.

Another fundamental characteristic is the size of the institutions they have chosen. The banks in which BBV invests have an extensive network of branches. The smallest, as of 1997, was the Peruvian network, with 150 branches; the largest was in Venezuela, with 378 branches. In 1997, the assets of these banks were between $4.0 billion and $9.6 billion, which explains their position in each country’s ranking of leading financial institutions (table 1.11).

Table 1.8. Penetration of Banco Santander in the Financial Markets of Latin America, 1990s

<table>
<thead>
<tr>
<th>Country</th>
<th>Bank</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>Santander</td>
<td>1991</td>
</tr>
<tr>
<td></td>
<td>Financiera FUSA</td>
<td>1995</td>
</tr>
<tr>
<td></td>
<td>Incorporated Osorno y La Unión</td>
<td>1996</td>
</tr>
<tr>
<td>Mexico</td>
<td>Santander de Negocios</td>
<td>1994</td>
</tr>
<tr>
<td></td>
<td>Mexicano</td>
<td>1997</td>
</tr>
<tr>
<td>Peru</td>
<td>Santander</td>
<td>1995</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Cia. Créditos Personales</td>
<td>1995</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Santander</td>
<td>1996</td>
</tr>
<tr>
<td>Argentina</td>
<td>Río de la Plata</td>
<td>1996</td>
</tr>
<tr>
<td>Colombia</td>
<td>Santander</td>
<td>1997</td>
</tr>
<tr>
<td>Brazil</td>
<td>Gral. del Comercio y Noreste</td>
<td>1997</td>
</tr>
</tbody>
</table>

Table 1.9. Penetration of Banco Bilbao y Vizcaya in the Financial Markets of Latin America, 1990s

<table>
<thead>
<tr>
<th>Country</th>
<th>Bank</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>Continental</td>
<td>1995</td>
</tr>
<tr>
<td>Mexico</td>
<td>BBV-Probursa</td>
<td>1996</td>
</tr>
<tr>
<td>Colombia</td>
<td>Ganadero</td>
<td>1996</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Provincial</td>
<td>1997</td>
</tr>
<tr>
<td>Argentina</td>
<td>Francés</td>
<td>1997</td>
</tr>
<tr>
<td>Chile</td>
<td>BHIF</td>
<td>1998</td>
</tr>
</tbody>
</table>
Table 1.10. Performance of Banco Bilbao y Vizcaya in Latin America, 1996

<table>
<thead>
<tr>
<th>Country</th>
<th>Equity holdings (percent)</th>
<th>Market share (percent)</th>
<th>Ranking (based on assets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>34.2</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Mexico</td>
<td>63.6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Colombia</td>
<td>40.0</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Argentina</td>
<td>30.0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Venezuela</td>
<td>40.0</td>
<td>25</td>
<td>22</td>
</tr>
</tbody>
</table>

Banco Santander also has very large institutions in Latin America, ranging from its subsidiary in Uruguay, with 43 branches, to its subsidiary in Chile, which in 1996 had 269 branches and $8.3 billion in assets.

Credit Technology

In contrast to the Chilean finance companies, the subsidiaries of the Spanish banks operate as universal banks, serving different market segments, including commercial banking, which offers products to individuals and small- and medium-scale businesses, and corporate banking, which is geared to large companies. In addition, the Spanish banks manage portfolios and administer investments; one of the most important parts of this line of business is the administration of private pension funds in those countries that have undergone social security reform. In the case of both banks, however, the largest share of their business—as is the case with the respective parent companies in Spain—is in personal banking services.

The two banks manage their different business lines in two different ways. In the case of BBV, the bank’s whole structure is divided based on the market niche served, including the branches. Most branches are dedicated to commercial banking, although some serve exclusively corporate clients or government

Table 1.11. Coverage of Banco Bilbao y Vizcaya in Latin America, 1996–97

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of branches</th>
<th>Assets (millions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>130</td>
<td>150</td>
</tr>
<tr>
<td>Mexico</td>
<td>309</td>
<td>349</td>
</tr>
<tr>
<td>Colombia</td>
<td>175</td>
<td>247</td>
</tr>
<tr>
<td>Argentina</td>
<td>93</td>
<td>215</td>
</tr>
<tr>
<td>Venezuela</td>
<td>290</td>
<td>378</td>
</tr>
</tbody>
</table>

Note: Not available.

a. BBV has announced plans to open 900 more branches over the next three years in Mexico.
agencies. In Banco Santander, commercial banking operations are carried out through the bank and corporate banking is handled through another subsidiary, commonly known as Santander Investment.

BBV and Banco Santander place special emphasis on offering comprehensive services to their clients, in both their deposit taking and loan operations. They also provide insurance, portfolio management, and pension fund services, for which they have had to adapt to the legal regimes of each country in determining whether to offer these as products of a single institution or through various subsidiaries.

Their greatest strength lies in their in-depth knowledge of their clientele, which requires geographic coverage. With this in mind, they are expanding their branch networks, mainly in middle-income neighborhoods, and making optimal use of their databases. This expansion enables them to adopt an aggressive attitude toward the market, offering services that match each client’s profile. The market niche that both banks have decided to exploit initially is middle- to lower-middle-income families.

Their strategy in the Latin American countries has been to make themselves known through massive campaigns to attract deposits in the form of savings accounts with no minimum balance required. They offer low interest rates in exchange for the possibility of participating in raffles with large prizes, raffle tickets being distributed on the basis of the individual’s total savings. These “super-passbook” accounts (known as the “libretón” at BBV and as the “superrlibreta” at Banco Santander) not only give the banks access to resources at below-market rates, they also facilitate the banks’ very quick penetration in the market, as illustrated in tables 1.12 and 1.13.

The type of prize offered has varied in each country. The campaigns in Colombia and Mexico have been among the most aggressive; a car was raffled every day, plus $90,000 in cash every month.

The results obtained are impressive not only in terms of volume—the number of accounts opened and the amounts taken in—but also in terms of the average balances in the accounts. The data reflect considerable participation of lower-income sectors of the population and the banks’ excellent capacity to handle small accounts.

Table 1.12. New “Super-Passbook” Savings Accounts at BBV in Latin America

<table>
<thead>
<tr>
<th>Country</th>
<th>Period covered</th>
<th>New savings accounts</th>
<th>Total volume (millions of dollars)</th>
<th>Average balance (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>1.5 years</td>
<td>485,000</td>
<td>178</td>
<td>367</td>
</tr>
<tr>
<td>Colombia</td>
<td>6 months</td>
<td>462,000</td>
<td>205</td>
<td>444</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Not specified</td>
<td>697,000</td>
<td>642</td>
<td>921</td>
</tr>
<tr>
<td>Argentina</td>
<td>1 month</td>
<td>78,000</td>
<td>232</td>
<td>2,974</td>
</tr>
<tr>
<td>Peru</td>
<td>1.5 years</td>
<td>91,000</td>
<td>656</td>
<td>7,208</td>
</tr>
</tbody>
</table>
Table 1.13. New “Super-Passbook” Savings Accounts at Banco Santander in Mexico and Colombia

<table>
<thead>
<tr>
<th>Country</th>
<th>Period covered</th>
<th>New savings accounts</th>
<th>Total volume (millions of dollars)</th>
<th>Average balance (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>6 months</td>
<td>300,000</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Colombia</td>
<td>6 months</td>
<td>350,000</td>
<td>205</td>
<td>586</td>
</tr>
</tbody>
</table>

- Not available.

Once the banks have formed a large client base, obtained the relevant information, and upgraded their technological platform (a process that has typically taken more than a year), they begin promoting their loan products on a mass scale. They use credit scoring as their method of risk assessment in offering these personal loans or lines of credit. They complement credit scoring with data collected by their own information centers, which confirm client-supplied information and consult credit bureaus. All of these processes are centralized to guarantee a quick response.

The banks offer many products, depending on the overall market and the market segments they seek to serve. The most common product is the consumer loan, which may be used for any purpose. Variations include car loans, student loans, and traditional credit cards (see box 1.1 for some examples of these products). Although the products are adapted for use in each of the different markets in which they are employed, the basic design is dictated by the parent companies in Spain. What clearly stands out is the remarkable flexibility the banks display in attending to the needs of each client, offering a variety of financial conditions, terms, amounts, and amortization schemes.

Both Banco Santander and BBV use their databases not only to offer better services, but also to reduce operating costs, for example, by offering pre-approved

Box 1.1. Characteristics of Loans Offered by Banco Santander in Peru

**Consumer Loans**

- Automatic loan with the opening of a savings account; may be used for any purpose.
- Amount: $5,000–10,000.
- Amortization: fixed installments.
- Term: 12–36 months.
- Personal guarantee of co-signers.

**Mortgage Loans**

- Amount: up to 80 percent of the value of the housing unit, starting at $20,000.
- Term: up to 20 years.
- Personal income: at least $1,000–1,200 monthly.
- Rebate for timely repayment given by canceling a percentage of the principal upon maturity of the loan.
loans and working capital credit lines to their borrowers with perfect repayment histories and to depositors they know well. Because of the technical level they have achieved, the volume of their operations, and their funding structure, the banks’ loan rates are right around the average lending rates charged by all commercial banks, despite the fact that their average loan amounts are clearly lower than those of all other banks. The two banks actively market their services through promoters, but they do not use a scheme entailing variable remuneration per promoter. Instead, the banks offer monetary incentives or bonuses to the offices that surpass the goals set in the budget, which includes goals set on a per promoter basis.

Conclusions

The two examples of financial intermediation analyzed here reflect the increasingly competitive environment in Latin American financial markets. This trend poses a very real threat to the development of credit unions.

Both the Chilean finance companies and the Spanish banks share a focus on consumer lending, have strong growth potential, and rely on technologically sophisticated processes with considerable investment in hardware and software. The main difference is that the Chilean companies are specialized financial institutions and the Spanish subsidiaries are clear examples of universal banks, offering a full array of services. The Chilean finance companies emphasize offering a portfolio of credit products and the Spanish bank subsidiaries seek to provide comprehensive services to their clients. These are clearly different types of financial intermediation, yet aimed at the same market, the middle- and lower-middle-income sectors.

The wave of foreign investment that has brought these models of financial intermediation to different parts of Latin America is a recent phenomenon. The capacity for growth especially of the Spanish banks has been felt as they have focused their efforts on transforming the institutions in which they have invested before launching massive consumer credit campaigns.

Nonetheless, the threat the credit union sector is facing comes not only from these new institutions. In response to the aggressive competition the new institutions pose to other local financial institutions, these local institutions are beginning to explore new market niches. They are taking an interest in the products offered by mass-scale banking; this process was evident in the Chilean case. The heightened competition presents a major challenge to credit unions. If credit unions are to maintain or expand their market share, they will have to become more efficient, both in their dealings with their clients and in their internal processes, so as to offer their clients a diverse array of products, expeditiously and on competitive terms.
The central proposition of this chapter is that credit unions are a self-sustainable means of reaching the poor. Their apparent neglect in the literature and in the various events associated with financial services for low-income households and for micro and small enterprises disguises the real significance of credit unions in these markets. The challenges credit unions face today in Latin America are likely to force the sector to further modernize and consolidate, fine tune its inherent advantages, and improve the mechanisms for prudential regulation and supervision, while maintaining or enhancing the relevance of credit unions in low- and middle-income market niches.

Credit unions have been found to be second only to banks in lending and especially in providing deposit services to low-income clients (World Bank 1996). The prevalence of credit unions stems from real advantages they have over other providers of financial services to marginalized clients. These advantages are associated with the following characteristics of credit unions: diverse client base; informational advantages due to community foundations; ability to provide simple, accessible deposit services; and capacity to lend to self-employed clients and obtain adequate repayment performance.

This chapter draws on six case studies of credit unions carried out by the World Bank’s Sustainable Banking with the Poor project in Colombia, Guatemala, and Ecuador. These studies shed light on the sustainability and outreach of credit unions as providers of financial services, the nature of their financial products and procedures, and the apparent constraints they face in their operations. This chapter also uses other case studies from the World Bank project and recent World Bank work in Mexico and El Salvador to compare credit union performance with that of other microfinance providers, including banks and nongovernmental organizations.

Six Credit Unions

The choice of which credit unions to include in the analysis, as with all other case studies in the Sustainable Banking with the Poor project, was based on consideration of what lessons could be drawn from the analysis for the purposes of
better understanding the capabilities and weaknesses of different types of institutions serving the poor. Hence, no claim is made about the representativeness of the institutions chosen with respect to the general population of credit unions in Latin America. The six credit unions belong to the class of relatively large, nationwide or at least regionwide organizations, and arguably reflect the performance levels attainable by organizations reaching this scale.

Three of the credit unions are predominantly urban, UPA-Guatemala, Solidarios-Colombia, and Progreso-Ecuador. The other three primarily serve a rural clientele, Unión Popular-Guatemala, Cupocrédito-Colombia, and OSCUS-Ecuador. Table 2.1 presents the basic institutional characteristics of the six credit unions. The scale of these institutions in terms of the number of clients ranges from about 11,000 in Unión Popular to almost half a million in Cupocrédito. Average loan size is much more uniform, fluctuating roughly between $1,000 and $1,800. Average loan size represents 71–91 percent of gross domestic product (GDP) per capita. Average deposit balances are 5–26 percent of GDP per capita, denoting a savings portfolio dominated by small accounts. The substantial rates of growth of total credit (14–48 percent a year in dollar terms) indicate that the institutions are actively expanding, despite the alleged assault by aggressive commercial banks penetrating the middle-income and small enterprise markets in these countries (chapter 1).

Outreach

In measuring institutional outreach, it is important to distinguish between extent (or breadth) and depth of outreach. The former measures the absolute number of households or enterprises in the target population reached by the institution (or the relative market penetration), and the latter indicates how deep in the pool of the underserved the institution or program has been able to penetrate.

The depth of outreach index (DOI) takes account of several categories of populations that financial institutions typically underserve or do not serve at all (Paxton and Cuevas 1998). I chose these categories—the poor, women, rural inhabitants, and the illiterate—not only for their association with the degree of exclusion from financial services, but also for their relative ease of measurement in simple, rapid-appraisal type surveys of the programs' clients. Given the likely correlations among the variables of the DOI, many people likely fall into more than one or even all of the categories.

To analyze the degree to which financial institutions serve rural, female, poor, and illiterate clients, I constructed depth of outreach diamonds. These dia-

1 Other variables (such as ethnicity or national origin) could be used in different scenarios, depending on the factors perceived as determining exclusion.
Table 2.1. Basic Institutional Characteristics of the Six Credit Unions

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Urban credit unions</th>
<th>Rural credit unions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UPA</td>
<td>Solidarios</td>
</tr>
<tr>
<td></td>
<td>Soli-</td>
<td>Progreso</td>
</tr>
<tr>
<td></td>
<td>darios</td>
<td></td>
</tr>
<tr>
<td>Year founded</td>
<td>1967</td>
<td>1969</td>
</tr>
<tr>
<td>Country</td>
<td>Guatemala</td>
<td>Colombia</td>
</tr>
<tr>
<td></td>
<td>Ecuador</td>
<td></td>
</tr>
<tr>
<td>Year of data</td>
<td>1996</td>
<td>1995</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td>Number of clients</td>
<td>15,871</td>
<td>50,077</td>
</tr>
<tr>
<td></td>
<td>28,830</td>
<td></td>
</tr>
<tr>
<td>Average loan size (dollars)</td>
<td>1,025</td>
<td>1,746</td>
</tr>
<tr>
<td></td>
<td>990</td>
<td></td>
</tr>
<tr>
<td>Average loan term (months)</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Average loan size/GDP per capita</td>
<td>0.76</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Average deposit size (dollars)</td>
<td>162</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>228</td>
<td></td>
</tr>
<tr>
<td>Average deposit size/GDP per capita</td>
<td>0.12</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Loan portfolio growth(^a) (percent per year, two-year average)</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>Average equity shares (dollars)</td>
<td>235</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>87</td>
<td>233</td>
</tr>
<tr>
<td></td>
<td>59</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Calculated using the dollar value of the portfolio.


mond's present the four outreach indicators for the clients of microfinance institutions and compare them with overall country averages, thus providing a simple graphical representation of the four outreach measures. Three of the variables (share urban, male, and literate) are proportions that always fall between zero and one. Rather than using GDP per capita as a measure of a country's level of income, the analysis uses the more appropriate measure of GDP divided by the economically active population. This measure is normalized to one for the country average. The income level of the clients was put on the same scale as the other three DOI indicators by dividing the average income of the clients by the country-level income. Using this approach, smaller diamonds for the institutions (inside the country diamond) reflect a greater depth of outreach.

Summing the differences between the country averages and the institutional outreach averages yields a single, summary measure of DOI. A positive number indicates that the institution serves a clientele that is more rural, poor, female, and illiterate than the country average. Although it is not a perfect outreach indicator, the summary DOI measure improves on the use of traditional outreach proxies, such as average loan size, because it utilizes direct outreach measures and takes country averages into account, thus allowing cross-country comparisons.

Averaging the values across all six credit unions in the study gives the mean value of each of the four individual DOI indicators. Figure 2.1 shows that
Figure 2.1. Depth of Outreach of the Six Credit Unions (percent)

Note: The six credit unions in the study are UPA and Unión Popular (in Guatemala), Solidarios and Cupocredito (in Colombia), and Progreso and OSCUS (in Ecuador).

the credit union clients have average income levels below that of their respective countries’ economically active populations. The gender balance corresponds closely to the 50/50 ratio found in the countries. The credit union clients are slightly more urban and more literate than the country averages.

Figure 2.2 presents the DOI diamond for the three rural credit unions. It portrays a clientele that is about 55 percent rural, with an average income level below the average for the countries. Rather surprisingly, the literacy rate of the credit union clients is slightly higher than that of the respective countries. Figure 2.3 shows a similar pattern, with the logical exception of the proportion of urban clients, for the three urban credit unions.

Market Penetration and Growth

The six case studies and recent observations in Mexico and El Salvador provide insight into what underlies the credit unions’ relatively high market penetration and portfolio growth. On the savings side, credit unions still offer better returns than competing institutions. Most banks and finance companies entering the middle- to low-income market have relied on savings mobilization campaigns that offer one-time incentives (such as gifts and raffle tickets) to open accounts that yield lower returns than those offered by credit unions. These incentives amount to the deposit equivalent of “teaser rates” in credit card offers: sweet now,
sour later. In addition, credit unions consistently offer lower minimum initial deposit sizes and lower minimum balances than bank and nonbank competitors.

On the lending side, the widespread acceptance of collateral in the form of personal guarantees, such as those offered by co-signers, in addition to borrowers’ own deposit balances, makes credit unions an accessible source of small loans with low transactions costs. Furthermore, members who have established a track record of on-time repayment typically access new loans or overdrafts almost automatically.

**Sustainability**

The credit unions analyzed here show high levels of self-sufficiency, relatively high staff productivity, and reliance on their own mobilized savings to fund their loan portfolios. Table 2.2 presents these and other performance indicators.

The analysis calculates a subsidy dependence index (SDI) for the six case studies. It goes, from worst to best, from 0.12 for Cupocrédito to -0.06 for UPA (table 2.2).\(^2\) The SDI value means that Cupocrédito would require an increase of 12 percent in the interest rate charged on loans in order to cover all costs, including the opportunity cost of its equity, without any subsidy. The value is not 12

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\(^2\) See Yaron, Benjamin, and Piprek (1997) for a definition and explanation of the SDI.
percentage points, but 12 percent of its current nominal rate, for example, an increase from 20 to 22.4 percent. At the other end, UPA could afford to reduce its lending rate by 6 percent (for example, from 20 to 18.8 percent) and still accomplish the same goal. These findings are highly unusual among institutions working with high-cost, high-risk clienteles. Indeed, very few microfinance institutions show negative SDI levels (one of them is BRI in Indonesia, another is Caja Social in Colombia).

With the exception of Progreso and OSCUS, where the loan portfolio exceeds deposit balances by about 10 percent, all other credit unions fund their entire loan portfolio with mobilized deposits. Two of the credit unions even have deposit balances that exceed their loan portfolios by a sizable proportion—18 percent for Cupocédito and 37 percent for Unión Popular (table 2.2). This reliance on savings, a consequence of the credit unions’ ability to mobilize deposits, makes these institutions highly resilient to external shocks because most of their liabilities (like their assets) are in domestic currency. This resilience was demonstrated, for example, during the Mexican crisis of 1994, when credit unions such as Caja Popular Mexicana sustained their financial positions and even increased their market shares. At the same time, the banking system collapsed and required expensive bailouts by the Mexican government, due in part to the different currency composition of their assets and liabilities.

The credit unions’ reliance on savings makes them susceptible to runs on deposits when other credit unions show signs of failure. This is particularly likely to affect credit unions since in most countries there is an absence of adequate...
Table 2.2. Sustainability Indicators for the Six Credit Unions

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Urban credit unions</th>
<th>Rural credit unions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UPA</td>
<td>Solidarios</td>
</tr>
<tr>
<td>Subsidy dependence index, SDI(^a)</td>
<td>-0.06</td>
<td>0.09</td>
</tr>
<tr>
<td>Operational self-sufficiency(^b)</td>
<td>3.24</td>
<td>2.36</td>
</tr>
<tr>
<td>Financial self-sufficiency(^c)</td>
<td>1.47</td>
<td>0.96</td>
</tr>
<tr>
<td>Arrears rate(^d) (percent)</td>
<td>13</td>
<td>13.8</td>
</tr>
<tr>
<td>Portfolio at risk(^e) (percent)</td>
<td>13.6</td>
<td>17</td>
</tr>
<tr>
<td>Real effective lending rate of interest (percent)</td>
<td>20.3</td>
<td>16.9</td>
</tr>
<tr>
<td>Value of loans outstanding per loan officer (thousands of dollars)</td>
<td>1.02</td>
<td>1.10</td>
</tr>
<tr>
<td>Number of loans outstanding per loan officer</td>
<td>699.6</td>
<td>325.4</td>
</tr>
<tr>
<td>Loan officer salary/GDP per capita</td>
<td>2.7</td>
<td>2.5</td>
</tr>
</tbody>
</table>

- Not available.
\(^a\) Total annual subsidy received/interest earned on the loan portfolio (see Yaron, Benjamin, and Piprek 1997).
\(^b\) Operating revenues/operating (nonfinancial) expenses.
\(^c\) Operating revenues/operating expenses including cost of funds.
\(^d\) Loan payments overdue more than 30 days/total portfolio outstanding.
\(^e\) Entire balance of loans overdue more than 30 days/total portfolio outstanding.

Note: See table 2.1 for the year of the data and basic characteristics of the credit unions.


regulatory and supervisory mechanisms, including deposit insurance, to provide confidence to customers of nonfailing entities. The recent crisis in Colombia exemplifies this weakness.

**Comparison with Microfinance Institutions**

To put the foregoing analysis in perspective, this section presents a comparison between the six credit unions examined here and leading institutions in the microfinance field. First, I compare the scale and sustainability indicators with those of Caja Social-Colombia and Banco Sol-Bolivia, two leading institutions in the sustainable provision of financial services to low-income clients. Second, I explore the breadth and depth of outreach and the trade-off between outreach and sustainability, by comparing the credit unions with two village banks (CARE-Guatemala and FINCA-Costa Rica). Many people believe that, among the various institutional types, village banks have the deepest outreach to the poor.
Scale and Sustainability

Table 2.3 shows the range of selected performance measures for the six credit unions and the corresponding individual values for Caja Social and Banco Sol. The credit union values compare satisfactorily or even favorably for most indicators. A possible exception is the arrears rate, for which two of the credit unions have rates above 10 percent (table 2.2). It is noteworthy that the SDI, self-sufficiency, and productivity indicators of the credit unions are very much in line with those of Caja Social and Banco Sol (table 2.3).

Two other differences stand out in table 2.3. First, the credit unions have much lower real effective lending rates of interest compared with both Caja Social and Banco Sol. Second, loan officers in the credit unions receive lower salaries compared with their counterparts in the two banks. Several factors may underlie these differences, such as the greater diversity in the levels and kinds of income received by the credit union clients, compared with the predominantly self-employed and microentrepreneur profile of the clients of Banco Sol and of the microenterprise window of Caja Social. The lower cost of analyzing consumer loans to middle-class and lower-middle-class wage and salary workers in credit unions may be responsible for reducing average administrative costs in these intermediaries to levels below those found in the two more specialized microfinance banks.

In summary, this brief comparative analysis indicates that credit unions are at least as financially sustainable as the two leading microfinance institutions used for comparison.

Outreach

A recent comparative study of credit unions and village banks in rural areas found that the average client served by credit unions is less poor than the average client reached by village banks.\(^3\) However, institutional averages of depth of outreach need to be combined with an assessment of both overall breadth of outreach and client heterogeneity.

Although the village banks examined here are composed of a rather homogeneously poor clientele, the credit unions serve much more of a cross-section of the population in terms of both member income levels and occupational types. Credit union members include farmers, housewives, microentrepreneurs, laborers, teachers, and public employees. Paxton and Cuevas (1998) find that, given the large number of credit union clients, rural credit unions serve as many

\(^3\) This section draws upon Paxton and Cuevas (1998).
Table 2.3. Comparison of Selected Indicators for the Six Credit Unions and Two Banks

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Credit unions</th>
<th>Caja Social (microenterprise window)</th>
<th>Banco Sol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clients (thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>10.7</td>
<td>173.0(^a)</td>
<td>100.5</td>
</tr>
<tr>
<td>Maximum</td>
<td>486.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average loan size/GDP per capita</td>
<td>0.71</td>
<td>0.91</td>
<td>1.14</td>
</tr>
<tr>
<td>Average savings/GDP per capita</td>
<td>0.05</td>
<td>0.26</td>
<td>0.18</td>
</tr>
<tr>
<td>Growth of loan portfolio(^b) (percent per year)</td>
<td>14</td>
<td>48</td>
<td>38</td>
</tr>
<tr>
<td>Subsidy dependence index, SDI</td>
<td>-0.06</td>
<td>0.12</td>
<td>-0.06</td>
</tr>
<tr>
<td>Operational self-sufficiency</td>
<td>1.08</td>
<td>3.24</td>
<td>2.77</td>
</tr>
<tr>
<td>Financial self-sufficiency</td>
<td>0.96</td>
<td>1.47</td>
<td>1.29</td>
</tr>
<tr>
<td>Arrears rate (percent)</td>
<td>2.4</td>
<td>13.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Real effective lending rate of interest (percent)</td>
<td>6.25</td>
<td>20.3</td>
<td>45.0</td>
</tr>
<tr>
<td>Volume of savings/volume of loans outstanding</td>
<td>0.85</td>
<td>1.37</td>
<td>1.11</td>
</tr>
<tr>
<td>Number of loans outstanding per loan officer</td>
<td>130</td>
<td>681</td>
<td>120</td>
</tr>
<tr>
<td>Loan officer salary/GDP per capita</td>
<td>2.1</td>
<td>3.8</td>
<td>4.0</td>
</tr>
</tbody>
</table>

\(^a\) Number of borrowers. There are 1.5 million savings clients.
\(^b\) Calculated based on the dollar value of the portfolio.

Note: See table 2.1 for details on the six credit unions and table 2.2 for definitions of the indicators.
Source: Author's calculations.

marginalized clients as do the village banks. In several instances, the number of credit union members in the lower income brackets exceeds the total number of clients with comparable incomes in the village bank programs.

Heterogeneity of clientele allows credit unions to achieve greater balance in the trade-off between sustainability and outreach. Figure 2.4 shows that village banks present both deep average outreach and a high dependence on subsidies, that is, a large trade-off. By contrast, credit unions appear to reach, on average, more of a cross-section of the full population, but with full financial self-sufficiency (independence from subsidies). Credit unions can reach at least the same number of poor people as the village banks do, but with no operating losses or reliance on subsidies. In addition, credit unions offer a more complete and flexible range of services, including deposits and loans with diverse terms and conditions.

**Future Challenges**

The findings reviewed in this chapter support the main proposition set forth at the outset, that credit unions are a self-sustainable means of reaching the poor.
As noted earlier, the institutions analyzed here may not be representative of the average credit union in Latin America, but their performance shows that substantial outreach and self-sustainability are attainable for this type of intermediary. Scale and scope are not the only important factors in explaining this performance; other key factors include managerial capacity and the use of modern and efficient systems and procedures in the major areas of credit union operations.

The constraints that remain and the challenges credit unions face are associated with two critical factors. The first challenge concerns the ability of credit unions to enhance and consolidate a track record and image of reliability that instills confidence in their traditional and potential clientele. To this end, it is essential to establish effective mechanisms of prudential regulation and supervision, which help ensure the financial health of credit unions, and to convey this information to the public. Such regulatory machinery should include means of counteracting the epidemic effects of institutional crises, such as through sta-
bilization funds and deposit insurance. Credit union regulations should include provisions akin to those found in banking regulations that credibly prevent and control practices associated with potential weaknesses in governance structures, such as insider lending and unsafe portfolio concentration.

The second challenge concerns the capacity of credit union networks to consolidate, modernize, and grow, so that both the individual entities and the movement as a whole can satisfy acceptable standards of solvency, viability, and service quality. Consolidation and modernization are essential for credit unions to reach the performance standards this chapter has shown are feasible, and to successfully meet the challenges that new competitors present to their traditional markets.

The author gratefully acknowledges the expert assistance of Julia Paxton in preparing tables and figures, and the comments received from Glenn Westley and other participants at the IDB-WOCCU Conference.
REFERENCES

PART II

CREDIT UNION REHABILITATION
Controlling loan delinquency is one of the most critical tasks a financial institution faces in ensuring its long-term survival. Earning positive profits to plow back into the capital base of the institution is also one of the keys to building a healthy, growing financial intermediary. This chapter finds a strong link between the policies adopted by credit unions and their performance as measured in these two dimensions for a sample of credit unions in Latin America.

The reasons for focusing on credit unions and on these two performance measures are explained in the next two sections, followed by a description of the data. Conceptual frameworks for explaining credit union loan delinquency and profitability together with the first econometric estimates of credit union delinquency and profit functions that we know of for Latin America are found in the following two sections. The final section presents our conclusions.

Why Are Credit Unions of Interest?

In most countries in Latin America, commercial banks have shown a great reluctance to serve the lower end of the economic spectrum—micro and small enterprises and poor and working-class households—that are the staple of the credit union movement in the region. Providing these notoriously underserved groups with better financial services offers the possibility of substantial efficiency and growth gains as well as positive equity effects.

Table 3.1, which summarizes all of the reasonably reliable statistics that we could find on the subject, shows that micro and small enterprises play a large role in economic production. In addition, a growing body of evidence finds an association between increased usage of banking services and greater economic

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1 Credit unions often serve some middle-class households as well. Magill (1991) and Richardson and Lennon (1994) discuss and present empirical evidence on the income level of households and the size of firms served by credit unions in Latin America.

2 Based on existing survey and other evidence, IDB (1995) estimates that less than 5 percent of Latin American microentrepreneurs have access to credit from the formal financial system.
### Table 3.1. Micro and Small Enterprises' Shares of GDP or GDP Components

<table>
<thead>
<tr>
<th>Country</th>
<th>Micro-enterprises (percent)</th>
<th>Micro and small enterprises (percent)</th>
<th>Reference year</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil&lt;sup&gt;a&lt;/sup&gt;</td>
<td>16</td>
<td>43</td>
<td>1985</td>
<td>Manufacturing, commerce, and services sectors</td>
</tr>
<tr>
<td>Mexico&lt;sup&gt;b&lt;/sup&gt;</td>
<td>26</td>
<td>48</td>
<td>1993</td>
<td>All GDP</td>
</tr>
<tr>
<td>Dominican Republic&lt;sup&gt;c&lt;/sup&gt;</td>
<td>31</td>
<td></td>
<td>1991</td>
<td>All nonagricultural GDP</td>
</tr>
<tr>
<td>Belize&lt;sup&gt;d&lt;/sup&gt;</td>
<td></td>
<td>39</td>
<td>1994</td>
<td>Manufacturing, commerce, services (except government), transportation, and utilities sectors</td>
</tr>
</tbody>
</table>

<sup>a</sup> Microenterprises are defined as having nine or fewer workers in the commerce and services sector and 19 or fewer in industry. Small enterprises have 10–49 and 20–99 workers in the two sectors, respectively. Data are from the country's 1985 Economic Census.

<sup>b</sup> Microenterprises are defined as having 15 or fewer workers and small enterprises as having 16–100 workers. Data are from the country's 1993 Economic Census.

<sup>c</sup> Microenterprises are defined as those with 10 or fewer workers. Data are from Fondomicro's (extensive) national survey of microenterprises.

<sup>d</sup> Micro and small enterprises are defined as those with gross output of less than $250,000. Data are from the country's Central Statistical Office.

These findings imply that providing better services for only the micro and small enterprise part of the credit union target population could yield growth rate gains that are significant in macroeconomic terms. Figure 3.1 indicates that to ignore only microenterprises is to ignore about half of the labor force in the typical Latin American country. Thus, easing constraints on microenterprise access to credit and other financial services may also generate macroeconomically significant employment gains.

Birdsall, Ross, and Sabot (1995) discuss how providing high-quality basic education and stimulating activities that increase labor demand can often help the poor disproportionately. These activities may also have high economic rates of return, so that both growth and equity objectives can be advanced simultaneously. Providing greater access to financial services for micro and small enterprises would appear to be another avenue for furthering such shared growth. To illustrate how extending financial services to these firms could achieve this aim, consider the case of a large firm that receives financing to execute a project that

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<sup>3</sup> For example, King and Levine (1993) find that a 10 percentage point rise in the ratio of private banking system credit to GDP is associated with an increase in the annual GDP growth rate of about one-third of a percentage point. Ghani (1992) finds an even larger growth effect, approximately one-half of a percentage point. Westley (1994) discusses several channels through which increased intermediation may result in gains in productivity and the growth rate.
Figure 3.1. Microenterprise Share of Total Nonagricultural Employment, 1994 (percent)

LATIN AMERICA
- Panama: 49.3
- Costa Rica: 44.3
- Venezuela: 40.9
- Chile: 41.8
- Argentina: 45.1
- Honduras: 45.9
- Ecuador: 48.4
- Brazil: 40.8
- Peru: 51.4
- Mexico: 51.6
- Bolivia: 56.1
- Paraguay: 57.2
- Colombia: 57.3

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a. Refers to metropolitan Lima only.

Source: ILO (1996, table 1B). The ILO's calculations are based on data from household surveys and other official sources. Microenterprises are defined as those with less than five or 10 workers, depending on the country.

Credit unions are also of interest because they are full-service institutions, in the sense that they both take deposits and make loans. This feature distinguishes them from financial nongovernmental organizations (NGOs), the other type of financial intermediary that has been widely promoted as a vehicle for reaching poorer households and smaller businesses. Financial NGOs make loans but generally are not permitted to take deposits. Deposit-taking gives credit unions great potential for growth because, unlike financial NGOs, credit unions are not dependent on limited external donor funds.

As Poyo (1987) explains, credit unions in Latin America were generally set up in the 1950s, 1960s, and 1970s with the strong social welfare purpose of assisting the poor. Catholic priests and Peace Corps volunteers organized many credit unions. The credit unions generally lacked professional management, were

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4 Townsend (1995) discusses a variant of this channel.
weak at loan recovery and at earning and retaining profits for future expansion, and usually kept loan rates very low in order to benefit borrowing members. Low lending rates meant that deposit rates were also normally kept low.

Substantial grant and soft loan funds from external donors enabled many credit unions to grow rapidly in this period despite the lack of deposit mobilization, loan recoveries, and retained earnings. With the drying up of much of these donor funds in the 1980s and 1990s, credit union movements in many Latin American countries became moribund. In a few countries in the region, credit union movements have regained vigorous growth and achieved at least some significant measure of financial health. They have generally done so through an aggressive campaign to mobilize savings, combined with much stricter attention to delinquency control and a policy of earning and capitalizing profits. Although successful deposit mobilization is largely a question of appropriate pricing, delinquency and profitability are more complex matters, and so have been selected as the focus of this chapter.

Figure 3.2 illustrates the market penetration of Latin American credit unions. The figure shows aggregate credit union deposits and loans relative to those of the commercial banking system in all Latin American countries for which we could obtain data and in several industrial countries (including five of the G-7). The figure reveals that the credit union movement in Latin America is severely stunted and suggests that there is great potential for growth if appropriate policies were to be adopted.

Finally, credit unions are also of interest because, as Banerjee, Besley, and Guinnane (1994) point out, neighbors may have better information about borrowers than bank credit officers do. In addition, neighbors may be better able than banks to impose sanctions (including social sanctions) on delinquent borrowers. Therefore, these financial cooperatives have important advantages over banks in loan screening and collection.

Selected Performance Measures: Profitability and Delinquency

As is true for other financial intermediaries, profits are important to credit unions in order to help build a capital base both for future expansion and to buffer negative shocks and thus help ensure long-run survivability.

Delinquency has been termed the number one killer of credit unions in Latin America, reflecting the fact that it is often a leading cause of credit union decapitalization and insolvency. Credit unions that are not able to maintain reasonably low delinquency rates (certainly in the single digits and preferably less

In fact, Huppi and Feder (1990, p. 196) note that for credit unions in the developing world in general, "high delinquency rates have been the primary reason for failure."
Figure 3.2. Credit Union Market Penetration: Deposits and Loans, 1994 (percent)

United States 4.17 6.02
Ireland: Japan 9.37 11.09
France 3.32 9.67
Germany 9.12 19.34
Canada 115.02 19.68
Chile 0.16
Uruguay 0.29
Peru 0.66
El Salvador 1.36
Guatemala 1.07
Colombia 1.73
Paraguay 1.69
Peru 1.56
Bolivia 2.16
Costa Rica 1.83
Bahamas 5.64
Panama 2.73
Barbados 2.42
Belize 2.64
Jamaica 2.79
Honduras 3.21

- Ratio of credit union deposits to total money plus quasi-money
- Ratio of credit union loans to private sector loans by the commercial banking system.

a. For the United States, thrifts are included with the commercial banking system.
b. Data for Japan are from Bank of Japan (1996).
c. Data for Germany are from Deutsche Bundesbank (1995).
d. Data refer to 1993.
Source: Data for the ratio of credit union deposits to total money plus quasi-money are from IMF (1995, line 34 plus line 35). Data for private sector loans by the commercial banking system are from IMF (1995, line 22d). Credit union data are from WOCCU (1995) unless otherwise noted.

than five percent) suffer an immediate impact on their incomes as loans go uncollected. Administrative costs balloon when loans go bad; loan collection becomes the most expensive component of the loan granting-administration-collection cycle and thus adds significantly to total costs if done on a substantial share of the portfolio.
An even more debilitating problem can develop in the longer run with respect to the nature of the credit union-client relationship. When delinquency is high, credit union staff can spend a great deal of their time in negative interactions with clients, instead of in roles that foster the idea that the credit union is an institution that supports and helps its clients. Negative interactions can undermine the base of customer loyalty. In addition, at high delinquency rates, a contagion effect may develop. If loan clients become aware that a significant share of borrowers is not repaying, they may ask themselves why they should repay. If borrowers perceive that the credit union does not punish delinquency strongly, additional borrowers may decide not to repay.

Liquidity crises may erupt as delinquency worsens, forcing the credit union to borrow expensive short-term money (damaging profits), to restrict lending, or both. Such restrictions may further increase delinquency, especially for clients that were expecting and needing a rollover. This situation can set up a vicious circle, with increased delinquency further deepening the liquidity crisis and vice versa. Finally, in addition to contributing to poor financial health in all of these ways, weak loan recovery undermines the growth and expansion of the credit union because it leads to a reduction in the availability of funds with which to extend new loans.

Data

In this chapter, we analyze two to four years of annual data collected from 58 credit unions in Bolivia, Guatemala, and Honduras. We selected the countries, credit unions, and years specifically to obtain reasonably accurate and consistent balance sheet, income statement, and delinquency rate data. The existence of such information is directly attributable to the credit union strengthening programs carried out by the World Council of Credit Unions (WOCCU). WOCCU implemented these programs on a group of credit unions in each country beginning in 1987 in Guatemala and Honduras and in mid 1993 in Bolivia.

The great diversity both within and across countries in the success of the WOCCU programs in strengthening financial discipline and management and in improving delinquency, profitability, and savings mobilization performance imparted a huge range of variation to most of the variables in our dataset. For example, delinquency rates vary from a low of 1.3 percent for a credit union in Guatemala to a high of 49 percent for one in Bolivia. In general, the delinquency and profitability performance of the Bolivian credit unions is the weakest (reflecting the recency of the strengthening program there), and that of Guatemalan credit unions is the strongest, particularly with regard to delinquency.

We obtained the data used in this study from three major sources. The International Monetary Fund’s *International Financial Statistics* provided most of
the macroeconomic series, occasionally supplemented by data from national sources. WOCCU technical assistance teams in each country provided balance sheets, income statements, delinquency data, local population data (based on a recent population census in each country), and a classification of each credit union as either borrower dominated, saver dominated, or neutral. A 17-page written survey questionnaire, filled out by the manager (or a delegate) of each participating credit union, provided information on the credit union’s delinquency control measures; the breakdown of its loan portfolio by sector, type of guarantee, and branch; loan and deposit rates; wages and employment; membership; and the number of banks and other financial institutions in the same locality.

Of the 69 credit unions to which surveys were distributed, 58 were returned and usable. This high 84 percent response rate is attributable in part to the efforts of the WOCCU technical assistance teams, which distributed and collected the surveys and exhorted credit unions to fill them out thoroughly and accurately despite the four to six hours it normally took to do so. We made follow-up telephone calls with every participating credit union in order to fill in or verify any missing or suspicious-looking information. Given that we later discovered a few isolated problems with some of the balance sheet and income statement information, we ultimately used data for 55 credit unions: 18 in Bolivia, 15 in Guatemala, and 22 in Honduras. With certain averaged and lagged variables consuming the first observation for each country, our regression analysis is based on data for 1994 in Bolivia and for 1992–94 in Guatemala and Honduras, with a total of 126 observations.

Explaining Delinquency

As a general matter, we find that delinquency depends in important ways on credit union policy variables, particularly those that affect borrower repayment incentives. Happily, this means that credit unions have great scope in motivating loan clients to choose against defaulting.

A model in which borrowers elect whether or not to repay their loans in a timely fashion in order to maximize their expected lifetime utility is a useful lens through which to view this general result. In such a model, loan clients choose to default if defaulting has greater expected utility than not defaulting. To make this decision, borrowers balance the value of not repaying principal and interest on the current loan against the value and probability of obtaining

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6 This categorization is subjective but based on intimate knowledge of the politics of each credit union. The subjective classification was corroborated by loan and deposit rate data. Neutral credit unions are those roughly balanced between the interests of savers and borrowers.
future loans, of using other potentially valuable credit union services (such as savings facilities), and of avoiding sanctions.

Our empirical analysis highlights the importance of credit union policy variables that operate by affecting borrower repayment incentives. The analysis also finds a considerable role for credit union policy variables that affect delinquency because they impact the credit unions' capacity to effectively screen loans.

This section presents several specific microeconomic hypotheses on the determinants of credit union delinquency rates, as well as our regression results. In general, the regression results are quite robust to the choice of explanatory variable sets, with the inclusion or exclusion of variables generally not affecting the sign of the remaining variables or whether they are significant at about the five percent level. Such robustness reflects the low degree of multicollinearity present in these largely cross-sectional data. The following variables are consistent in their sign and generally in their significance throughout the regression analysis.

**Real Deposit Rate**

Higher real deposit rates motivate loan repayment in two ways. First, they increase borrower incentives not to lose access to the credit union’s savings services by defaulting because these services have greater value at higher real rates. Second, by improving deposit mobilization, higher real deposit rates reduce the often severe problem of loan rationing, thus increasing a nondefaulting borrower’s probability of obtaining future loans. Reducing loan rationing may also discourage a culture of insider lending, favoritism, and even corruption—a culture that can result in poor loan selection, weak collection efforts, and high delinquency rates.

**Difference in Loan Rates**

The difference in loan rates is the effective rate of interest on loans charged by credit unions minus the national average loan rate charged by commercial banks.7 A priori, the direction of this variable’s effect is unclear. Lower credit union loan rates may discourage repayment by creating a condition of excess credit demand, thus increasing the likelihood of future loan rationing and the culture of insider lending referred to above. At the same time, direct savings are lower when a borrower defaults on a loan that has a low interest rate. Also, following

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7 The effective loan rate refers to the fact that most credit unions in our sample require that the borrower deposit a certain fraction of the loan amount in a share deposit account. The effective loan rate is calculated as the ratio of the amount of net interest paid to the net loan proceeds.
Stiglitz and Weiss (1981), lower lending rates may avoid an adverse selection of borrowers and thus contribute to lower delinquency rates. In the regression analysis, we consistently find that the first argument prevails, with credit union loan rates always negatively associated with credit union delinquency rates.\(^8\)

**Credit Union Wage Ratio**

The credit union wage ratio is the ratio of the credit union’s average wage rate to the average wage rate prevailing in the country’s financial sector. An efficiency wage hypothesis underlies this variable. A chronic problem in credit unions in Latin America is that wage levels are often held down by a membership that compares its own income level to that of credit union officials. Low credit union wage levels relative to those paid elsewhere in the financial sector may result in low effort and morale, high turnover, and a general inability to recruit and retain high-quality credit union staff. Poorer loan selection and weaker recovery efforts may result, the latter reducing the incentives for borrowers to repay. Both factors tend to increase delinquency rates. As an example of this phenomenon, Arbuckle (1994, p. 34) notes that in the case of Honduras, “the biggest obstacle to rational personnel policies is the fear of board members that General Assemblies may protest that high performing managers and staff are too highly paid.”

**Return on Assets**

The return on assets is a measure of the credit union’s financial health. We use the credit union’s return on assets lagged one year. Incentives to repay loans diminish greatly if borrowers believe that the credit union may not survive to offer them loan and savings services in the future, or that it may only survive with greatly diminished capacity to offer loans. A basic hypothesis of this chapter is that, although credit union financial health is not a policy variable per se, it is strongly influenced by the set of policy variables discussed here.

Among the many measures of financial health, credit union members follow profits with special interest. Credit union members normally hold an annual assembly around March of each year to decide on dividend distributions from the preceding year’s profits. We normalize profits by assets to control for the size of the credit union. We lag the rate of return on assets by one year to reflect the fact that members generally would gauge the health of a credit union.

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\(^8\) A significantly negative coefficient is also consistently obtained when the effective credit union loan rate appears in the regression in real terms instead of as the difference between credit union and commercial bank loan rates.
by last year's profitability. Alternative measures of credit union health, such as growth in the number of members, real assets, and real voluntary (savings plus time) deposits all have the proper signs, but are less significant than the return on assets in the regression analysis.

Severity of Default Sanctions

All of the variables discussed up to now except the wage ratio relate primarily to the benefits to members of maintaining access to loan and deposit services (the carrots offered by credit unions), as weighed against the cost of repaying the loan. The other variables in table 3.2 are principally concerned with different aspects of the remaining dimension of the expected utility framework described earlier, the severity of default sanctions (the credit unions' sticks).

Loans collateralized with real or movable property should have lower default rates than signature loans because of the additional threat to the borrower's assets. The present study confirms this hypothesis by the significantly negative sign on the collateralized share of loans (table 3.2). Monetary penalties (late charges) can also be important deterrents to delinquency, at least for loans that members might intend to repay eventually. Although the penalty interest rate is correctly signed, it is never very significant in the regression analysis and so does not appear in the regressions in table 3.2. However, the length of the grace period before such penalties are imposed (a variable that ranges in value from 1 to 360 days) is highly significant (table 3.2). This result may reflect the fact that borrowers contemplating temporary (or potentially temporary) default may focus more on whether there are any consequences to their actions in the short run—and hence on the length of the grace period—rather than on the precise amount of the penalty that would eventually be assessed. Moreover, the grace period is the only variable that is relevant to borrowers who pay overdue installments before late charges begin.

Credit unions are cooperative entities that generally do not attempt to maximize profits. In fact, they often are not subject to the rule of the market that capital will forsake them if they consistently earn low or even negative profits. Many credit union members will stay and even contribute additional share capital

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9 Intra-year profit reports are prepared in some of the better credit unions, but this information is not normally available to the membership, which we assume is not financially sophisticated enough to gauge the rate of return in the current year by any better measure than last year's value. When the current year's rate of return is used in the regression, it is less significant than the rate of return lagged one year. (When the current rate of return is used, the two-stage least squares estimator is also employed, taking the rate of return as endogenous because higher current delinquency rates tend to drive down the current rate of return. When the rate of return lagged one year is used, ordinary least squares is employed because lagging eliminates this simultaneity problem.)
Table 3.2. Delinquency Regressions

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real deposit rate(^a) (annual percent)</td>
<td>-0.00363</td>
<td>-0.00299</td>
<td>-0.00283</td>
</tr>
<tr>
<td>Difference in loan rates(^b) (annual percent)</td>
<td>-0.00427</td>
<td>-0.00473</td>
<td>-0.00422</td>
</tr>
<tr>
<td>Credit union wage ratio(^c)</td>
<td>-0.0568</td>
<td>-0.0674</td>
<td>-0.0911</td>
</tr>
<tr>
<td>Return on assets, lagged one year(^d)</td>
<td>-0.284</td>
<td>-0.298</td>
<td>-0.344</td>
</tr>
<tr>
<td>Grace period(^e) (days)</td>
<td>0.000483</td>
<td>0.000461</td>
<td>0.000432</td>
</tr>
<tr>
<td>Period before financial reports are ready(^f) (days)</td>
<td>0.00714</td>
<td>0.00667</td>
<td>0.00667</td>
</tr>
<tr>
<td>Period between financial reports (months)</td>
<td>0.0295</td>
<td>0.0281</td>
<td>0.0270</td>
</tr>
<tr>
<td>Population of the town(^g)</td>
<td>0.0127</td>
<td>0.0142</td>
<td>0.0118</td>
</tr>
<tr>
<td>Charged off overdue loans(^h)</td>
<td>-0.000476</td>
<td>-0.000364</td>
<td></td>
</tr>
<tr>
<td>Collateralized share of loans(^i)</td>
<td>-0.0739</td>
<td></td>
<td>-0.0950</td>
</tr>
<tr>
<td>Stock of loans per credit union employee(^j)</td>
<td></td>
<td>0.000000357</td>
<td>(2.22)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.00716</td>
<td>0.0376</td>
<td>0.0474</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.5608</td>
<td>0.5824</td>
<td>0.5819</td>
</tr>
</tbody>
</table>

\(^a\) Stock-weighted average of real savings and time deposit rates, from quarterly data.
\(^b\) Credit union effective loan rate minus the national average of the commercial bank loan rates.
\(^c\) Ratio of the credit union's average wage level to the average wage level in the country's financial sector.
\(^d\) Credit union's return on assets, lagged one year (decimal terms).
\(^e\) Grace period before monetary penalties are imposed on late loan payments.
\(^f\) Number of days after the close of the month (or other accounting period) before financial reports are ready.
\(^g\) Natural log of the weighted average population of localities in which main and branch credit union offices are located, weighted by the number of members in each office.
\(^h\) Percentage of loans more than one year overdue that are charged off.
\(^i\) Share of loans that are collateralized either by real or movable property (decimal terms).
\(^j\) Ratio of the average yearly loan stock in December 1993 dollars to the average number of employees for the year.

**Note:** Values are ordinary least squares estimates, with \(t\)-statistics in parentheses. The dependent variable is the delinquency rate, measured as the contaminated portfolio at the end of the year. Explanatory variables measure average conditions during the preceding 12 months.

**Source:** Authors' calculations.

if they receive sufficient benefits that they could not obtain elsewhere. And because credit unions frequently serve groups that have no other real options for obtaining financial services, these institutions often are not forced to achieve high levels of X-efficiency by the threat that most of their customers (and their customers' capital) will desert them.
The problem of inadequate market discipline to enforce efficient management is frequently compounded by the lack of business acumen and management skills and training of the teachers, priests, and other nonprofessionals who have been called upon to direct and manage credit unions. In addition, the members who elect the governing board have a relative lack of financial and business sophistication. A common result of this situation is that a credit union enters into a crisis and realizes that it must control delinquency if it is to survive. For a while, the credit union expends great energy in this area. Once the arrearage problem becomes less urgent, the credit union shifts its focus to improving financial management, cost controls, member services, or other tasks. Market and internal controls are often insufficient to force the credit union to do all of these things simultaneously.

In our analysis, variables that reflect the seriousness with which the credit union treats arrearages may well be important in explaining the observed variation in credit union delinquency rates. There may be substantial differences across credit unions and over time in how well a serious repayment culture has been established; in which members are, for example, encouraged and lectured (repeatedly) about the importance of repayment; and in which immediate phone calls and letters followed by solemn interviews and demands against the property of those who fall into default are commonly—and perhaps even uniformly—followed procedures. Although a serious culture of repayment is important, measuring its extent is a formidable task. It is difficult to quantify the above noted procedural variables with accuracy over all loans in a given time period. And the most important determinant of all, the attitude within the credit union toward delinquency, presents even thornier measurement problems.

We employ two proxy variables, which measure a credit union’s discipline in preparing its financial reports. One variable measures the period (in months) between financial reports and the other gives the number of days after the close of the month or other accounting period before the financial reports are ready. Although most credit unions prepare financial reports every month, some have intervals of two, six, or even 12 months between reports. And although the average credit union has its financial reports ready by about 12 days after the close of the previous accounting period, in some credit unions, the delay is as long as 40 days. A large value for either financial reporting variable is an indicator of lax management in general. It may in addition indicate the lack of a serious repayment culture, as is suggested by the significance and robustness of these two variables in the delinquency regressions (table 3.2).

10 The board of directors and management frequently lack skills and knowledge, yet often possess a great desire to serve their members. Thus, credit union strengthening programs, such as those alluded to earlier, can be valuable.
The variable that gives the percentage of loans more than one year overdue that are charged off may provide an additional tip-off to a credit union that does not deal with delinquency in a serious manner. Credit unions that are purposeful about loan collection are also normally serious about keeping track of their successes and failures in the proper accounting framework. Although loans that are more than one year overdue should generally be charged off, many credit unions keep them on the books long after this period. The staff and members of such credit unions are usually not imbued with a serious repayment culture. In summary, our empirical analysis finds that higher values of the financial reporting variables and lower values of the charge-off variable are associated with higher delinquency rates, apparently indicating a weak culture of repayment (table 3.2). 11

The variable that gives the average stock of loans (expressed in December 1993 dollars) per credit union employee is an inverse measure of the human resources available to do loan screening, administration, and collection. As expected, an increase in resources reduces delinquency (table 3.2).

Finally, the variable that gives the natural log of the population of the town in which the credit union is located consistently enters the regression with a significantly positive sign (table 3.2). 12 This result implies that, other things equal, delinquency rates are higher in cities than in small towns. It may reflect the greater social controls that operate in small towns. It may also reflect the fact that credit unions in our sample of countries suffered huge losses in donor-sponsored, small-farmer lending programs that ended prior to our sample period (in the mid-to-late 1980s). Credit unions still had vivid memories of these experiences in 1994, and so they were likely to have been exercising special caution in their lending to agriculture and agriculture-related activities during our sample period. This experience, the 1994 coffee price boom, and the fact that real agricultural value added grew reasonably well during the sample period—although usually more slowly than real gross domestic product (GDP)—may account for the impact of the town population variable.

Quantitative Importance of the Results

The descriptive statistics given in table 3.3 and the regression coefficients in table 3.2 show that reasonable size changes in the explanatory variables are associ-
### Table 3.3. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delinquency regressions</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan delinquency rate (end of year)</td>
<td>0.189</td>
<td>0.115</td>
<td>0.0131</td>
<td>0.490</td>
</tr>
<tr>
<td>Grace period (days)</td>
<td>47.6</td>
<td>85.2</td>
<td>1</td>
<td>360</td>
</tr>
<tr>
<td>Period before financial reports are ready (days)</td>
<td>12.24</td>
<td>6.52</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Period between financial reports (months)</td>
<td>1.14</td>
<td>1.08</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Difference in loan rates (annual percent)</td>
<td>4.58</td>
<td>6.64</td>
<td>-7.18</td>
<td>55.54</td>
</tr>
<tr>
<td>Credit union wage ratio</td>
<td>0.804</td>
<td>0.352</td>
<td>0.272</td>
<td>1.680</td>
</tr>
<tr>
<td>Return on assets, lagged one period</td>
<td>0.0108</td>
<td>0.0430</td>
<td>-0.298</td>
<td>0.109</td>
</tr>
<tr>
<td>Real deposit rate (annual percent)</td>
<td>-1.78</td>
<td>6.31</td>
<td>-16.5</td>
<td>8.60</td>
</tr>
<tr>
<td>Population of the town</td>
<td>10.07</td>
<td>1.647</td>
<td>7.364</td>
<td>13.96</td>
</tr>
<tr>
<td>Charged off overdue loans</td>
<td>57.0</td>
<td>46.7</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Collateralized share of loans</td>
<td>0.428</td>
<td>0.258</td>
<td>0</td>
<td>0.995</td>
</tr>
<tr>
<td>Stock of loans per credit union employee</td>
<td>57,061</td>
<td>44,873</td>
<td>6,170</td>
<td>230,065</td>
</tr>
<tr>
<td><strong>Profit regressions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real profits (1993 dollars)</td>
<td>24,927</td>
<td>73,529</td>
<td>-282,560</td>
<td>335,182</td>
</tr>
<tr>
<td>Real interest rate on investments&lt;sup&gt;b&lt;/sup&gt;</td>
<td>25.79</td>
<td>69.56</td>
<td>-21.15</td>
<td>535</td>
</tr>
<tr>
<td>Real posted loan rate&lt;sup&gt;c&lt;/sup&gt;</td>
<td>8.24</td>
<td>7.93</td>
<td>-10.01</td>
<td>43.1</td>
</tr>
<tr>
<td>Real interest rate on deposits&lt;sup&gt;d&lt;/sup&gt;</td>
<td>-4.07</td>
<td>6.14</td>
<td>-18.1</td>
<td>6.54</td>
</tr>
<tr>
<td>Real average wage rate (1993 dollars)</td>
<td>2,193</td>
<td>994</td>
<td>752</td>
<td>6,730</td>
</tr>
<tr>
<td>Real price of materials&lt;sup&gt;e&lt;/sup&gt;</td>
<td>4.11</td>
<td>2.33</td>
<td>-1.10</td>
<td>12.1</td>
</tr>
<tr>
<td>Real value of fixed assets (1993 dollars)</td>
<td>83,162</td>
<td>140,068</td>
<td>3,212</td>
<td>1,076,889</td>
</tr>
<tr>
<td>Share of loans collateralized by real property (decimal terms)</td>
<td>0.387</td>
<td>0.239</td>
<td>0</td>
<td>0.995</td>
</tr>
<tr>
<td>Saver dominated credit union dummy&lt;sup&gt;f&lt;/sup&gt;</td>
<td>0.111</td>
<td>0.316</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Neutral credit union dummy&lt;sup&gt;g&lt;/sup&gt;</td>
<td>0.190</td>
<td>0.394</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Growth rate of real GDP (annual percent)</td>
<td>3.81</td>
<td>2.54</td>
<td>-1.40</td>
<td>6.23</td>
</tr>
<tr>
<td>Inflation rate&lt;sup&gt;h&lt;/sup&gt;</td>
<td>13.6</td>
<td>7.48</td>
<td>6.50</td>
<td>28.9</td>
</tr>
<tr>
<td>Real effective exchange rate&lt;sup&gt;i&lt;/sup&gt;</td>
<td>7.12</td>
<td>2.73</td>
<td>0.760</td>
<td>10.2</td>
</tr>
<tr>
<td>Commercial bank credit boom, lagged one year&lt;sup&gt;j&lt;/sup&gt;</td>
<td>-5.92</td>
<td>7.70</td>
<td>-16.1</td>
<td>5.53</td>
</tr>
</tbody>
</table>

<sup>a</sup> See Table 3.2 for definitions of variables.
<sup>b</sup> Real ex post interest rate on investments (annual percent), deflated by local consumer price index.
<sup>c</sup> Real posted loan rate from quarterly data (annual percent), deflated by local consumer price index.
<sup>d</sup> Real ex post interest rate on all deposits, shares, and borrowing (annual percent), deflated by local consumer price index.
<sup>e</sup> Real price of materials (nonwage administrative costs), defined as the ratio of nominal nonwage administrative costs to nominal total assets.
<sup>f</sup> Value is 1 if true; 0 otherwise.
<sup>g</sup> December-over-December consumer price inflation rate (annual percent).
<sup>h</sup> Absolute value of the December-over-December percentage change in the real effective exchange rate (annual percent).
<sup>i</sup> A measure of whether there was a commercial bank credit boom in the previous year (annual percent). This is measured as CRBOOM = [1 + c]/[(1 + r) (1 + g)], where c is the growth rate of commercial bank credit to the private sector (in nominal terms), r is the nominal commercial bank loan rate, and g is the growth rate of real GDP.

<sup>j</sup> Source: Authors' calculations based on sources discussed in the text.
ated with numerically important changes in the delinquency rate. To illustrate, 10 percentage point increases in credit union deposit and loan rates reduce delinquency rates by 3 and 4 percentage points, respectively. Increasing the return on assets by 0.10 (a reasonable increment because this variable ranges from -0.30 to 0.11) reduces delinquency by 3 percentage points. A 20 percentage point increase in the share of the loan portfolio collateralized by real or movable property is associated with a fall in the delinquency rate of 1.5 to 2 percentage points. Increasing relative credit union wages (a variable that ranges from 0.27 to 1.68) by 0.5 reduces delinquency by 3 to 5 percentage points.

Sensitivity Analysis

The sign and significance of the variables in table 3.2 are robust to a wide variety of changes in the regression specification. As noted earlier, fairly substantial changes can be made in the sets of variables included in and excluded from these regressions without affecting the sign of the remaining regressors in table 3.2 or whether they are significant at about the five percent level.

The dependent variable in all regressions in table 3.2 is the delinquency rate at the end of the year. All explanatory variables measure average conditions during the preceding 12 months, which shape both borrower decisions to default and more recent loan selection decisions (the average loan term being about 20 months). The signs and significance of our results are robust to using two-year averages for independent variables instead of a one-year measure. We retain the one-year measures because they are consistently more significant and yield higher $R^2$ values.

13 We employ the share of the loan portfolio with any payments one day or more overdue to measure the delinquency rate. This is the definition actually used in Guatemala in 1993–94 and in Bolivia. Honduras employed a 60-day cutoff in all years and Guatemala used a 30-day cutoff in 1992. For purposes of comparability, prior to the regression analysis, we increased the reported delinquency rates by six percentage points for Honduras and by three percentage points for Guatemala for 1992. These adjustments were based on data from a sample of credit unions in which delinquency rates were calculated with multiple cutoffs. We also ran regressions with adjustment factors of four and two percent (instead of six and three percent, respectively) and with no adjustment at all. This last delinquency measure rests on the hypothesis that behavior adjusts to whatever the delinquency definition is, so that Bolivian credit unions would press their members just as hard on the first day of delinquency as the Honduran credit unions would on the 61st day. These changes had little effect on the regression results.
The dependent variable, by definition, cannot go outside the [0,1] range and, in fact, all dependent variable observations fell in the [0.013, 0.49] interval (table 3.3). To remedy the truncated normal error imposed by the [0,1] limitation, we tried several transformations of the dependent variable: \( \ln(d) \), \( \ln\left[\frac{d}{(1-d)}\right] \), and \( \ln\left[\frac{d}{(c-d)}\right] \), where \( c = 0.5, 0.6, 0.7, 0.8, \) and \( 0.9 \), and \( d \) is the delinquency rate. These transformations produced little change in the regression results. Signs were unchanged and the same variables were significant, with t-statistics typically varying by only 0.1–0.4 or less and the \( R^2 \) changing by less than 0.01. For simplicity of interpretation, we report the results for the linear equation.

Our conclusions are also robust to other formulations of the independent variables. For example, loan and deposit rates can be used in real terms (deflating by the December-to-December increase in the local consumer price index) or as the difference between nominal credit union and commercial bank rates. Deposit rates can be based on voluntary (savings plus time) deposits only or they may also include share accounts.\(^{14}\)

The method of estimation makes little difference. For example, estimating delinquency equations jointly with the profit functions (and associated share equations) discussed in the next section using the seemingly unrelated regressions (SUR) method makes little difference to either the delinquency or the profit function, as compared with estimating each in isolation. Including country or country-times-year dummies has little impact on the delinquency regression coefficients. Moreover, the dummy variables are insignificant individually and as a group in the many delinquency specifications in which they were tried. Finally, dropping all observations for Bolivia (on the grounds that the data are weakest there) does not change any of our conclusions, and the Chow test indicates that the regressions are the same with and without these data points.

**The Scoring Literature**

There exists a large literature estimating delinquency (or “scoring”) equations for commercial bank lending and credit card accounts.\(^{15}\) There appear to be no published studies estimating delinquency equations for credit unions, in either the industrial or developing country literature.

Our delinquency equations differ from the existing scoring literature in their emphasis on policy variables and the incentives these policies create for

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\(^{14}\) In share accounts, funds are not available to members until they leave the credit union. None of the credit unions were permitted to offer demand deposits.

\(^{15}\) For literature on the United States, see, for example, Avery and others (1996), Altman and Haldeman (1995), Asch (1995), and Boyes, Hoffman, and Low (1989), and references contained therein. For developing country scoring functions, see, for example, Vigano (1993) and the references contained therein.
borrowers to repay. With credit union delinquency rates in our sample generally at very high levels (reaching almost 50 percent and averaging nearly 20 percent) despite generally favorable macroeconomic conditions, it would seem to be essential to explore delinquency from the point of view of the borrower's decision about whether to repay. By contrast, the scoring literature does not generally emphasize bank policy variables and their effect on repayment incentives; it focuses instead on such variables as borrower characteristics, including financial ratios that measure ability to repay.

Explaining Profitability

Following Hancock (1991), we estimate the short-run translog profit function shown in equation 1, together with all but one of share equations 2, subject to the usual homogeneity and symmetry constraints in equations 3 and 4.\(^{16}\)

\[
\ln \pi = A + \sum_{q=1}^{Q} d_q S_q + \sum_{i=1}^{5} a_i \ln p_i + a_F \ln x_F + 1/2 \sum_{i=1}^{5} \sum_{j=1}^{5} b_{ij} \ln p_i \ln p_j + \sum_{j=1}^{5} b_{jF} \ln p_j \ln x_F + 1/2 b_{FF} (\ln x_F)^2 + u.
\]

(2) \[
\frac{p X_i}{\pi} = a_i + \sum_{j=1}^{5} b_{ij} \ln p_j + b_{iF} \ln x_F + u_i \quad \text{for } i = 1, \ldots, 5.
\]

(3) \[
\sum_{j=1}^{5} b_{ij} = 0 \quad \text{for } i = 1, \ldots, 5; \quad \sum_{j=1}^{5} b_{jF} = 0; \quad \sum_{i=1}^{5} a_i = 1.
\]

(4) \[
b_{ij} = b_{ij} \quad \text{for } i = 1, \ldots, 5 \text{ and } j = 1, \ldots, 5.
\]

The profit function we use is based on the intermediation model developed by Klein (1971) and Sealey and Lindley (1977). It includes several policy variables and other variables as intercept shifters, these being denoted as the \(S_q\) in equation 1. The five \(p_i\) price variables consist of two output prices (for loans and investments) and three input prices (for deposits plus borrowing, wages, and materials).\(^{17}\) Fixed capital is denoted by \(x_F\), the profit equation constant term by

\(^{16}\)For other studies estimating bank profit functions, see Berger, Hancock, and Humphrey (1993) and the references contained therein. The only study we know of that estimates a profit function for credit unions is Beshouri and Glennon (1996), which uses a sample of U.S. credit unions and a loglinear profit equation.

\(^{17}\)Materials refer to all nonwage administrative costs. Loans are not broken into more than one output variable because the rates charged are usually the same or nearly the same for all types of loans,
and white noise, possibly contemporaneously-correlated disturbances by \( u \) and the \( u_i \).

Profits, fixed capital, and the five price variables are all measured in real terms, using the local consumer price index for deflation in every case except for the price of materials. In addition, for cross-country comparability, profits, wages, and fixed capital are all converted to 1993 dollars, a year in which the exchange rate was in reasonable equilibrium in the three countries. That year preceded, for example, the exchange rate overvaluation in Guatemala and Honduras from the 1994 coffee boom. Finally, ex post or implicit nominal interest rates for investments and for deposits plus external borrowing are obtained by dividing the annual amount of interest by the average yearly stock. By contrast, posted rates are used for the nominal loan rate in order to allow policy variables to affect profits through changes in repayment rates, a key channel we wish to explore.

**Translog Model with and without Slack**

The implicit assumption behind estimating equations 1 through 4 is that although credit unions normally do not maximize profits unconditionally, they are nonetheless efficient in the sense that they maximize profits conditional on the vector of prices they select, and thus their profit-price vector is located on the profit frontier. This distinction is best understood with reference to the theoretical treat-

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so that the resulting price series would be highly collinear. Deposits and borrowing are combined because the amount of borrowing is in general not very large and, in fact, is zero for numerous credit unions, so that an implicit borrowing rate could not have been defined for many of our observations. For ease of reference, we henceforth refer to deposits plus borrowing as deposits.

18 The real price of materials is defined as the ratio of nonwage administrative costs to total assets, both measured in nominal terms. Using this value ratio, we make the Leontief-type assumption that the quantity of materials per real peso of total assets is fixed, so that any variation in the value ratio is due to relative price variation. In effect, then, we use the price of total assets to deflate the price of materials. Even with the moderate 6–30 percent inflation rates experienced by the countries in our sample over the study period, most price indexes tend to move together with a fairly common trend. Therefore, this deflation procedure is probably a reasonable one. No direct measure of the nominal price of materials is available. Because negative values are assumed for some observations by profits and by the real prices of investments, loans, deposits, and materials, 100 is added to all observations of these four real price variables and 1,000,000 to all profit data prior to taking logs. In addition, to facilitate interpretation of the regression coefficients, profits, fixed capital, and all five price variables are centered around zero after taking logs. This means, for example, that \( \sum_{s=1}^{126} \ln(\pi_s + 1,000,000) / 126 \) is subtracted from all 126 of the \( \ln(\pi_s + 1,000,000) \) dependent variable observations. Table 3.3 provides statistics on variables prior to any of these rescalings or log transformations.

19 Because the credit unions in this study received little income from loan commissions and fees, the major difference between posted and implicit loan rates is caused by loan default.
ment of the credit union objective function by Smith, Cargill, and Meyer (1981) and Smith (1984). These papers analyze how credit unions would set their loan and deposit rates with different possible objective functions.

For example, in the case of a purely borrower dominated credit union—that is, one that is run in order to maximize benefits to borrowers—the credit union will minimize its loan rate subject to the sustainability constraint that profits cannot go below zero. More fully, such credit unions can be thought of as setting their loan and deposit rates so as to maximize profits and then using the full amount of these profits to reduce loan rates, stopping only when profits are at their lower bound of zero. Considering the broader set of policy decisions that real-world credit unions must make, a borrower dominated credit union will serve the interests of its borrowers best by being completely efficient in all ways. It will then use the full amount of profits earned to subsidize the loan rate, changing the mix of inputs and outputs as necessary to maximize profits given the new loan rate. Because it is always possible for the credit union to drop its loan rate below the going market rate, this behavior is perfectly feasible.

In the same way, a purely saver dominated credit union can be thought of as maximizing profits and then using any positive profits to increase the rate paid on deposits to levels above the market rate. It will select input and output ("netput") combinations that maximize profits conditional on this new price vector and will continue to increase deposit rates (and reset netput levels accordingly) until its maximized profits are driven to zero. This would be the strategy that would most benefit savers, in whose interest the credit union is being run. Credit unions that are balanced somewhere between the interests of savers and borrowers would also find it in their interests to be efficient given whatever choice of supra-market deposit rate and sub-market loan rate the two groups, with their relative strengths, decide upon. We estimate the system of equations 1–4 on the assumption that credit unions maximize profits conditional on their vector of netput prices.

As noted earlier, Smith, Cargill, and Meyer’s (1981) and Smith’s (1984) descriptions of credit union behavior may be too idealized. Credit unions may fail to be even conditionally efficient because financially unsophisticated members choose inexperienced nonprofessionals as directors and managers who may then fail to control costs and push outputs to profit-maximizing levels. In addition, credit unions that are borrower dominated or at least consider the interests of borrowers may choose to keep loan rates high but be lax on loan collection as an alternative way to benefit their borrowers, and one that yields less than maximum profits at the given vector of prices. In such cases, a variant of the translog profit equation system is called for, which reflects such slack or inefficiency.

The variant utilized here is the profit function analogue to Mester’s (1989) separable-expense-preference cost function. It is derived in the same way that
Mester derives her cost equation, employing Hotelling’s lemma (for profit functions) instead of Shephard’s lemma (for cost functions). Equation 5 gives the resulting profit function, with share equations shown in equation 6, all subject to the homogeneity and symmetry constraints of equations 3 and 4.

\[
\ln \pi = A + \sum_{q=1}^{Q} d_q S_q + \sum_{i=1}^{5} a_i \ln p_i + a_x \ln x_F + 1/2 \sum_{i=1}^{5} \sum_{j=1}^{5} b_{ij} \ln p_i \ln p_j + \sum_{j=1}^{5} b_{ij} \ln p_j \ln x_F \\
\quad + 1/2 b_{EF} (\ln x_F)^2 + \ln \left[ 1 + \sum_{i=1}^{5} c_i \left( a_i + \sum_{j=1}^{5} b_{ij} \ln p_j + b_{EF} \ln x_F \right) \right] + \nu.
\]

\[
\frac{p_i x_i}{\pi} = \left( a_i + \sum_{j=1}^{5} b_{ij} \ln p_j + b_{EF} \ln x_F \right) \left( 1 + c_i \right) / \left( 1 + \sum_{k=1}^{5} c_k \left[ a_k + \sum_{j=1}^{5} b_{kj} \ln p_j + b_{EF} \ln x_F \right] \right) \\
\quad + \nu_i \quad \text{for } i = 1, \ldots, 5.
\]

The only difference between the ordinary translog profit function in equation 1 and the slack translog profit function in equation 5 is the addition of the \(\ln [1 + \ldots]\) term at the end of equation 5, a term which contains five additional parameters, the \(c_i\). The \(c_i\) are markup factors; if a (conditional) profit-maximizing credit union would have used or produced \(x_i^*\) of the \(i^{th}\) netput, a slack (nonmaximizing) credit union would use or produce \((1 + c_i)x_i^*\) instead, where \(c_i\) is constant across credit unions but is allowed to take on different values for each netput. Given the log form of the profit function, the bracketed \([1 + \ldots]\) expression in equation 5 is the ratio of profits in the slack credit union divided by what profits would have been if the credit union had been efficient. This ratio might reflect, for example, that a slack credit union could have used more inputs or produced less output than would an efficient credit union.

**Empirical Results**

The estimated profit equations shown in table 3.4 include an ordinary translog and a slack translog. The netput prices pertain to investments, loans, deposits plus borrowing, wages, and materials.

Many of the variables that are significant in the delinquency regressions in table 3.2 are also significant in the profit regressions, with either an identical form of the delinquency equation variable or a slight variant of it appearing in the profit regressions. Thus, deposit, loan, and wage rates appear in both equations, as do the variables for the period between financial reports and the popu-

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20 The derivation is available from the authors upon request.
### Table 3.4. Profit Regressions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ordinary translog</th>
<th>Slack translog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.0636 (1.02)</td>
<td>0.0591 (0.20)</td>
</tr>
<tr>
<td>Period between financial reports</td>
<td>-0.0235 (1.58)</td>
<td>-0.0193 (1.28)</td>
</tr>
<tr>
<td>Population of the town</td>
<td>-0.00846 (2.26)</td>
<td>-0.00675 (1.86)</td>
</tr>
<tr>
<td>Share of loans collateralized by real property</td>
<td>0.0861 (1.18)</td>
<td>0.126 (1.77)</td>
</tr>
<tr>
<td>Squared value of share of loans collateralized by real property</td>
<td>-0.109 (1.37)</td>
<td>-0.160 (2.07)</td>
</tr>
<tr>
<td>Saver dominated credit union dummy</td>
<td>0.0368 (2.05)</td>
<td>0.0338 (1.93)</td>
</tr>
<tr>
<td>Neutral credit union dummy</td>
<td>0.0164 (1.19)</td>
<td>0.00612 (0.45)</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>0.0104 (4.15)</td>
<td>0.0135 (5.25)</td>
</tr>
<tr>
<td>Real effective exchange rate</td>
<td>-0.00425 (1.45)</td>
<td>-0.00493 (1.74)</td>
</tr>
<tr>
<td>Growth rate of real GDP</td>
<td>0.00962 (1.80)</td>
<td>0.00633 (1.29)</td>
</tr>
<tr>
<td>Commercial bank credit boom, lagged one year</td>
<td>-0.00140 (1.63)</td>
<td>-0.00176 (2.08)</td>
</tr>
<tr>
<td><strong>Price terms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real interest rate on investments</td>
<td>-0.104 (3.37)</td>
<td>0.0534 (0.37)</td>
</tr>
<tr>
<td>Real posted loan rate</td>
<td>0.280 (1.22)</td>
<td>1.49 (1.39)</td>
</tr>
<tr>
<td>Real interest rate on deposits</td>
<td>0.770 (4.05)</td>
<td>-0.887 (0.93)</td>
</tr>
<tr>
<td>Real average wage rate</td>
<td>0.0760 (4.53)</td>
<td>0.197 (2.17)</td>
</tr>
<tr>
<td>Real price of materials</td>
<td>-0.0229 (0.11)</td>
<td>0.150 (0.32)</td>
</tr>
<tr>
<td>Real value of fixed assets</td>
<td>-0.00272 (0.52)</td>
<td>-0.0348 (0.58)</td>
</tr>
<tr>
<td>Squared value of real interest rate on investments</td>
<td>0.0596 (0.73)</td>
<td>0.114 (1.27)</td>
</tr>
<tr>
<td>Real interest rate on investments x real posted loan rate</td>
<td>0.137 (0.19)</td>
<td>0.287 (0.37)</td>
</tr>
<tr>
<td>Real interest rate on investments x real interest rate on deposits</td>
<td>0.514 (0.71)</td>
<td>0.0322 (0.05)</td>
</tr>
<tr>
<td>Real interest rate on investments x real average wage rate</td>
<td>0.0770 (0.99)</td>
<td>0.0666 (0.97)</td>
</tr>
<tr>
<td>Real interest rate on investments x real price of materials</td>
<td>-0.788 (1.46)</td>
<td>-0.501 (1.33)</td>
</tr>
<tr>
<td>Squared value of real posted loan rate</td>
<td>10.4 (1.94)</td>
<td>13.1 (2.04)</td>
</tr>
</tbody>
</table>
Table 3.4. Profit Regressions (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ordinary translog</th>
<th>Slack translog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real posted loan rate x real interest rate on deposits</td>
<td>–6.02</td>
<td>–8.32</td>
</tr>
<tr>
<td></td>
<td>(1.13)</td>
<td>(1.33)</td>
</tr>
<tr>
<td>Real posted loan rate x real average wage rate</td>
<td>–0.210</td>
<td>–0.0775</td>
</tr>
<tr>
<td></td>
<td>(0.39)</td>
<td>(0.14)</td>
</tr>
<tr>
<td>Real posted loan rate x real price of materials</td>
<td>–4.31</td>
<td>–4.99</td>
</tr>
<tr>
<td></td>
<td>(1.21)</td>
<td>(1.46)</td>
</tr>
<tr>
<td>Squared value of real interest rate on deposits</td>
<td>1.88</td>
<td>2.97</td>
</tr>
<tr>
<td></td>
<td>(0.29)</td>
<td>(0.38)</td>
</tr>
<tr>
<td>Real interest rate on deposits x real average wage rate</td>
<td>0.420</td>
<td>0.282</td>
</tr>
<tr>
<td></td>
<td>(0.84)</td>
<td>(0.55)</td>
</tr>
<tr>
<td>Real interest rate on deposits x real price of materials</td>
<td>3.21</td>
<td>5.03</td>
</tr>
<tr>
<td></td>
<td>(1.03)</td>
<td>(1.85)</td>
</tr>
<tr>
<td>Squared value of real average wage rate</td>
<td>0.0958</td>
<td>0.0975</td>
</tr>
<tr>
<td></td>
<td>(1.81)</td>
<td>(1.71)</td>
</tr>
<tr>
<td>Real average wage rate x real price of materials</td>
<td>–0.383</td>
<td>–0.371</td>
</tr>
<tr>
<td></td>
<td>(1.65)</td>
<td>(1.85)</td>
</tr>
<tr>
<td>Squared value of real price of materials</td>
<td>2.27</td>
<td>0.829</td>
</tr>
<tr>
<td></td>
<td>(0.79)</td>
<td>(0.47)</td>
</tr>
<tr>
<td>Real interest rate on investments x real value of fixed assets</td>
<td>0.0369</td>
<td>0.0305</td>
</tr>
<tr>
<td></td>
<td>(2.47)</td>
<td>(1.67)</td>
</tr>
<tr>
<td>Real posted loan rate x real value of fixed assets</td>
<td>–0.887</td>
<td>–0.729</td>
</tr>
<tr>
<td></td>
<td>(3.76)</td>
<td>(3.56)</td>
</tr>
<tr>
<td>Real interest rate on deposits x real value of fixed assets</td>
<td>0.385</td>
<td>0.532</td>
</tr>
<tr>
<td></td>
<td>(2.32)</td>
<td>(2.52)</td>
</tr>
<tr>
<td>Real average wage rate x real value of fixed assets</td>
<td>–0.0352</td>
<td>–0.0338</td>
</tr>
<tr>
<td></td>
<td>(2.23)</td>
<td>(1.92)</td>
</tr>
<tr>
<td>Real price of materials x real value of fixed assets</td>
<td>0.300</td>
<td>0.200</td>
</tr>
<tr>
<td></td>
<td>(3.85)</td>
<td>(2.49)</td>
</tr>
<tr>
<td>Squared value of real value of fixed assets</td>
<td>–0.0210</td>
<td>–0.0216</td>
</tr>
<tr>
<td></td>
<td>(2.81)</td>
<td>(2.78)</td>
</tr>
</tbody>
</table>

**Markup factors**

| Markup factor for loans        | –0.412          |
|                              | (1.07)          |
| Markup factor for deposits    | –0.516          |
|                              | (1.20)          |

Profit equation $R^2$   0.5630  0.5968  
Investment equation $R^2$ 0.0143  0.0028  
Deposit equation $R^2$   0.0031  0.0065  
Wage equation $R^2$      0.0085  0.0034  
Materials equation $R^2$  0.00033  0.00042

**a.** All price terms are in natural logs; see equations 1 and 5 in the text.

**b.** See text for explanation of markup factors.

**Note:** Values are iterated SUR estimates, using profit and all share equations except that for loans. Asymptotic $t$-statistics are in parentheses. See tables 3.2 and 3.3 for definitions of variables.

**Source:** Authors' calculations based on sources discussed in the text.
lation of the town. The real property variable in table 3.4 is a variant of the collateralized share of loans variable in table 3.2. Yet, several variables that are significant in the delinquency regressions are not significant in the profit regressions. This outcome most likely reflects difficulties of multicollinearity in the profit regressions, which have some 40 parameters.

Intercept Shifter Variables

Higher values for the period between financial reports and the population of the town are found to reduce profits (table 3.4), as would be expected because they are also associated with higher delinquency rates (table 3.2). Longer periods between financial statements may also diminish the credit union's ability to control costs and thus further contribute to reducing profits.

Although increasing the share of the loan portfolio backed by real property guarantees is found to have an unambiguously favorable impact on the delinquency rate, the effect takes on an inverted "U" shape in the case of profits, as shown by the coefficients of real property and real property squared (table 3.4). The coefficient estimates for these two variables in both the ordinary and slack translog regressions are such that the use of some mortgage guarantees (as compared with none at all) increases profits as long as total mortgage-backed loans constitute less than 79 percent of the overall loan portfolio. Profits are maximized in both regressions when mortgage loans are 39 percent of the total portfolio, which, incidentally, is virtually identical to the observed mean of the real property variable (table 3.3). The estimates of 79 and 39 percent do not vary much across different profit regression specifications, and thus appear to be quite robust point estimates. One implication of these results is that credit unions that secure nearly every loan—even small loans, for example—with a mortgage (as some credit unions in our sample do) would appear to be engaging in a wasteful practice. This practice places additional administrative costs on the credit union associated with processing such credits, with these costs outweighing the benefits of enhanced loan recovery (through either higher repayment rates or collateral forfeiture).

The regressions include dummy variables for saver dominated and neutral credit unions. The dummy for saver domination is usually significant in the profit regressions; the dummy for neutral credit unions is significant less often. We might expect these variables to impact profits positively through the delinquency channel because borrower dominated credit unions would likely not only subsidize loan rates, but also be less strict about loan collection. In fact, the saver and neutral variables consistently have the requisite negative signs in

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21 The earlier discussion of the data notes the sources for these series.
the delinquency regressions. However, their t-ratios are around unity in those regressions, not especially significant.

The significance of the saver variable in the profit regressions but not in the delinquency regressions is somewhat puzzling. It may be explained by the fact that only 11 percent of the credit unions are classified as saver dominated, making it difficult to clearly identify the impact of this variable (in both regressions). Our fieldwork suggests an alternative or perhaps additional explanation. Some credit unions have made the transition from the traditional borrower dominated form that almost all of them started with to being saver dominated. This transition usually has meant that the credit union has understood not only the importance of savings mobilization, but also of other complementary principles. For example, the credit union may adopt more businesslike management, which includes earning (and capitalizing) profits to buffer negative shocks and help fuel growth. This explanation may account for the significant increase in profits observed in saver dominated credit unions.

Four of the intercept shifters— inflation rate, real effective exchange rate, growth in real GDP, and commercial bank credit boom—are macroeconomic variables. None is very significant in the delinquency regressions, but all of them are at least reasonably significant in most of the profit regressions. The inflation rate is the most significant of the four. Its presence may reflect the fact that, with a given percentage reserve requirement, bank intermediation margins rise and therefore bank spreads also tend to widen as nominal interest rates rise with increasing inflation. This tendency will be even stronger if reserve requirements are increased, as they commonly are, to combat higher inflation. Because none of the credit unions in this study were subject to reserve requirements, higher inflation rates tend to improve the competitive position of the credit unions vis-à-vis commercial banks and other formal intermediaries and hence credit union profitability.

The growth rate of real GDP has the expected positive effect on short-run profits, reflecting the existence of fixed capital in the profit function and perhaps of fixed overhead costs that do not vary with cyclical increases in business volume (for example, building rent, equipment and software systems, or insurance). It may also be that during cyclical upturns, personnel work harder to accommodate this increased volume, generating labor productivity gains.

The absolute value of the percentage change in the real effective exchange rate captures a major source of relative price change in these small, open economies. Larger changes may cause private firms to cut back on planned invest-

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22 Most of the variation in our sample is cyclical, rather than cross-country. Average percentage values for the sample period for the rate of growth of GDP are 4.24 for Bolivia, 4.24 for Guatemala, and 3.60 for Honduras.
ments as they sense greater macroeconomic volatility. This may lessen the demand for credit union loans and hence reduce profits.

The last macroeconomic variable, commercial bank credit boom, measures whether the lagged increase in nominal commercial bank credit is sufficient to roll over all old credits and their interest payments and to meet the demand for all new credit arising from the growth of real GDP. Increases in credit beyond this level yield positive values for the credit boom variable; increases below this level yield negative values, or a credit crunch. The hypothesis behind the credit boom variable is that credit unions get caught up in credit booms along with the banks and expand their personnel capacity to accommodate the increased business volume. The year after the credit boom, when economic conditions are often less buoyant, credit unions may have difficulty cutting back on this additional capacity (both because of restrictive labor laws and the social orientation of the credit unions), which then reduces their profits. Conversely, if a credit crunch has taken place in the last year, the credit union may have initiated cost-cutting measures, which may improve profits this year as more of the full force of these reductions is felt, often together with an economic recovery in the current year. This situation tends to force greater credit union output from a reduced stock of labor, thereby increasing productivity and profits. This argument may explain the significantly negative sign that we consistently find for the credit boom variable in the profit regressions.

Price Policy Variables

Given that the logarithmic price and fixed capital variables have all been centered around their means, it is straightforward that in both equations 1 and 5, \( \frac{\partial \ln p_i}{\partial \ln z} = a_i \) for any netput \( z \) at the point of sample means. The usual monotonicity argument would imply that these partial derivatives and therefore the \( a_i \) coefficients should be positive for output prices (because increasing the price of investments or loans should increase profits) and negative for input prices (because increasing the price of deposits, labor, or materials should decrease profits). However, we use a posted loan rate in this study instead of an implicit loan rate in order to allow prices and other variables to affect profits through the delinquency channel. Therefore, these monotonicity results need not necessarily hold.

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23 On the connection between real exchange rate volatility and aggregate investment, see, for example, Edwards (1989).

24 We use bank credit growth and loan rates because we do not have good aggregate statistics for credit union loan rates in any of the three countries.
In most regressions, including those in table 3.4, the usual monotonicity condition does hold for the loan price variable at the point of means. In addition to the normal direct impact on profits of an increased output price, higher loan rates are also associated with lower delinquency rates (see table 3.2), reinforcing the positive impact on profits. The most consistently signed price variable in the profit regressions is that for wages, which has a positive sign in every profit regression we ran and is almost always very significant as well. This outcome represents a strong efficiency wage result, which parallels the salutary effect of higher wages on delinquency that we find in the delinquency regressions. This result provides further evidence that, in the main, credit unions would benefit from paying higher wages in order to attract and retain better-qualified personnel and to motivate them; doing so will actually increase profits. Reduced loan delinquency and perhaps better financial management, reduced turnover costs (retraining), and general increases in labor productivity will more than offset the increased wage bill. Higher deposit rates are often associated with higher profits in the regression analysis, as they are in the ordinary translog regression, reflecting the earlier result that higher deposit rates motivate loan repayment. The investment and materials price variables are often insignificant at the point of means, possibly reflecting multicollinearity problems or measurement errors in the series.

The point estimates in the slack translog regression for the deposit and loan markup factors are −0.52 and −0.41, respectively (table 3.4). These values indicate that, compared with an efficient (conditional profit-maximizing) credit union, the credit unions in this sample mobilized about 50 percent less in deposits and made about 40 percent less in loans. Although variants of the slack translog regression shown in table 3.4 involving different sets of intercept shift variables yielded estimates for these two markup factors rather consistently in the −0.3 to −0.5 and −0.2 to −0.4 ranges, respectively, all of these parameter values should be taken as quite preliminary. When the slack profit regressions were run with only the parameter for the markup on loans, the estimated values for that parameter clustered around −0.1 (with standard errors of less than 0.05).

These and other estimates consistently support the hypothesis that the credit unions in this sample mobilized less in deposits, made less in loans, and generally used or generated less of all five of the inputs and outputs than an efficient credit union would at the given vector of prices. However, the regressions are far less consistent in their estimates of the percentage shortfalls, with many of the estimated values not statistically significant. We interpret these results as showing that the credit unions operate on a generally reduced scale, even given

25 Estimating profit functions with more than two slack parameters gave erratic results and a high frequency of nonconvergence problems.
their deposit rates and other prices. This situation appears to reflect administrative inefficiencies, perhaps in such areas as deposit mobilization, loan extension and collection, and personnel and overall management of the institution.

Like those of the delinquency regressions, the $R^2$ values for the profit equation generally fall in the 0.55 to 0.60 range, which is substantial considering that delinquency rates and profit levels are erratic from year to year and from credit union to credit union (with great variation persisting even when profit levels are normalized by fixed or total assets to adjust for varying credit union size). The profit "share" equations consistently had $R^2$ values near zero. This result is due at least in part to the fact that at profit levels near zero, the shares become unstable and can swing between very large negative and positive values from small changes (for example, measurement errors) in calculated profits. In general, the parameter estimates are not greatly affected by the inclusion or exclusion of the share equations. However, standard errors tend to be smaller in the regressions that include the share equations and employ the iterated SUR estimator.

Conclusions

This chapter has presented our conceptual frameworks for explaining credit union loan delinquency and profitability, followed by empirical estimation and discussion. It found that delinquency depends in important ways on the incentives that credit unions create for their borrowers to repay loans. These incentives range from the loan and deposit rates the credit union sets, to the overall financial health of the credit union, to the use of loan collateral and the extent to which the credit union creates a serious culture of loan repayment. Certain other credit union policy variables that operate only partially through borrower incentives are also important. Chief among these is the relative wage rate between credit unions and other financial institutions.

The analysis explained profitability within the framework of a traditional translog profit function. It showed that this function is admissible as long as the credit union's only departure from profit maximization is to alter prices (loan or deposit rates) so as to favor borrowers or savers. Further departures from efficiency are modeled using a profit function analogue to Mester’s (1989) separable-expense-preference cost function. Within both frameworks, credit union price and delinquency control policies are found to be important determinants of profitability. So important is the issue of delinquency control to maintaining profitability, that higher wage rates and often higher deposit rates increase profitability in part because of their beneficial impacts on loan repayment, despite the fact that raising these rates directly increases costs.

This chapter has provided some important guidelines for the successful operation of credit unions in developing countries. Our results also have impli-
cations for the monetary authorities in these countries. Given the importance of higher interest rates in both reducing delinquency and increasing profitability, interest rate ceilings should be avoided in order to avoid damaging the financial health of credit unions. Subsidized, targeted credit programs that undermine credit unions’ adoption of higher, market-based deposit and loan rates should also be avoided. Our results also indicate some of the potential benefits of credit union supervision, suggesting that stricter loan collection standards and more businesslike management could significantly improve delinquency rates and profitability.

The authors gratefully acknowledge the help and support of WOCCU headquarters and field staff, in particular, Brian Branch, Oswaldo Oliva, Francisco Pérez, David Richardson, Raúl Sánchez, and Luis Valladares, and the very able research assistance provided by Martín Loser and Nathan S. Shattuck.
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CHAPTER 4 Model Credit Unions into the Twenty-First Century

David C. Richardson

The birth of the cooperative movement in the mid 1800s was the start of a revolutionary concept of doing business. The original Rochdale pioneers had a remarkably clear vision as to how they wanted to organize themselves. At the core of their vision was a solution to the inherent conflicts that occurred (and still occur) between labor and capital. These pioneers postulated that by joining ranks, poorer people could pool their meager resources and conduct business transactions that benefited themselves, instead of benefiting private capitalists who demonstrated exploitative tendencies. The clear vision of the Rochdale pioneers developed into a series of cooperative guiding principles that have come to be regarded as the “Holy Grail” of cooperativism.

From 1844 to 1854, these principles were tested, refined, and ultimately distilled into nine key tenets:

- Open membership
- Democracy: one member-one vote
- Distribution of surplus as patronage dividends
- Limited return on member share capital
- Political and religious neutrality
- Cash trading
- Promotion of education
- Disposal of net assets without profit to members
- Selling only pure and unadulterated goods.

Upon review of these tenets, the overriding philosophy of the Rochdale pioneers becomes unmistakably clear. The primary intent of their cooperative enterprise was to subjugate financial capital to human capital. In other words, the cooperative promoted the supremacy of human beings over money. Such values were deeply rooted in the principles of brotherly love and kindness to all human beings. Although religious neutrality was a key principle, the concept of helping the poor and underprivileged people of the world was inherently obvious to all. Such a paradigm, even today, is radically different from the traditional private enterprise approach of capitalism.
Not long after the Rochdale principles were articulated, the first credit unions were formed. The inherent goodness of the principles attracted noble and great men to the credit union cause. Among these were four particularly notable individuals. The first two were the "founding fathers" of the credit union movement: Friedrich Wilhelm Raiffeisen (1818–1888) and Herman Schulze-Delitzsch (1808–1883). These two Germans were instrumental in launching the credit union movement in their country. At the turn of the century, Alphonse Desjardins (1854–1920) became another founding father of credit unions by organizing the first credit unions in the province of Quebec, starting in 1900. Finally, Edward Filene (1860–1937) was a driving force behind the establishment of credit unions in the United States from 1921 until his death. These visionary giants of different nationalities and religions provided a bricks-and-mortar approach to making credit unions a reality. Their unwavering commitment to the credit union ideology, coupled with their clear vision, was and still is a great legacy.

Inspired by the principles articulated by these early pioneers, the Catholic Church and Christian missionaries were instrumental in organizing many new credit unions throughout the developing world in the 1950s, 1960s, and 1970s. Peace Corps volunteers, who provided assistance to these nascent institutions, further buttressed these efforts. And international development agencies, such as the United States Agency for International Development, the World Bank, the Inter-American Development Bank, and others were instrumental in providing financial support and technical assistance to credit unions throughout the developing world. They viewed credit unions as being a viable mechanism for channeling external credit to the poorer segments of the world’s population.

With the debt crisis of the 1980s and the arrival of globalization and the liberalization of financial and macroeconomic policies in the 1990s, financial markets in many developing countries were turned upside down, with far-reaching consequences. Inflation, currency devaluation, volatile interest rates, and increased competition from alternative financial intermediaries have taken their toll on credit union movements worldwide. Once-vibrant credit union movements have been reduced to disappointing relics of institutions that have failed to adapt to the challenges of changing financial paradigms in the 1990s. The cumulative effect of these far-reaching changes has produced strikingly similar results: illiquidity, insolvency, poor administrative capacity, and loss of member confidence.

Many of these discouraging results have transcended geographical and cultural boundaries. As a result, many experts from the development finance community have begun to question the capacity of credit unions to respond to the challenges of financial intermediation in the 1990s, primarily because of perceived structural flaws in the "Holy Grail" of credit union ideology. At the heart of their criticisms is the belief that the governance structure of a credit union is to blame for the majority of the current problems. Although governance is cer-
tainly an issue with credit unions, my experience has shown that there are some underlying weaknesses that have had a far greater negative impact on the development of credit unions.

The Seven Deadly Credit Union Sins

In this section, I summarize the underlying weaknesses in credit unions. I call these weaknesses the seven deadly credit union sins.

1. External Dependency

Until the 1990s, many credit unions were like most nongovernmental organizations that depended on donor funding to finance the bulk of their credit operations. Instead of embarking on savings mobilization programs to gain independence from donor funding, these credit unions continued to look for favorable financing from international sources. This external dependency came with certain strings attached because most donors specified the objectives or activities that their money would be used to finance. Instead of being in charge of their own destiny, many credit unions had to change their focus and direction to conform to donor-mandated wishes. This inability to control their future led many credit unions down dead-end roads that ultimately did more damage than good. Credit unions that depended on external funds often suffered from high delinquency rates when they directed credit to targeted markets regardless of the risk or return in those markets. Many credit unions deflated and collapsed when those external funds dried up.

2. Confusing Financial Information

Due to a lack of standardized accounting nomenclature and policies, many credit unions presented their financial information in a variety of ways, using different accounts to classify assets, liabilities, and capital, as well as income and expenses. The net effect of this diversity of accounting procedures and formats was that most information was very difficult to understand and analyze. Sometimes the accounts painted an overly optimistic picture of credit union affairs, with overstated asset values, operating expenses deferred and amortized over time, and other smoke-and-mirrors accounting gimmicks.

3. Uncompetitive Products and Services

The traditional credit union generally offered only one main product: cheap loans. In order to provide subsidized loans to its members, the credit union could not
pay attractive rates of return on its savings products, nor could it pay competitive salaries to its employees. This precipitated a variety of serious problems that helped contribute to illiquidity and insolvency in many credit unions. The informal slogan, recognized by many credit union members, was: “Go to the credit union when you want to borrow money . . . Go to the bank when you want to save money.”

4. **Poor Public Image**

The problem of poor public image can be broken down into three areas: the physical facilities (buildings, furniture, and alarm systems), the dress code for employees, and the marketing program (identification of new market niches, publicity, and promotional campaigns). Each of these areas can adversely affect the public image of the credit union. It is ironic, but one of the devastating effects of providing cheap loans was that credit unions did not have enough resources (capital reserves) to improve their physical appearance or to carry out an effective marketing program.

5. **Undisciplined Fiscal Operations**

A careful study of insolvent credit unions would reveal that the reason for failure in the majority of cases was that financial discipline was nonexistent in their day-to-day operations. There are five key aspects of financial discipline: delinquency control, creation of adequate loan loss reserves, creation of adequate institutional capital reserves, creation of adequate liquidity reserves, and proper asset-liability management.

Although it could be argued that problems arose due to weak governance, a more correct assessment would be that the credit union did not practice adequate financial discipline. In most cases, the concept of financial discipline is just now beginning to be understood in cooperative circles. The apparent lapse of discipline was more a result of ignorance than of weak governance. With proper training and orientation, most board members are anxious to do what is right.

6. **“Cookie-Cutter” Loan Analysis**

A cookie cutter is a preformed mold that can be used with little or no thought. In credit unions, share-multiple-based lending has been the cookie cutter. In essence, a member would be qualified for a loan amount based upon a multiple of his or her shares (that is, 2:1, 3:1, 5:1, 10:1, etc.), without any other type of analysis. As loan sizes continue to grow, loans become more complicated and a more thorough, repayment-capacity approach to loan analysis becomes even more urgent.
7. Social Philosophy over Common Business Sense

The traditional credit union primarily viewed itself as a social organization oriented toward helping poor people. Decisions often were made from a social perspective (based on whether an action would help poor people) rather than from a business perspective (based on whether it would hurt the credit union). The new model credit union does not discard the importance of maintaining a social conscience. Instead, it promotes the idea that the credit union must be financially strong before it can effectively help the poor. This concept can be restated from an agricultural perspective: a cow must be fed and given proper nutrition if it is going to continue to provide milk. A credit union is not a social welfare institution; it is, first, a business.

The Financial Landscape of the 1990s

The seven deadly credit union sins are not unique to credit unions. In fact, there are a great many banks, finance companies, and nongovernmental organizations that have failed because they have succumbed to one or more of the seven deadly sins. With the failure of so many of these other financial institutions, the international financial community has embarked on a vigorous campaign to promote the regulation and supervision of all institutions that capture savings from the public. Although this campaign is generally a positive development, it has had important negative side effects on credit unions, for at least two reasons.

First, many financial experts and advisors under the employ of international development banks and other donor agencies have a limited understanding of the operational ideology of a credit union. They have suggested that all financial institutions must adhere to the same set of rules, notwithstanding their many operational and philosophical differences. These rules, in many instances, have adversely and unnecessarily impacted the credit union’s ability to compete in the marketplace. Some regulations may impose unnecessarily high capital adequacy requirements on credit unions, which raise their capital from low- to middle-income client equity investment and from retained earnings. Other regulations may impose high costs on making the smaller loans in which credit unions typically specialize.

Second, with the increased awareness of the need for proper regulation and supervision, many bank superintendencies have found themselves ill prepared to deal with the burgeoning demand for their supervisory services. In most countries that I have visited, this is due to serious budget constraints and untrained staff. The superintendencies have reacted to this latest challenge by trying to impose new restrictions which would abolish or severely restrict the activities of all financial institutions falling under their supervision that do not
meet minimum capital requirements, set in terms of fixed nominal amounts (for example, $1 million). Clearly, such restrictions would pose a serious threat to the survival of all small credit unions, and to the possibility of forming new credit unions in small communities not served by other financial institutions.

Reacting in part to poignant criticisms from outside the movement, many credit union leaders from different areas of the world have embarked on their own journeys, abandoning time-tested credit union principles to search for innovative strategies to deal with the new financial landscape of the 1990s. The main thrust of their initiatives has been toward a commercial, for-profit business approach. This approach has translated into pursuing business opportunities of all types, with anyone who walks in the door, as long as the opportunities are profitable. With such a focus, the differences between a credit union and a bank continue to blur, and in some cases, have almost vanished.

Notwithstanding all of these difficulties, in many industrial countries, credit unions have enjoyed great prosperity and increasing levels of market penetration. This success has been a bright spot in the otherwise volatile and unpredictable international financial markets, where the risks of a free market economy have adversely affected so many. Ironically, credit unions in the United States have become too successful. The American Bankers Association has waged a campaign against the U.S. credit union movement by lobbying congressional leaders for greater restrictions on credit union growth.

As we approach the new millennium, these successes are a convincing reminder that the credit union governance structure is not woefully flawed, and that credit unions can compete and survive in the new global market economy. The credit union operating ideology continues to withstand the test of time, demonstrating across geographical and cultural boundaries that success is possible. Instead of abandoning the time-tested principles set up by the founding fathers, what is needed is a recommitment to those principles by articulating a new vision for the twenty-first century. This vision should reinforce the credit union principles through a new operational model that will help credit unions realign their daily operations so that they can effectively meet the challenges of the global economy.

The New Model Credit Union Methodology

During the 1990s, the World Council of Credit Unions (WOCCU) developed and refined the “model credit union” methodology. It outlines the conceptual framework for credit unions to modernize their traditional operations and position themselves to compete effectively in a free market economy. (See table 4A for a summary of the new model.) This modernization process is comprised of three distinct phases: dependence, independence, and interdependence. These
phases can be clearly identified by certain unmistakable characteristics that affect the institution, its products and services, and its human resources.

When combined, these elements produce a certain image quality: dependence produces a poor image, independence produces a better image, and interdependence produces the best image. The concept of interdependence validates an old credit union saying, “unity builds strength.” Paradoxically, unity also builds a reliance on the system as a whole. Interdependence can operate effectively only in an environment where there is a high level of uniformity and standardization among the credit unions.

Throughout the modernization process, it is not uncommon for a credit union to be in several phases of development at the same time because each phase exhibits a variety of different characteristics. Table 4.1 outlines the characteristics of each phase of credit union development.

 Everyone should be heading toward the third phase. With the advent of the computer, the traditional savings and credit products are increasingly being replaced in the financial marketplace with a large array of new electronic financial products and services. These services include automated teller machines, telephone banking, and computerized home banking. These types of products are very costly to develop and require a huge volume of transactions in order to justify the initial investment. If credit unions are going to remain competitive, they must quickly adopt new technology and at the same time build an excellent

<table>
<thead>
<tr>
<th>Table 4.1. Phases of Credit Union Development</th>
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<tbody>
<tr>
<td><strong>Phase</strong></td>
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<tr>
<td>------------------------------------------------</td>
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<tr>
<td>1. Dependence and poor image</td>
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<tr>
<td>2. Independence and good image</td>
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<tr>
<td>3. Interdependence (network) and excellent image</td>
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</table>
professional image in the communities where they operate. The only way that a credit union can have an excellent image is if it can achieve three important goals: uncompromised institutional financial strength, a diverse array of high-quality products and services, and competent and trustworthy leaders and employees.

The achievement of these goals requires a radical change from the traditional credit union approach of the past 25 years. The old credit union was unsophisticated and easy to manage. Macroeconomic conditions were relatively stable, with little volatility, so interest rates, both on loans and deposits, were also very stable. Competition was limited and the credit union enjoyed a captive market with excess demand and a limited supply of credit resources. Most credit union managers only had to worry about three variables: member shares, loans from donors, and loans to members.

With the arrival of globalization in the early 1990s, credit unions were besieged by a number of variables that required constant vigilance. Donor money had disappeared and credit unions were forced to mobilize savings deposits in order to have loanable resources. The macroeconomic setting had also become extremely volatile, so interest rates fluctuated on almost a daily basis.

**Component Areas of the New Model Credit Union Methodology: A Metaphor**

The new model credit union methodology was designed to help credit union managers deal with all the fluctuating variables. This methodology is likened to playing the piano with both hands. The right and left hands and feet operate independently of each other but all are synchronized to yield beautiful music. In this metaphor, there are some powerful similarities between piano playing and administration of a credit union. In music, there are three key components: melody, harmony, and bass. A piano is one of the few instruments on which all three can be played at the same time. In the new model credit union methodology, there are likewise three key areas that can be likened to playing the melody, the harmony, and the bass. As noted above, the key areas are the human resources, the products and services, and the institution’s financial controls. When combined, these three components form the basis for a magnificent opus.

**The Melody, Human Resources**

The most important part of any musical composition is the melody. Its notes are what is heard and repeated. Many times, people who try to sing the melody know the words, but have difficulty in carrying the tune. In a credit union, the melody is represented by the human resources, more specifically, the directors,
manager, and staff. These people all must be committed to the modernization process. I have seen many directors, managers, and other employees who can repeat the buzzwords of modernization, such as controlling delinquency, mobilizing savings, paying market rates of interest, building institutional capital, and, in general, overcoming the seven deadly credit union sins. But many of those people cannot carry the correct melody with the words; that is, they cannot carry out the activities.

Talking the talk and walking the walk are two very different things. Singing the correct melody means that everyone is “walking the walk.” This means that actions and words are consistent with each other. One of the great weaknesses of the international credit union movement is that it has many more philosophers than real practitioners. It is easy to talk of the need for change, but when such change adversely affects the comfort zone of board members or managers, the process of change often breaks down. The long, difficult process of changing the way people think is by far the most difficult aspect of modernization. When people ask me how long this process takes, I respond by saying that it depends on the amount of resistance that must be overcome from board members, managers, and staff. If these groups are opposed to change, the process can be quite protracted. If there is unanimity of purpose, the change process can occur quickly, over a period of just a few years.

An international development organization can employ a variety of strategies to motivate people to change. Unfortunately, development experts have thought that technical assistance and credit are the only available alternatives. In my experience, I have found that permanent change is possible if three important carrots (incentives) are used simultaneously: financial resources, human resources, and programs and tools.

Financial Resources

Financial resources are probably the most powerful agents of change, yet many development organizations have not learned how to effectively maximize the use of these resources. There are four key principles for the proper use of financial resources.

The first principle is acceleration. Resources may be used to shorten the time it takes to get from point A to point B. In development terms, this can be very motivational if the process is typically long and hard.

The second principle is the role of counterpart funds. Resources may be invested only if there are legitimate counterpart funds that encourage entrepreneurial spirit and a risk-taking attitude. Where everything is 100 percent financed, there is no chance for the beneficiaries to lose their own money.
The third principle is reinforcement. Resources should only be used to strengthen the institutional capacity of the beneficiary organization. Too often, institutional strengthening is neglected because something else that is more expedient is undertaken instead, such as providing loanable resources or salary subsidies. Expediency should never be allowed to violate these core financial resource principles.

The fourth principle is sustainability. One of the most important uses of financial resources should be to achieve full operational and financial sustainability. In order for this to happen, the resources should be channeled only into activities that respond to market forces.

Human Resources

Opposite the financial resources are the human resources. The overriding objective of this component is to employ only people who can elevate the beneficiary credit unions to a higher plane. Too often, “experts” are hired who are at the same level as the beneficiaries. If the beneficiaries know just as much as or more than the experts, technical assistance becomes redundant or even counterproductive. In order to be successful, a person must garner the trust and confidence of the people he or she is working with. Trust is a function of competence and character. Both aspects are critically important.

Each professional who is hired should demonstrate a high level of competence in four skill areas: technical knowledge, commercial experience, communications skills, and leadership skills.

• Technical knowledge. Every person should have technical knowledge—well-grounded, specialized knowledge in the areas of his or her expertise. Generalists are no longer the ideal candidates for influencing change.
• Commercial experience. In addition to knowledge, each person should have had real-world commercial experience in doing what they are being hired to do. Too often, I have seen experts teaching the five C’s of credit analysis without ever having made a loan in their professional career.
• Communications skills. An expert may have the knowledge and the experience, but does he or she have the communications skills to transfer knowledge to others? Oral and written communications skills are critically important in the overall process of permanent change.
• Leadership skills. Leadership is the most important quality for change. Usually, if the hired professional has technical knowledge, real-world experience, and communications skills, he or she will display a strong capacity to lead. Leadership is that quality in a person that can influence others to change because of who the person is, rather than what the person knows.
Character is another matter. I have found that there are four cardinal virtues of character in achieving permanent change: honesty, courage, integrity, and passion.

- **Honesty.** This is the most basic virtue, yet the most profound. Professionals must constantly be aware of the need to be honest in all of their business dealings.
- **Courage.** It is difficult to go against the grain, particularly when an individual’s opinion upsets the status quo. It takes courage to maintain convictions.
- **Integrity.** In a nutshell, integrity means promises made, promises kept. A person’s commitments should be held inviolate.
- **Passion.** Is the individual’s job just a paycheck, or is the person willing to make personal sacrifices to ensure success? People who are passionate about their work tend to ignite passion in others. Passion is one of the great catalysts of permanent change.

*Programs and Tools*

When financial and human resources are effectively combined, a third carrot emerges from the interaction of the two. Programs and tools are developed that can help managers become much more effective in the administration of their credit union. The power of WOCCU’s new model credit union methodology is not in its conceptual framework, but in the practical programs and tools that are provided to credit union managers and board members to make their job easier.

WOCCU has developed a series of integrated tools and programs that have proven to be in high demand with credit union managers and personnel. For example, WOCCU has developed model credit union legislation, model credit union bylaws, standardized accounting nomenclature, the computerized PEARLS monitoring system (described below), a computerized business planning system, a computerized delinquency control system, savings mobilization programs, credit administration programs, and financial stabilization programs.

Once people become aware of these new tools and programs, they are highly motivated to learn the new technology because they realize that it is useful in helping them do their jobs more effectively. One of the most innovative programs ever developed by WOCCU was its financial stabilization program, created in Guatemala in 1987. Instead of injecting new financial resources into the credit unions for on-lending, resources were injected only to help write off bad loans, build institutional capital, and aggressively pursue savings mobilization. This injection of resources played a major role in bringing about complete financial independence from donor money and in dramatically improving credit union
performance. Ironically, the $880,000 used for financial stabilization was a more powerful carrot than the $1,100,000 credit fund (which provided resources for on-lending and was never used). Ultimately, not one cent of the stabilization fund money was lost in nonperforming credit unions.

In summary, through the proper use of financial resources, human resources, and technical programs and tools, it is possible to change the mentality of credit union directors, managers, and other personnel.

The Harmony, Products and Services

In music, the melody is never meant to be sung alone. There is always a harmony, which complements and enriches the melody. The next worse thing to a melody that is sung off-key is to listen to a song that has poor harmony. Harmonizing is a key process in the new credit union methodology. It is the process whereby the credit union provides the highest possible quality financial products and services that are in harmony with its financial and institutional capacity. For example, automated teller machines can be put into service only if the credit union has sufficient institutional capital to finance their purchase and sufficient technical capacity to support their use—and so may be offered by some credit unions, but not others. As another example, savings and time deposit accounts and multiple loan types (including, for example, housing, business, and consumer loans), all at competitive market interest rates, can be offered even by credit unions of more modest means and capabilities. That is, offering such services could be in harmony with the financial and institutional capacities of a large number of credit unions, and would represent a significant improvement in products and services over simple share accounts and a single type of loan, both with uncompetitive interest rates.

Depending on the sophistication and financial capacity of the credit union, the products and services it offers can be numerous. In most instances, there are three main groups of products: loan products, savings products, and insurance products. As a credit union matures in its modernization process, the list of new products and services within these three main areas continues to expand, because members become more demanding in terms of their needs and wants. The goal of a modernized credit union is to provide quality products and services at competitive prices to its members. Therefore, each of the products and services must be harmonized with each other and with the institutional and financial capacity of the credit union, to ensure that the slogan, “not for profit, nor for charity, but for service,” lives up to member expectations.

Providing high-quality financial products and services can be a difficult process because sometimes the credit union has serious operating deficiencies or a tarnished image that impedes its ability to provide the quality of service
that its members demand. The harmonization process becomes more complicated as the list of products and services grows, but in no case does it take less than three to five years. The process can be particularly lengthy and difficult for credit unions without adequate capital to purchase a new building or information systems or to undertake other expensive modernization initiatives that may be needed.

The Bass, Financial Controls

The final part of a musical composition is the bass. Its purpose is to frame the melody and the harmony within a set of defined parameters. The bass is typically characterized by a limited range of musical notes, set to a repetitive sequence. The mystical powers of the bass are paradoxical. The more mundane and repetitive the notes are, the more entrancing its power. The process of repetition establishes a rhythm that ultimately controls and surprisingly accentuates the melody and the harmony. In the new model credit union methodology, the bass has an undeniably preeminent role. It is represented by the financial controls imposed on the credit union, from both without and within. There are four key component areas: the legal framework, financial discipline and standards, external audits and prudential supervision, and the monitoring system.

Upon review of these four component areas, it should be clear how each one affects the institution itself and its operations. The legal framework establishes the rules, financial discipline, and standards to help guide the credit union through its annual business plan. The monitoring system signals the weak areas. And the audit verifies financial information, which assists the supervisory body in correcting weaknesses through the implementation of remedial actions. When all of the component parts work together, it should not be surprising that problems can be controlled before they get out of hand. In this sense, the cadence established by the monotonistic tendencies of these four areas keeps the credit union marching to the beat without veering off onto forbidden paths.

Legal Framework

Many credit unions around the world operate within a legal structure that was created in the 1950s. Credit unions were lumped together with a variety of different cooperative institutions and placed under the same cooperative law. Credit union bylaws in most instances were copied from those of other cooperative institutions, with little thought given to the needs of the credit union as a financial institution. In the 1990s, the radical change in the financial landscape has created an urgent need to revise the existing legal framework of many credit unions or, preferably, to start anew. A variety of key legal changes need to be
made, including, for example, revision of the respective responsibilities and powers of the board, management, and annual general assembly in such areas as the approval of operating budgets and the setting of interest rates.

Financial Discipline and Standards

The cornerstone of the new credit union model is financial discipline. This has been a controversial topic because some directors have felt that complying with financial discipline has taken away their most coveted possession: autonomy. In reality, modernized credit unions that have achieved financial discipline have learned an important and paradoxical lesson: the more financial discipline a credit union has, the more autonomy it also has. Although this has been a very difficult statement for some to accept, it is true in practice because financial strength brings real autonomy. In order for financial discipline to work, there must be a set of standards that provide clear guidelines. Once the guidelines are set, financial discipline is the process whereby the guidelines are followed, to the letter of the law. Obviously, the board and management are the key players in the process of acquiring and sticking with financial discipline.

External Audits and Prudential Supervision

The objective of external audits is to verify the accuracy of the accounting information produced by the credit union. Once that information is available, the role of supervision is to enforce compliance with a pre-established set of prudential regulations. The main constraint on these two activities is human resources. As I mentioned earlier, there is a widespread lack of understanding among many accountants, auditors, and bank examiners and analysts regarding the true nature and operational ideology of a credit union. If credit unions are to be effectively supervised, these differences must be properly allowed for when prudential regulations and supervisory procedures are established. This does not imply lower standards or looser supervision, but rather oversight that takes account of the unique nature of credit unions and permits them to continue offering full services to lower-income members of society.

Monitoring System

In response to the need for more accurate and useful financial information, an effort was made to implement the CAMEL monitoring system in Guatemala in the late 1980s. After several attempts, it was determined that, although CAMEL was a good tool for supervisors, it did not provide all of the information that managers needed to manage their credit unions. The two greatest deficiencies of CAMEL
were that it did not analyze financial structure and it did not look at growth rates of key variables. These deficiencies were the catalysts behind the creation of a new monitoring system entitled PEARLS. Although CAMEL is still widely used, most people ultimately prefer PEARLS when they see a side-by-side comparison of the two systems. The PEARLS system was developed in Guatemala during the early 1990s. Since then it has been used in a number of countries around the world and it has proven itself to be an extremely useful management tool.

The PEARLS acronym was originally developed in Spanish, with the name PERLAS. Each letter carries the following meaning:

P  Protección (protection). Protection refers to the adequacy of the loan loss provisions and the process whereby delinquent loans are written off the financial statements.

E  Estructura financiera (financial structure). The following key balance sheet variables are measured as a share of total assets: loans, liquid assets, savings deposits, external credit, member shares, and institutional capital.

R  Rendimientos y costos (yields and costs). Rates of return are measured for all key investments, including the yield on member savings and the dividend yield on member shares.

L  Liquidez (liquidity). Liquid investments and liquidity reserves are measured against savings and time deposits to ensure adequate institutional liquidity for satisfying all deposit withdrawal requests.

A  Activos improproductivos (nonearning assets). Loan delinquency and nonearning assets are measured and treated as the two most important things to minimize in the financial administration of the credit union.

S  Señales expansivas (signs of growth). The growth rates of the following key balance sheet variables are measured: total assets, loans, deposits, external credit, shares, institutional capital, and membership.

The purpose of any monitoring system is to act as an early warning system that alerts board members, managers, accountants, and examiners to potential problems before they arise. The advantage of PEARLS over CAMEL is that it not only indicates potential problem areas, it also indicates the reasons for the problems and implicitly provides recommendations for improvement.

The Guatemalan Opus and the PEARLS Indicators

From 1987 to 1994, the United States Agency for International Development funded the Cooperative Strengthening Project in Guatemala. During this
period, much of the new model credit union methodology was developed, tested, and refined. This chapter has discussed the problems that credit unions have encountered as they prepare to enter the twenty-first century. It has also discussed the conceptual underpinnings for the new model credit union methodology.

As a final piece to this presentation, it seems proper to present the financial results and performance indicators of the Guatemalan credit union movement from the inception of the Cooperative Strengthening Project in 1987 to its conclusion in 1994. The results for the subsequent three years, 1995–97, are also presented because they conclusively answer the many questions that have been raised concerning the sustainability of this new methodology. During these three years, the national federation of credit unions in Guatemala (known by the acronym FENACOAC) and the 20 FENACOAC member credit unions that participated in the project were basically on their own to carry out the work of modernization, except for occasional visits from WOCCU.

Table 4.2 shows, on a consolidated basis, the rapid growth in several major balance sheet indicators and in total membership for the 20 participating credit unions. The comparatively slow growth of member shares reflects the shift from share savings (which were often obligatory) to deposits (which were voluntary and more highly remunerated), which was part of the project’s paradigm shift.

There are 39 PEARLS indicators. For the sake of space, here I discuss only 12 PEARLS indicators for the Guatemalan credit unions (table 4.3). The 12 are considered to be the key PEARLS indicators and are used by WOCCU in the

<table>
<thead>
<tr>
<th>Year</th>
<th>Total assets</th>
<th>Loan portfolio</th>
<th>Deposits</th>
<th>Member shares</th>
<th>Institutional capital</th>
<th>Net earnings</th>
<th>Total membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>20,601</td>
<td>12,885</td>
<td>5,051</td>
<td>9,698</td>
<td>1,028</td>
<td>343</td>
<td>60</td>
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<tr>
<td>1988</td>
<td>22,994</td>
<td>14,305</td>
<td>5,691</td>
<td>10,470</td>
<td>1,255</td>
<td>494</td>
<td>65</td>
</tr>
<tr>
<td>1989</td>
<td>25,042</td>
<td>15,673</td>
<td>6,884</td>
<td>11,024</td>
<td>1,474</td>
<td>548</td>
<td>66</td>
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<tr>
<td>1990</td>
<td>21,168</td>
<td>11,629</td>
<td>7,224</td>
<td>8,284</td>
<td>1,397</td>
<td>444</td>
<td>72</td>
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<tr>
<td>1991</td>
<td>24,958</td>
<td>14,686</td>
<td>9,732</td>
<td>9,449</td>
<td>2,144</td>
<td>703</td>
<td>76</td>
</tr>
<tr>
<td>1992</td>
<td>30,053</td>
<td>17,482</td>
<td>14,368</td>
<td>10,502</td>
<td>2,695</td>
<td>559</td>
<td>80</td>
</tr>
<tr>
<td>1993</td>
<td>35,855</td>
<td>24,556</td>
<td>17,631</td>
<td>12,262</td>
<td>3,832</td>
<td>985</td>
<td>90</td>
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<tr>
<td>1994</td>
<td>45,703</td>
<td>29,838</td>
<td>25,009</td>
<td>13,748</td>
<td>4,934</td>
<td>1,405</td>
<td>104</td>
</tr>
<tr>
<td>1995</td>
<td>58,064</td>
<td>41,055</td>
<td>30,944</td>
<td>16,181</td>
<td>6,571</td>
<td>1,835</td>
<td>120</td>
</tr>
<tr>
<td>1996</td>
<td>71,081</td>
<td>47,504</td>
<td>39,355</td>
<td>18,440</td>
<td>8,265</td>
<td>2,019</td>
<td>174</td>
</tr>
<tr>
<td>1997</td>
<td>94,362</td>
<td>54,487</td>
<td>58,784</td>
<td>20,909</td>
<td>10,432</td>
<td>2,918</td>
<td>200</td>
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</table>

Note: Real 1997 dollar values are obtained by converting nominal 1987–96 quetzal values to real 1997 local prices using the Guatemalan consumer price index and then using the 1997 exchange rate of Q 6.18 = 1 dollar.
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</thead>
<tbody>
<tr>
<td>P1, total loan loss provisions/total delinquency greater than 12 months</td>
<td>52.5</td>
<td>63.6</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<tr>
<td>P2, net loan loss provisions/total delinquency one to 12 months</td>
<td>0.0</td>
<td>0.0</td>
<td>33.0</td>
<td>30.0</td>
<td>42.8</td>
<td>57.8</td>
<td>36.9</td>
<td>35.6</td>
<td>33.3</td>
<td>30.0</td>
<td>41.8</td>
</tr>
<tr>
<td>E1, net loans/total assets</td>
<td>62.5</td>
<td>62.2</td>
<td>62.6</td>
<td>54.9</td>
<td>58.8</td>
<td>58.2</td>
<td>68.5</td>
<td>65.3</td>
<td>70.7</td>
<td>66.8</td>
<td>57.7</td>
</tr>
<tr>
<td>E5, total deposits/total assets</td>
<td>24.5</td>
<td>24.8</td>
<td>27.5</td>
<td>34.1</td>
<td>39.0</td>
<td>47.8</td>
<td>49.2</td>
<td>54.7</td>
<td>53.3</td>
<td>55.4</td>
<td>62.3</td>
</tr>
<tr>
<td>E8, total institutional capital/total assets</td>
<td>5.0</td>
<td>5.5</td>
<td>5.9</td>
<td>6.6</td>
<td>8.6</td>
<td>9.0</td>
<td>10.7</td>
<td>10.8</td>
<td>11.3</td>
<td>11.6</td>
<td>11.1</td>
</tr>
<tr>
<td>A1, total loan delinquency/total loan portfolio</td>
<td>18.8</td>
<td>14.9</td>
<td>12.7</td>
<td>11.5</td>
<td>8.0</td>
<td>6.9</td>
<td>8.1</td>
<td>8.1</td>
<td>7.3</td>
<td>10.2</td>
<td>7.1</td>
</tr>
<tr>
<td>A2, total nonearning assets/total assets</td>
<td>14.5</td>
<td>15.2</td>
<td>15.0</td>
<td>13.3</td>
<td>11.6</td>
<td>10.5</td>
<td>8.2</td>
<td>7.9</td>
<td>6.4</td>
<td>6.3</td>
<td>5.9</td>
</tr>
<tr>
<td>R6, dividends paid on member shares/average member shares</td>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
<td>1.6</td>
<td>2.6</td>
<td>3.6</td>
<td>5.8</td>
<td>7.5</td>
<td>7.5</td>
<td>8.3</td>
<td>6.9</td>
</tr>
<tr>
<td>R9, operating expenses/average assets</td>
<td>6.4</td>
<td>5.8</td>
<td>6.6</td>
<td>6.7</td>
<td>7.0</td>
<td>7.9</td>
<td>7.1</td>
<td>8.0</td>
<td>7.4</td>
<td>7.5</td>
<td>6.9</td>
</tr>
<tr>
<td>L2, liquidity reserves/total deposits</td>
<td>3.8</td>
<td>5.1</td>
<td>6.6</td>
<td>9.6</td>
<td>10.4</td>
<td>9.9</td>
<td>9.8</td>
<td>9.8</td>
<td>8.5</td>
<td>9.8</td>
<td>9.8</td>
</tr>
<tr>
<td>S1, total asset growth</td>
<td>21.1</td>
<td>25.3</td>
<td>30.3</td>
<td>35.0</td>
<td>30.3</td>
<td>38.7</td>
<td>33.7</td>
<td>42.6</td>
<td>39.6</td>
<td>34.5</td>
<td>44.7</td>
</tr>
<tr>
<td>S7, total membership growth</td>
<td>5.5</td>
<td>9.0</td>
<td>0.4</td>
<td>9.3</td>
<td>6.2</td>
<td>4.6</td>
<td>13.8</td>
<td>14.9</td>
<td>15.8</td>
<td>13.2</td>
<td>16.9</td>
</tr>
<tr>
<td>ROA, net income (after dividends)/average total assets</td>
<td>1.7</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
<td>3.2</td>
<td>2.2</td>
<td>3.1</td>
<td>3.6</td>
<td>3.7</td>
<td>3.3</td>
<td>3.7</td>
</tr>
<tr>
<td>ROE, net income (before dividends)/average equity (shares plus institutional capital)</td>
<td>25.3</td>
<td>34.0</td>
<td>34.7</td>
<td>39.3</td>
<td>44.7</td>
<td>36.4</td>
<td>48.0</td>
<td>49.0</td>
<td>45.6</td>
<td>42.4</td>
<td>40.7</td>
</tr>
</tbody>
</table>
PEARLS Ranking System (another tool) to compare credit unions with each other. In addition, I include the return on assets and the return on equity as part of this analysis because these two ratios are widely used in commercial circles to measure institutional profitability. Like table 4.2, table 4.3 presents all indicators on a consolidated basis for the 20 credit unions that participated in the Cooperative Strengthening Project.

**P1, Total Loan Loss Provisions/Total Delinquency Greater than 12 Months (goal: 100 percent)**

The P1 ratio measures the adequacy of the loan loss provisions when compared with the value of all loans delinquent 12 months or more. At the start of the project, the credit unions were clearly deficient in this area. Since 1989, they have maintained the goal of 100 percent.

**P2, Net Loan Loss Provisions/Total Delinquency 1 to 12 Months (goal: 35 percent)**

The P2 ratio measures the adequacy of the loan loss provisions when compared with the value of all loans delinquent from 1 to 12 months, after subtracting the loan loss provisions necessary to satisfy the P1 indicator. With the exception of the first two years, the credit unions were generally able to maintain the goal of 35 percent for P2.

**E1, Net Loans/Total Assets (goal: 70–80 percent)**

The E1 ratio measures the percentage of total assets that are invested in the loan portfolio after subtracting loan loss provisions. In the case of Guatemala, there has always been a more conservative approach to lending. As a result, the credit unions have typically been below the minimum goal of 70 percent. This continues to be an area of challenge for them.

**E5, Total Deposits/Total Assets (goal: 70–80 percent)**

The E5 ratio measures the percentage of total assets that are financed from all deposits, including both savings deposits and time deposits. Achieving the goal of 70–80 percent is a long-term process. The Guatemalan credit unions have gradually modified their financial structure over the years, as a result of their highly successful savings mobilization programs. They have come from 24.5
percent to 62.3 percent over a 10-year period, and are quickly closing in on the goal of 70 percent.

**E8, Total Institutional Capital/Total Assets**  
*(goal: 10 percent)*

The E8 ratio measures the adequacy of the institutional capital reserves of the credit union. Institutional capital does not include member shares, loan loss provisions, or educational, social, or revalued fixed asset reserves that are typically counted as capital under the Basle Accords. The only reserves that are included in this ratio are the statutory legal reserves and the undivided retained earnings reserves. This measure is one of the most important ratios of financial strength and solvency. Since 1993, the credit unions have been able to maintain this goal, notwithstanding their high nominal growth rates of total assets (in excess of 40 percent per annum over this period).

**A1, Total Loan Delinquency/Total Loan Portfolio**  
*(goal: less than 10 percent)*

The A1 ratio measures the delinquency of the total gross loan portfolio (before deducting loan loss provisions). The numerator includes the total value of the loan balances of all loans delinquent more than 30 days. This measure conforms to the standard “portfolio at risk” measure used by commercial banks. For the first two years of the project, the participating credit unions counted only the delinquent loan payments in the numerator of the formula (rather than the entire loan balance), so the delinquency rates of 18.8 and 14.9 percent understate the magnitude of the real delinquency in those years. In any event, the credit unions have done well in keeping this ratio below 10 percent in most of the recent years.

**A2, Total Nonearning Assets/Total Assets**  
*(goal: less than 5 percent)*

The numerator in the A2 ratio includes all of the assets that do not earn income: cash, checking accounts, accrued interest receivable, and all fixed and other assets that do not generate income. Meeting the 5 percent goal has been a severe challenge for many of the Guatemalan credit unions, given their urgent need to improve their physical facilities and open new branch offices to increase their market penetration. The remarkable reduction of this ratio to 5.9 percent by 1997 despite these many expenditures is one of the great accomplishments of these credit unions.
R6, Dividends Paid on Member Shares/Average Member Shares  
(goal: equal to or greater than the inflation rate)

The R6 ratio measures the yield paid on member shares. Historically, the yield on member shares has always been below the inflation rate; in many credit unions, it has been nonexistent. This ratio has gone from 0 percent in 1987 to 7–8 percent in 1995–97. At present, the yield on member shares is about the same as the inflation rate in Guatemala.

R9, Operating Expenses/Average Assets  
(goal: 3–10 percent)

The R9 ratio measures the operating costs of the credit union, divided by average assets. The only typical operating expense excluded from this ratio is the loan loss reserves expense, which is measured separately. This ratio has fluctuated between six and eight percent for the entire period of the project. What is not shown is the increase in the employees’ salaries over the same period. Whereas at the beginning of the project the employees were grossly underpaid, by the end of 1997, it was common for the credit union to offer some of the best salaries available in the communities in which they were operating. What is even more interesting is the fact that the operating expense ratio of these 20 credit unions is less than half that of a typical nongovernmental microfinance institution. A high level of efficiency is one of the main factors behind institutional profitability.

L2, Liquidity Reserves/Total Deposits  
(goal: 10 percent)

The L2 ratio measures the adequacy of the credit union’s liquidity reserves, principally to meet withdrawal requests by members. During the early stages of the project, this discipline was not practiced, but since 1990 it has been widely accepted.

S1, Total Asset Growth  
(goal: greater than the inflation rate)

The Guatemalan credit unions have continued to exhibit strong, sustained growth of total assets, at rates well above the inflation rate. This is due to their aggressive savings mobilization programs, as well as to the nonstop addition of new branch offices.

S7, Total Membership Growth

The S7 indicator includes all end users, such as youth groups and potential new members (these are nonmembers who are using the services of the credit union...
without joining). In the past few years, there has been a significant influx of new members due to the successful addition of branch offices in many new areas.

**ROA, Net Income (after Dividends)/Average Total Assets**

Credit unions have no explicit goal in the area of returns on assets because their profit goals are tied to institutional capital adequacy. It is not the goal of the credit union to maximize profits, but rather to have adequate reserves of institutional capital. The ROA ratio measures the consolidated net return on total assets of the 20 credit unions in the program. As can be seen in table 4.3, the ROA increased from 1.7 percent in 1987 to 3.7 percent in 1997. The profitability of these credit unions is significantly higher than the profitability of most commercial banks because the credit unions have limited their dividends and capitalized nearly 100 percent of their net income to build institutional capital reserves. It is for this reason that PEARLS indicator E8 (institutional capital/total assets) has grown from 5.0 percent in 1987 to 11.1 percent in 1997.

**ROE, Net Income (before Dividends)/Average Equity (Shares Plus Institutional Capital)**

The ROE is included merely as a reference point for those who wish to compare the traditional return-on-equity ratio of the credit unions with that of commercial, for-profit businesses. As stated in discussing the ROA, the focus of a credit union is not on maximizing profits. It is interesting to note, however, that the ROE has gone from a low of 25.3 percent in 1987 to a high of 49 percent in 1994. Clearly, by all standards of performance, these credit unions are highly efficient, profitable, and robust financial institutions.

**Epilogue**

It is curious to contemplate the significance of these numbers and then continue to openly question the viability of credit union principles and practices as the new millennium approaches. There is no question that there have been many credit union failures in the past few years; however, the reasons for those failures have not been a result of flawed ideology. This chapter shows that credit union principles are alive and well. It is possible to run a credit union with an entrepreneurial vision and a social conscience.
### Table 4A. The New Credit Union Development Model

<table>
<thead>
<tr>
<th>Area</th>
<th>Traditional focus</th>
<th>New focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Ideology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentality</td>
<td>Social/business</td>
<td>Business/social</td>
</tr>
<tr>
<td>Attitude</td>
<td>Reactive</td>
<td>Proactive</td>
</tr>
<tr>
<td>Economic activity</td>
<td>Diverse activities</td>
<td>Specialization in financial services</td>
</tr>
<tr>
<td>Policies and standards</td>
<td>Diverse criteria</td>
<td>Standardization</td>
</tr>
<tr>
<td>Membership</td>
<td>Lower-income groups</td>
<td>Diverse groups</td>
</tr>
<tr>
<td>Image and market presence</td>
<td>Poor</td>
<td>Professional</td>
</tr>
<tr>
<td>Products</td>
<td>Credit and shares</td>
<td>Savings and credit</td>
</tr>
<tr>
<td>Technology</td>
<td>Antiquated</td>
<td>Modern</td>
</tr>
<tr>
<td>Information</td>
<td>Inadequate</td>
<td>Transparent and clear</td>
</tr>
<tr>
<td><strong>2. Legal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit union law</td>
<td>Outdated and generalized for all cooperative institutions</td>
<td>New specialized law for credit unions</td>
</tr>
<tr>
<td>Bylaws</td>
<td>Outdated</td>
<td>Updated</td>
</tr>
<tr>
<td>Regulation</td>
<td>None</td>
<td>Formal sector regulation or self-regulation</td>
</tr>
<tr>
<td><strong>3. Human resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>Insufficient</td>
<td>Well-trained</td>
</tr>
<tr>
<td>Experience</td>
<td>Inadequate</td>
<td>Professional</td>
</tr>
<tr>
<td>Compensation</td>
<td>Inadequate</td>
<td>Competitive</td>
</tr>
<tr>
<td>Turnover</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td><strong>4. Financial structure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing</td>
<td>Shares and external credit</td>
<td>Savings deposits</td>
</tr>
<tr>
<td>Capital</td>
<td>Member shares</td>
<td>Reserves</td>
</tr>
<tr>
<td>Capitalization</td>
<td>Obligatory share contributions</td>
<td>Capitalize all net income of the operating period to institutional capital</td>
</tr>
<tr>
<td><strong>5. Interest rates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans</td>
<td>Below market rate</td>
<td>Entrepreneurial rate that covers all credit union costs and expenses and maintains institutional capital at 10 percent of total assets</td>
</tr>
<tr>
<td>Savings deposits</td>
<td>Not competitive</td>
<td>Competitive rate that protects against inflation</td>
</tr>
<tr>
<td>Shares</td>
<td>None or inferior to the inflation rate</td>
<td>Equal to or greater than the savings deposit rate</td>
</tr>
</tbody>
</table>
Table 4A. (continued)

<table>
<thead>
<tr>
<th>Area</th>
<th>Traditional focus</th>
<th>New focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Financial discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>In arrears and not balanced</td>
<td>Balanced and on time each month</td>
</tr>
<tr>
<td>Transmittal of financial inflation</td>
<td>Intermittent</td>
<td>By the 10th of each month</td>
</tr>
<tr>
<td>Monthly cash flow analysis</td>
<td>Inadequate/none</td>
<td>Monthly</td>
</tr>
<tr>
<td>Financial indicators</td>
<td>Diverse criteria</td>
<td>PEARLS system</td>
</tr>
<tr>
<td>Delinquency ratio calculation</td>
<td>Diverse calculations</td>
<td>Entire delinquent loan balance</td>
</tr>
<tr>
<td>Accounting basis for income from loans</td>
<td>Accrual</td>
<td>Cash</td>
</tr>
<tr>
<td>Creation of loan loss reserves</td>
<td>None or inadequate</td>
<td>According to aging of loan</td>
</tr>
<tr>
<td>Loan charge-offs</td>
<td>Rarely done</td>
<td>Quarterly or monthly</td>
</tr>
<tr>
<td>Net income distribution</td>
<td>Dividends to membership</td>
<td>Capitalize 100 percent to</td>
</tr>
<tr>
<td>Liquidity reserves</td>
<td>Not specifically allocated</td>
<td>legal reserves</td>
</tr>
<tr>
<td>Control of nonearning assets</td>
<td>Inadequate</td>
<td>Require 10 percent of total</td>
</tr>
<tr>
<td>Annual business plan/strategic plan</td>
<td>Inadequate/none</td>
<td>savings plus time deposits</td>
</tr>
<tr>
<td>Annual external audit</td>
<td>Inadequate/none</td>
<td>High-quality certified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>public accounting firm</td>
</tr>
<tr>
<td>7. Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td>Old and inadequate</td>
<td>New or remodeled</td>
</tr>
<tr>
<td>Public areas</td>
<td>Small and uncomfortable</td>
<td>Spacious and comfortable</td>
</tr>
<tr>
<td>Furniture and equipment</td>
<td>Depreciated</td>
<td>Modern</td>
</tr>
<tr>
<td>Security</td>
<td>Inadequate</td>
<td>Alarms, strongboxes, and guards where</td>
</tr>
<tr>
<td></td>
<td></td>
<td>appropriate</td>
</tr>
<tr>
<td>Studies</td>
<td>None/intermittent</td>
<td>Covering market area</td>
</tr>
<tr>
<td>Marketing plans</td>
<td>None/limited to</td>
<td>Complete and integrated</td>
</tr>
<tr>
<td></td>
<td>promotions or publicity</td>
<td>with the business plan</td>
</tr>
<tr>
<td>Dress code</td>
<td>None</td>
<td>Professional</td>
</tr>
<tr>
<td>8. Credit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit analysis</td>
<td>Limited, based on member</td>
<td>Based on five C's of credit:</td>
</tr>
<tr>
<td></td>
<td>shares</td>
<td>Character</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capacity to pay</td>
</tr>
<tr>
<td>Loan amounts</td>
<td>Restricted due to</td>
<td>Capital invested</td>
</tr>
<tr>
<td></td>
<td>inadequate funds</td>
<td>Conditions of loan</td>
</tr>
<tr>
<td>Loan purpose</td>
<td>Restricted due to</td>
<td>Collateral</td>
</tr>
<tr>
<td></td>
<td>inadequate funds</td>
<td></td>
</tr>
<tr>
<td>Guarantees</td>
<td>Inadequate/not registered</td>
<td>Solid, convertible to cash, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>registered</td>
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</tbody>
</table>
Reforming Credit Unions in Honduras

Lee Arbuckle and Dale W. Adams

The United States Agency for International Development (USAID) began a program in Honduras in 1986 called the Small Farmer Organization Strengthening Project (AID 1995). It was aimed at assisting poor people in rural areas by fortifying five cooperative organizations, one of which was the national federation of credit unions (FACACH). In the credit union portion of the project, it was anticipated that reformed credit cooperatives would provide more and better deposit and loan services to a larger number of poor people, especially in rural areas. This chapter reports on the strategy used in these reforms as well as on some of the results and lessons learned.

Background on Honduras

Since the mid 1980s, commercial banks, savings and loan associations, and two state-owned banks have comprised the formal financial system in Honduras. In the early 1990s, these formal financial institutions operated about 400 banking service points. Following liberalization of economic and monetary policies in 1991–92, the number of banking offices expanded to about 560 in 1995, a fairly large number for a country with a population of only 5 million. While other segments of the formal financial system were growing, the rural financial system was contracting because of difficulties in the government-owned agricultural bank, BANADESA. In 1980, the bank provided about one-third of all formal loans for agricultural purposes, but that percentage contracted to only about 5 percent in 1994 (Daly and Torrico 1994). BANADESA’s decline left the rural areas relatively under-banked compared with urban areas by the late 1980s.

In addition to the formal financial system, Honduras also has a large number of less regulated and unregulated organizations that provide financial services, including credit unions, nongovernmental organizations, and pawn shops. The contraction in BANADESA’s subsidized rural lending provided more opportunities for these semi-formal forms of finance to expand in rural areas. In the mid 1990s, there were 175 nongovernmental organizations in the country, with about 60 of them involved in lending (González-Vega and Torrico 1995). There were hundreds of pawnshops, some registered and some not, that had...
tens of thousands of clients. Some 230 credit unions provided financial services to large numbers of people. Ninety of the largest of these credit unions were affiliates of FACACH.

Various forms of informal finance fill important niches in financial markets in Honduras. These include some full-time moneylenders and finance companies that mobilize funds privately and then lend to the public. Most central markets have merchants who occasionally lend money and many merchants who sell goods on credit. Many input suppliers and product buyers provide credit in rural areas (Larson 1990). Some of these forms of informal finance compete with credit unions.

In the 1980s, civil disturbances in Central America led to loss of confidence, capital flight, and a decline in real incomes in Honduras. Prior to the liberalization of 1991–92, monetary policy was repressive, with interest rate ceilings, high legal reserve requirements, foreign exchange rationing, and concessionary rediscount lines in the Central Bank that funded many credit activities. Bank supervision was passive. The monetary authorities did not want to set standards for or monitor credit unions or other semi-formal financial institutions.

This repression of the formal financial system provided unexploited opportunities for credit unions. As unregulated financial organizations, they had latitude to pay higher interest rates on deposits than banks, but most failed to do so due to their philosophy of providing inexpensive loans to members.

In the early 1990s, the government removed interest rate ceilings, liberalized access to foreign exchange, and reduced the amount of subsidized lending by the Central Bank. These policies improved the macrofinance environment and allowed credit unions that had been assisted by the project to capitalize on opportunities created by this new environment. On the one hand, the drying up of subsidized lending provided a more level playing field for credit unions that wished to price their loans properly. On the other hand, the lessening of repression of the formal financial system allowed banks to compete more aggressively for deposits. The Central Bank continued to maintain relatively high legal reserve requirements on banks over the life of the project, however, a policy that allowed aggressive credit unions to offer more attractive interest rates on deposits than the rates offered by banks.

**Background on Credit Unions**

Credit unions are self-help, member-owned organizations that first emerged in Germany in the mid 1800s. There are two types of credit unions: closed bond cooperatives that restrict membership to a defined group, such as the employees of a particular company, and open bond cooperatives that allow almost anyone to join. About half of the credit unions that were affiliated with FACACH
were of the open bond variety. All of the participants in the USAID project were open bond cooperatives.

Especially after World War II, donors in North America, the World Council of Credit Unions (WOCCU), the Catholic Church, and particularly the Peace Corps aggressively promoted credit unions in Latin America. They established national federations and built or strengthened hundreds of individual cooperatives. In Latin America, a regional association of national credit union federations, COLAC, located in Panama, was also formed. In many cases, donors used credit unions as channels for funds aimed at selected target groups or activities. All of these efforts led to rapid growth in the number of credit unions and in their membership in many low-income countries, including Honduras.

In 1876, several well-to-do families in the city of Marcala founded the first financial organization in Honduras that evolved into a credit union (Poyo 1986). However, systematic efforts to extend credit unions nationwide did not begin until the early 1950s, under the sponsorship of the Catholic Church. USAID reinforced these efforts in 1966 through a grant to fund the formation of a national credit union federation and the promotion of individual credit unions. Soon after that, the Honduran government channeled funds through the national federation to individual credit unions for agricultural lending.

The number of credit unions and their membership in Honduras increased slowly until the mid 1960s, when growth accelerated. Nonetheless, the vitality and strength of the credit union movement began to decline in the early 1980s. Three primary factors caused the decline: a faulty development strategy that stressed subsidized lending, the expectation that inexpensive outside funding would be available indefinitely, and adverse economic conditions in the country. By the mid 1980s, about 34 of the open bond credit unions in the country had ceased operations, another 30 were in serious financial difficulties, and only about 12 to 15 were functioning normally.

For several decades prior to the mid 1980s, various donors in addition to USAID attempted to boost credit union lending and other activities. A German development agency, for example, provided funds through FACACH to encourage several rural credit unions to engage in grain storage, seed production, and marketing, all activities somewhat removed from financial intermediation. In the 1960s and 1970s, donors supplied several sizable loans to COLAC, which then channeled the loans through country federations to augment individual credit union lending. COLAC lent a significant amount of these funds to FACACH, which, in turn, relented the money to individual credit unions in Honduras. Some donors also provided funds directly to FACACH.

These donor intrusions into credit unions used a fairly standardized approach that included providing subsidized loans or grants to the federation along with some free technical assistance. The federation, in turn, extracted a margin
on these external funds and then passed them on to the individual credit unions at a subsidized rate. The credit unions on-lent the funds to members of the cooperatives at below-market rates of interest. These efforts led to rapid, but transitory, growth in participating credit unions. The strategy depended heavily on external funds and subsidies and was not sustainable under market conditions. In many cases, the strongest credit unions were the ones selected to participate in these targeted credit efforts.

The unanticipated results of these programs were mostly unsatisfactory, especially for FACACH. The availability of inexpensive outside funding weakened the incentives within the credit union system to mobilize deposits and lessened the autonomy of individual cooperatives. Low interest rate policies, combined with inflation and serious loan recovery problems, decapitalized many of the credit unions as well as FACACH. The availability of outside funding induced the national federation to slight supervision. At the same time, the federation did little to encourage deposit mobilization because it would conflict with having the credit unions dependent on the federation for significant parts of their funding. By 1987, the value of the shares held by individual credit unions in FACACH was essentially zero. If member credit unions had been forced to write down the value of these shares, the reserves available in individual credit unions to protect member deposits and shares would have been halved.

During the latter half of the 1980s, FACACH incurred chronic operating losses due to an excessive number of employees and to various activities that produced no income. FACACH lacked a viable business plan and was unwilling to provide the types of services that member cooperatives most needed—such as low-cost liquidity management arrangements. These problems led to a decline in support for the federation by member cooperatives when the supply of external funds through FACACH evaporated.

The Cooperative Strengthening Project

At the beginning of the project in 1987, less than two percent of the economically active population in Honduras belonged to credit unions (Scott 1992). The total value of loans supplied by these cooperatives amounted to about 3 percent of all loans made by banks in the country. The deposits and share capital in credit unions amounted to less than 6 percent of deposits in banks.

USAID’s efforts to strengthen credit unions in Honduras, using a new paradigm, began in the early 1980s, when it funded a small program to stimulate new thinking about interest rate policies and deposit mobilization. For about a year, consultants discussed new policies with the national federation and a hand-
ful of credit unions. Their efforts resulted in several of the credit unions changing interest rate policies and placing more emphasis on deposit mobilization. However, the federation was unwilling to change. It preferred supporting its activities with grants, capturing a margin on pass-through funds to the credit unions, and earning commissions on selling insurance.

At about the same time, USAID funded an analysis of rural finance in the country by the Ohio State University (Graham and others 1981). The study found that the rural poor captured relatively few of the subsidies associated with subsidized credit, that these credit subsidies weakened the financial system, and that deposit mobilization helped strengthen rural financial markets. The study convinced USAID and a few policymakers in Honduras of the need for major changes in the way donors and governments dealt with rural finance. The results of the earlier consultancies and research were ingredients in the design of the new project that began working with credit unions in 1987.

Initially, the project aimed to increase the income and improve the quality of life of operators of small farms in Honduras. Later, the project expanded this narrow focus on farmers to allow strengthening of any open bond credit union outside the two principal cities in the country. The project changed the traditional paradigm used previously in development programs associated with credit unions. In place of policies that were socio-politically driven and dependent on external funding, it stressed sound business practices and self-financing through capital accumulation and deposit mobilization.

Participation in the project was voluntary. Eventually, 37 open bond credit unions opted to participate. These credit unions signed a contract with the project that listed the actions they agreed to take, how their achievements would be measured, and the support they would receive from the project upon realization of the phased targets. The process advanced as quickly as the credit unions met their commitments and targets. Sometimes it took two or three years for support to develop for change within the credit union’s board or among its managers. In some cases, the contracts were amended to include additional commitments. As a cooperative met its commitments, the project disbursed small grants, training, and technical assistance as rewards.

The project initially had three components: organizational development, financial stabilization, and an external credit line. The external line of credit was never activated, however.

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1 Robert Vogel and Jeffrey Poyo were the consultants. See Poyo (1985) for more details on this project.
2 The reform program in Honduras was preceded or accompanied by similar USAID efforts in the Dominican Republic, Guatemala, and Peru.
Organizational development involved three traditional ingredients: technical assistance, training, and performance-based small grants. These grants funded such things as audits, new signs, critical furniture or office equipment, and short-term subsidies to cover part of the salary of a key employee. The project meted out these small grants in phases as the credit union achieved some of its short-term, self-help targets, for example, bringing accounts up to date or making key personnel changes. Overall, the organizational development component was used to enhance the short-term operating results of the credit union as captured by its income statement. A vital part of the organizational component was the preparation of a three- to five-year business plan and annual operating plans and budgets, including an analysis of the strengths, weaknesses, and opportunities for the credit union in its local market.

Once a credit union completed the organizational phase of its contract, the project then focused on financial stabilization: enhancing the long-term performance measures of the credit union. Somewhat larger grants were given when credit unions achieved the long-run stabilization targets agreed to in their contracts. For example, a participating credit union might agree to build its capital reserves, improve operating efficiency, charge off bad loans and otherwise boost the quality of its loan portfolio, and enhance other financial performance indicators. If it achieved these targets, the project would give the cooperative a grant of about one percent of the credit union’s assets.

The grants for achieving stabilization goals were small enough so they did not deflect credit unions from their primary mission of providing high quality financial services to their members. Initially, the promise of these financial stabilization grants loomed large in decisions made by the leaders of a credit union. However, after the credit union made the agreed-on corrective measures, its performance nearly always improved, it enrolled new members, and it mobilized substantial amounts of share capital and deposits. The results of these improvements dwarfed the stabilization grants, much to the surprise and delight of the credit union leaders.

Key Principles in the Strategy

Four principles guided project administration:

• To develop the credit union system from the bottom up.
• To formulate performance indicators appropriate to the local conditions and then use these measures in a dialogue about changes in each of the credit unions.
• To severely limit access to outside funds for on-lending.
• To strengthen the governance of the credit unions by boards and managers.
**Bottom-Up Development**

In many countries, the traditional strategy used in credit union development has been to work from the top down. This involves forming or strengthening a credit union federation first and then using this organization to develop the individual cooperatives. Typically, outside sources subsidize the federation to perform these functions. In turn, the federation provides subsidized services to individual credit unions. This approach can lead to subsidy dependency and to credit unions that lack initiative and independence.

The bottom-up approach used in this project placed initial emphasis on strengthening individual credit unions. The insolvency of FACACH at the time the project was started made this approach possible. Initially, the federation relied on some short-term subsidies provided by the project, which accompanied the much more important program for participating credit unions. As the participating credit unions strengthened, they forced FACACH to provide those services that were of greatest interest to them. As the project phased out subsidies for the federation, FACACH survived by providing useful services—for pay—to its member organizations.

**Performance Indicators**

Many credit unions in Honduras encountered financial difficulties because they did not regularly produce useful financial indicators. The lack of useful indicators hampered effective management and limited the ability of boards of directors to understand and track performance. Therefore, in the initial phases of the project, much time was spent selecting appropriate financial indicators. This included adapting and modifying the CAMEL (Capital adequacy, Asset quality, Management, Earnings, and Liquidity) system for bank supervision, using technical assistance from WOCCU.

WOCCU based its advice on the CAMEL standards used by the credit union regulator in the United States, the National Credit Union Administration. A concurrent USAID project in Guatemala enriched the initial CAMEL measures to about 40 indicators, a system called PEARLS. The reform effort in Honduras used a smaller set of indicators, in view of the participatory nature of the technical assistance process. About half of the credit union board members had a high school education, about a quarter had only a grade school education, and less than a quarter had university training. The board members were typically teachers, small businesspersons, government employees, or farmers.

To make the indicators readily understandable to the average board member, it was decided to limit the number of primary indicators to just 12. These indicators covered the standard CAMEL categories. The project gave added
meaning to the 12 selected measures by using them in development dialogues with credit unions, including the grading of the progress of the individual cooperatives. This relatively simple set of indicators became the language of communication with credit union managers and boards of directors. With time, the performance standard for each indicator was adjusted.

**Limited Outside Funding**

The primary criticism of outside funding is that it provides disincentives for mobilizing member savings. Members are only willing to trust their deposits to a credit union if the rates of return are competitive, if the members believe their funds are safe, and if deposits can be withdrawn easily. Inexpensive outside funding leads managers of credit unions to draw on these funds, rather than to mobilize relatively more expensive voluntary deposits. As a result, managers tend to cultivate their relationships with suppliers of outside funds and ignore providing high quality deposit services to members of the cooperative. If these outside sources channel funds through the national organization, the federation becomes more concerned with capturing a margin on the funds and less with providing high quality services to individual credit unions. This practice results in a paternalistic, rather than businesslike, relationship between the federation and its member cooperatives.

The project was designed to foster deposit mobilization. The project gave small grants to credit unions and to the federation to encourage institutional development and to stabilize their financial status. It conditioned the grants on economic performance, including deposit mobilization.

**Governance**

People organize credit unions to provide themselves savings and credit services. Individual members at any time may be net borrowers or net savers, according to their cash management needs. The credit union assists in intermediating, hopefully balancing the interests of depositors and borrowers, which is more likely in the absence of cheap external resources.

Owners of a private firm protect their interests by managing their assets carefully. In credit unions, diffused ownership among many shareholders (each with one vote) can lead to what is called the principal-agent problem. For example, the managers and directors of a credit union may make less prudent

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3 Critics of traditional subsidized credit programs, such as Robert Vogel and John Gadway, have argued that these efforts are a "poison pill" for the forgotten half of financial intermediation, deposit mobilization.
decisions about the use of funds in the credit union than a moneylender who lends his or her own money.

The introduction of subsidized outside funding can aggravate the principal-agent problem. Outside funding motivates some aggressive credit union members to participate in governance to capture subsidies. The countervailing interest of members as savers is weakened because there is no need to mobilize savings with sound business practices and attractive deposit rates. Outside funding can lead to insider borrowing, lax loan recovery, and an aura of corruption. When the project denied access to outside funds, the boards of directors, in time, stopped seeking subsidies and became primarily interested in protecting their own funds as well as the savings of the membership at large.4

Transparent performance measures and enhanced supervision and regulation by the project team, with the federation looking on, also addressed the principal-agent problem. As the participating cooperatives improved their performance, moved into new or remodeled buildings, employed modern technology, and attracted more clients, the leaders of the cooperatives took more pride in their positions, became more convinced of and committed to sound business practices, and acted in ways that further strengthened the organization. Directors, managers, and employees have more incentives to act prudently if all members know the outcomes of their decisions. Likewise, in credit unions that build their base on depositors, rather than on borrowers, members can more easily discipline managers who perform poorly by withdrawing their funds and taking them elsewhere. However, effective external prudential regulation was still not in place in Honduras in late 1998.

As the confidence of the leaders of the participating credit unions grew, they voted to change the national federation. These changes in FACACH led to increased confidence in the federation among member credit unions. The federation took on the important function of gathering and placing elsewhere the excess balances from individual credit unions, a particularly valuable service to isolated credit unions that were successful in mobilizing deposits. In addition, with project advice, the federation switched from providing technical services and training free of charge to a self-supporting, fee-based system. This system subjected the federation to market forces; the federation could survive only if it provided services that credit unions were willing to buy. The federation became more responsive to the needs of the credit unions and substantially increased the quality of the services it provided. These changes resulted in FACACH reducing the number of its employees by more than half. Instead of doling out favors, the federation was forced to perform more like a private firm.

4 For a more detailed treatment of the governance problem, see chapter 11.
Project Results

The credit union portion of the project extended over the period 1987–95. One must be careful not to claim too much for the project. In part, the hefty growth of credit unions in Honduras during this period was due to the overall improvement in the macroeconomic and macrofinancial environments in the country over these years. At the same time, one should not claim too little for the project. It generated substantial spillover effects from the 37 credit unions that participated in the project to other credit unions, especially to members of FACACH. Some indication of the increasing momentum associated with the project can be noted in the acceleration of the growth rate of many of the indicators in 1995–97, the two-year period that followed project termination (table 5.1).

Outreach

Credit unions in Honduras have been remarkably successful in expanding their outreach. Over the period 1987–97, total membership in credit unions participating in the project increased from 26 thousand to 116 thousand individuals. The number of credit union branches increased from just 7 in 1987 to 58 in 1997 (table 5.1). Many of these new branches were located in central markets or in small villages that previously had few or no banking facilities. Still another indication of outreach is the more than tripling of the dollar value of loans made by participating credit unions over the 10-year period.

Sustainability

Several measures in table 5.1 indicate that participating credit unions were much stronger financially in 1997 than when the project began. Institutional capital, total deposits, investments in equipment and facilities, and annual profits all increased more than fourfold in dollar terms by 1997. The value of members' share capital more than doubled. Institutional capital, which protects members' shares and deposits, increased from 7 to 11 percent of assets.

The dramatic increase in deposit mobilization by the Honduran credit union system, mostly by credit unions that participated in the project, increased the credit union share of total savings in the financial system from less than 6 percent in 1987 to about 13 percent in 1997. These deposits, together with member shares and the expanded base of institutional capital, provided a solid financial foundation that allowed most of the participating credit unions to weather the

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5 In the latter phases of the project, two pairs of credit unions merged, thus reducing the number of participating credit unions to 35 by 1995.
Table 5.1. Changes in Performance Indicators of Participating Credit Unions, Honduras, 1987–97

<table>
<thead>
<tr>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of credit unions</td>
<td>37</td>
<td>37</td>
<td>36</td>
<td>35</td>
<td>35</td>
<td>n.a.</td>
</tr>
<tr>
<td>Number of branches</td>
<td>7</td>
<td>18</td>
<td>26</td>
<td>34</td>
<td>58</td>
<td>8.29</td>
</tr>
<tr>
<td>Number of members</td>
<td>26,270</td>
<td>37,311</td>
<td>59,072</td>
<td>86,173</td>
<td>115,841</td>
<td>4.40</td>
</tr>
<tr>
<td>Number of employees</td>
<td>140</td>
<td>247</td>
<td>315</td>
<td>429</td>
<td>573</td>
<td>4.09</td>
</tr>
<tr>
<td>Total assets (millions of dollars)</td>
<td>22.0</td>
<td>15.6</td>
<td>29.8</td>
<td>39.4</td>
<td>66.4</td>
<td>3.02</td>
</tr>
<tr>
<td>Institutional capital (millions of dollars)</td>
<td>1.7</td>
<td>1.1</td>
<td>2.3</td>
<td>3.1</td>
<td>7.5</td>
<td>4.41</td>
</tr>
<tr>
<td>Institutional capital/total assets</td>
<td>0.07</td>
<td>0.07</td>
<td>0.08</td>
<td>0.08</td>
<td>0.11</td>
<td>n.a.</td>
</tr>
<tr>
<td>Members' share capital (millions of dollars)</td>
<td>13.9</td>
<td>9.5</td>
<td>17.5</td>
<td>22.6</td>
<td>32.8</td>
<td>2.36</td>
</tr>
<tr>
<td>Deposits (millions of dollars)</td>
<td>4.6</td>
<td>3.5</td>
<td>7.6</td>
<td>10.7</td>
<td>22.2</td>
<td>4.82</td>
</tr>
<tr>
<td>Loan portfolio (millions of dollars)</td>
<td>15.5</td>
<td>12.0</td>
<td>23.9</td>
<td>31.6</td>
<td>47.7</td>
<td>3.08</td>
</tr>
<tr>
<td>Past due ratio*</td>
<td>–</td>
<td>0.22</td>
<td>0.16</td>
<td>0.18b</td>
<td>0.07</td>
<td>–</td>
</tr>
<tr>
<td>Investments in facilities (millions of dollars)</td>
<td>0.9</td>
<td>0.8</td>
<td>1.3</td>
<td>1.9</td>
<td>3.7</td>
<td>4.11</td>
</tr>
<tr>
<td>Annual profits (millions of dollars)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.8</td>
<td>0.9</td>
<td>1.3</td>
<td>4.33</td>
</tr>
<tr>
<td>Return on assets* (percent)</td>
<td>1.4</td>
<td>1.9</td>
<td>2.7</td>
<td>2.2</td>
<td>2.0</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Note: Not available.

n.a. Not applicable.

* Total value of loans overdue divided by the total value of loans outstanding.

b. 1994 value.

Profits divided by the total value of assets.

Source: Unpublished information provided by FACACH.

devastation caused by Hurricane Mitch in late 1998. Member deposits were also an important source of liquidity that allowed many households to begin reconstructing their businesses and homes after this destructive storm.

Other changes that strengthened the sustainability of the credit unions in the project included enhanced loan recovery performance and proper provisioning for loan losses. At the beginning of the project, many of the credit unions had unsatisfactory loan recovery performance and recordkeeping that did not reflect clearly the severity of these problems. Credit unions were slow in writing off delinquent loans and made inadequate provisions to cover actual loan losses. By 1997, delinquency rates on loans had declined to about 7 percent, record-keeping correctly reflected loan recovery problems in at least the majority of program participants, and most credit unions were adequately adding to reserves to cover expected loan losses.

The increased strength of the credit unions resulted in important gains in deposit mobilization, which contributed to a sharp decline in the use of external credit to supply funds for lending. Before the start of the project, these outside funds made up a significant part of the total funds lent by credit unions that
participated in the project. By 1997, the use of outside funding had contracted to an insignificant amount.

For a corporation, the return on assets is a useful measure of the firm’s ability to generate income for distribution to owners and to underwrite investment and growth. This measure is less useful when judging cooperatives because profits are not their primary objective. As profits grow, the managers of credit unions tend to adjust interest rates and charges to distribute automatically to their members some of the benefits of growth. Nonetheless, table 5.1 shows that the return on assets (profits/total assets) increased from 1.4 percent in 1987 to about 2 percent in 1997 among participating credit unions.

Although the project did not concentrate on enhancing the viability and sustainability of FACACH, the federation ended up much stronger. In 1987, the share capital owned by individual credit unions in the federation had a negative value: the federation owed far more than it owned. By 1997, the value of shares in the federation were again worth par and the association had additional retained earnings equal to 1.4 times that amount.

Table 5.1 also shows that the positive results associated with the project did not taper off when the project was formally concluded in 1995. The reforms adopted by the participating credit unions resulted in sustained momentum in deposit mobilization, profits, loan delinquency, and other areas.

Lessons

The Honduran experience provides valuable lessons. Most importantly, it points out that credit unions can achieve successful reform in relatively little time and play an important role in providing financial services to tens of thousands of additional households. The Honduran case shows that donors can materially assist in this process by stressing deposit mobilization, emphasizing transparent and useful information, limiting support to only those credit unions that commit to making fundamental changes, and promoting incentives that stimulate more businesslike cultures.

Deposit mobilization is the foundation of these efforts. The Honduran case shows that poor people will save significant amounts in strong credit unions. A stress on mobilizing deposits reinforces balance between the interests of savers and borrowers. Most individuals have a dual motivation for joining credit unions: they want a safe and convenient place to store some of their savings and they desire the possibility of at least occasionally obtaining a loan. To maintain its internal stability, a credit union must balance these two interests.

Stressing deposit mobilization will result in some credit unions capturing more deposits than they can judiciously lend to members. Therefore, an important function for a national federation is to assist member credit unions in in-
vesting excess liquidity in safe and remunerative places. These "external reserves" can serve as an important shock absorber that helps credit unions cope with nationwide disasters, such as that experienced in Honduras in late 1998 from Hurricane Mitch.

To attract deposits, credit unions must be well managed and must be perceived as being stable. Appropriate and transparent information plays a key role in both management and perceptions. Managers and boards of directors need quality information to administer the cooperative. Members likewise must have access to reliable and understandable information to assess the performance of their cooperative and its leaders.

Finally, incentives are critical elements in successfully reforming credit unions. These cooperatives are delicate organizations whose performance depends heavily on incentives. Incorrect incentives can lead participants in credit unions to actions that undermine the well-being of the cooperative. Alternatively, correct incentives can induce managers and members to act in ways that strengthen the credit union. Incentives are important at three levels: the national federation, the managers and directors of credit unions, and the members. Donors can play an important role in helping to put into place appropriate sets of incentives, and thereby create more businesslike cultures in credit unions.

The authors appreciate helpful comments and suggestions from Barry Lennon and Robert Vogel. Carlomagno Amaya and his staff at the Honduran federation of credit unions, and especially Raúl Sánchez, were helpful in providing information. Many credit union leaders and advisors helped to realize the accomplishments reported on in this chapter.
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Credit unions in developing countries provide important financial services to those with low and middle incomes. For many low-income workers, a credit union may be the only financial institution that offers loans and liquid deposit facilities. The only alternatives to such facilities may be informal credit, such as loans from moneylenders, and in the case of deposit facilities, either increased consumption or saving in less-liquid assets, such as farm animals, inventory, building materials, or jewelry.

In Kenya, the national railways opened a credit union for its employees. Within a few years, the program was failing and a nonprofit organization was asked to restructure its operations. This chapter explains how the credit union recovered. This particular case illustrates the kinds of problems and stresses that such organizations encounter, and the actions required to restore a credit union to viable, efficient operation. The chapter reviews some lessons learned, based on this case and my eight years of experience in Kenya helping troubled credit unions.

**RELI Savings and Credit Cooperative**

RELI Savings and Credit Cooperative is a closed bond credit union drawing on the employees of the Kenya Railways Corporation (KRC), a government-owned institution. At the time of our intervention, the railway had approximately 24,000 employees. At its peak, the credit union numbered 20,000 members (some 80 percent of KRC employees), with share capital of $8 million (about $400 per member). A main office and seven branch offices were in operation, each with its own credit committee.

In six years RELI had become Kenya’s second-largest credit union, in terms of assets and members. RELI grew so rapidly during the first few years that staff and processing systems were unable to keep pace. Loan processing times lengthened and defaults increased. Board members began to interfere in loan processing operations and management systems broke down. Loan arrears then became a major problem and members started to withdraw. At the time they asked our organization to intervene, the credit union’s membership had shrunk to 16,000.
and was dropping rapidly. The loan portfolio was about $7 million, but arrears (past due amounts only) stood at $2.5 million (about 35 percent). The waiting period for a loan had grown to five months.

The order in which applicants received loans became chaotic, as staff came under strong pressure to give priority loans to certain groups of individuals. One group of priority loans was to pay for funerals. As a result, the death rate increased sharply among families belonging to RELI; in some cases, parents of members had “died” several times in a year. Cash flow problems became serious for the credit union as more members withdrew their shares or defaulted on their loans.

RELI staff consisted of KRC employees on permanent loan to the credit union. Overall, these were neither the best nor the brightest of the railway’s staff. One notable exception was the general manager, an honest, hard-working employee. However, the credit union’s growth and the resulting complexities had overwhelmed him.

No files were kept for individual members. Loan applications (pending and approved) were tied in bundles and stacked on the floor. There were large backlogs in bookkeeping and processing, both for loans and for share withdrawals. Members of the board of directors were interfering in the loan approval process on behalf of their particular “constituencies.” Some credit union members had multiple loans, in violation of the rules. Others were acting as guarantors for numerous loans, in amounts far exceeding permissible limits.

**Actions Taken**

In response to these problems, we first tackled the immediate concerns of account reconciliation, recordkeeping, and rule enforcement.

*Reconciliation of accounts.* The first step was manually reconciling individual share and loan accounts. For this massive task, we recruited new high school graduates and trained them on the job.

*Organization of files and indicators.* We purchased file cabinets and opened a file for each member. Using a system of colored stickers, we marked every individual file to indicate how many loans each member had and the number of loans that member was guaranteeing.

*Enforcement of rules.* Each member could borrow an amount equal to three times their share capital, and each loan needed two guarantors to cover the other two-thirds of the loan. As noted above, it became apparent that many members had obtained multiple loans and were providing guarantees in excess of legal limits. A first-come, first-served rule was instituted, except for death case applications, which now had to be accompanied by a death certificate. We centralized all loan processing at the main office and disbanded the branch credit committees.
To further restructure and improve the credit union’s operations, we made several additional changes.

**Staff upgrading.** As the manual reconciliation of member records came to a close, the best temporary employees were offered permanent jobs in the credit union, and the KRC employees were gradually sent back to KRC. This change was greatly resisted by the board of directors, because the credit union did not pay the KRC employees, but would have to pay the new staff.

**Holding guarantors responsible.** We reviewed the color-coded files to identify members acting as guarantors for loans that were in arrears. The share capital of the guarantors was confiscated, and we duly informed the guarantors by letter. This step had a dramatic effect on the collection of arrears. Guarantors began chasing defaulters, even those who had left KRC employment, to have them repay their debts to the credit union. RELI’s loan delinquency rate contracted sharply.

**Legal action.** For those defaulters who had left KRC employment, we engaged lawyers to attach their salaries at their new places of employment. The board of directors was reluctant to take this step, fearing that the process would be more expensive than would be justified by the amounts recovered. In fact, the expense proved low because very few cases had to be pursued further than sending a letter to the new employer. Most defaulters began repaying the outstanding amounts, including back interest. As word spread, the psychological effect of these letters had a very positive impact on new loan repayments as well, and this further reduced the incidence of delinquency and defaults.

**Publication of monthly financial statements.** Every month the credit union’s financial statements were published in both English and Swahili, with special sections on arrears and key performance ratios. These statements were posted at the main office and at every branch. Credit union members received basic instructions for finding the most important information in these financial statements.

**Log of applications.** We started a loan application log, registering and assigning a number to each application. Key processing dates and decisions were entered in the log, so that the status of each application could be quickly determined.

**Computerization and regular member statements.** Meetings were held with the payroll department of KRC, so that member employees could receive their account information (share and loan balances, monthly share and loan deductions, and interest payments) on monthly pay slips. For the first time, members were given regular information on their accounts, allowing them to verify their accuracy. Because loan repayments were limited to a certain percentage of a member’s net pay, the pay slip also became a standard item to attach to each loan application, facilitating loan processing.
Results

Within a year, 80 percent of loan arrears had been recovered. The one-day delinquency rate was reduced to less than 1 percent of the loan portfolio. The processing time for new loan applications was reduced from five months to two weeks, with loans disbursed on a first-come, first-served basis. Membership rebounded to 22,000 out of 24,000 employees. Share capital increased by more than 50 percent, reaching $8 million. The death rate among members’ families dropped dramatically.

Lessons Learned

The experience of the KRC credit union provides lessons about the causes of failure, political interference, retention of staff, financial supervision, and liquidity.

The Causes of Failure

Credit programs primarily fail not because of the borrowers, but because of the lenders. Most borrowers, anywhere in the world, will avoid repaying their debts if they can do so with relative impunity. Church-based credit programs are particularly prone to this problem. Debtors will often test a lender by saying that they are too poor to repay. If the lender forgives the debt or allows the debtor to stop making payments, the word quickly spreads through the community, and the “credit” program soon becomes a grant program. The large rise in RELI’s delinquency rate was mainly attributable to management’s failure to insist on loan repayment from borrowers and their guarantors. Reversing this policy led to the subsequent drop in delinquency rates.

Political Interference

In some developing countries, getting on the board of directors of a credit union can be a convenient stepping-stone to a political career. An aspiring politician would want first to be elected to the board, then be elected chairperson. From this position, with the political support of the credit union membership, the chair would run for election to a local political office. New people with political ambitions may accuse the chair of corruption and favoritism in approving loans. This can quickly divide the credit union into opposing camps, leaving divisions in the board of directors, driving well-intentioned people off the board, and ultimately leaving the affairs of the credit union in the hands of less scrupulous people. Thus, the board chairperson or general manager must be a person of integrity, with the ability to stand up to forces that do not have the credit union’s best interests in mind.
When I first arrived in Kenya, politicians commonly served on the boards of cooperatives. The press carried many stories of corruption and mismanagement in these organizations. Eventually, a law was passed that a person seeking or holding public office could not be on a cooperative’s board. The number of newspaper accounts of problems in the cooperatives dropped dramatically. After several years, however, this law was repealed and the negative stories reappeared in the press.

**Retention of Staff**

The retention of qualified staff is often a major problem. When the credit union is new and still small, the demand on staff skills is not very heavy. But as the credit union grows, the work becomes more challenging, especially for the general manager and chief accountant. To retain or attract the right people, the credit union must offer appropriate salary packages. These salaries are determined by boards of directors, whose own incomes are usually very much in line with the general membership of the credit union. The board members are often reluctant to approve salaries above the norms for the local community. The result is frequent staff turnover and senior staff that are not qualified for their positions.

**Financial Supervision**

The financial supervision of credit unions is an important task that many countries do not address properly. Credit unions are too often seen as social welfare organizations, and their financial supervision is not a high priority. Credit unions may not represent a large share of a country’s pool of savings, but they do hold the savings of many low- and middle-income people. The security of these savings should be a higher priority to the government bodies responsible for ensuring the safety and soundness of financial institutions.

The small size and often remote location of credit unions makes supervision expensive. Their cooperative nature, with large numbers of local voters, means that supervisory decisions are frequently based on local political considerations, rather than sound financial management principles. The government supervisory function is often weak, with the responsibility for supervision frequently given to the same government institution that is responsible for promoting cooperatives, such as the Office of Cooperatives.

This dual responsibility creates an immediate conflict of interest between promotion and supervision. The skills of such Office staff are usually much more inclined toward promotion and development than toward financial supervision. In an office that measures its success by the number of cooperatives and cooperative members under registration, declaring a credit union to
be in financial trouble is an action that may not receive adequate support or encouragement.

A common argument regarding supervision is that credit unions are cooperatives and they should be supervised by those responsible for other types of cooperatives (such as agricultural production or marketing cooperatives). However, credit unions are much more like banks than like other types of cooperatives. They would be far better supervised by those trained to supervise banks and other financial institutions, a job that requires specialized technical skills in order to properly safeguard the savings of members.

Unfortunately, such supervisory agencies are reluctant to take responsibility for credit unions because of the small size and political nature of these cooperatives. Nevertheless, at a minimum, such agencies should delegate supervision to the best possible alternative organization (perhaps the national credit union federation). The supervisory agency should establish the policies and procedures to be followed and make random checks that the supervision scheme is being appropriately followed.

**Liquidity: Savings Services versus Credit Services**

Small farmers in rural areas often have much more of a liquidity problem than a credit problem. After the harvest, most small farmers who do not have access to a savings account either keep their money under the mattress or buy additional farm animals, jewelry, or other durables that can be sold when cash is needed. Cash under a mattress is a temptation for increased consumption and is eroded in value by inflation. Animals, jewelry, and other durables cannot always be easily converted into cash, and it is not possible to sell half a cow when only a small amount of cash is needed.

It is the small farmer’s liquidity problem that keeps rural moneylenders in business. Much of the perceived demand for microenterprise credit is a reflection of this liquidity problem. Yet the problem can also be alleviated through access to a savings account, where a portion of the harvest surplus can be stored to meet short-term liquidity needs. A credit union that offered only savings facilities to its members and then placed these savings in secure government bonds would very likely find a large demand for its services, especially in the rural areas where access to other forms of savings services is very limited.
Since the late 1980s, monetary and regulatory authorities throughout Latin America and the Caribbean have been engaged in a far-reaching process of financial reform designed to improve the competitiveness, efficiency, safety, and soundness of their domestic banking systems. With support from the Inter-American Development Bank and other donors, significant resources have been invested in strengthening legal and regulatory frameworks and banking supervisory systems. The policies of financial repression implemented throughout the region in the 1970s and 1980s, combined with the lack of an effective system of supervision, led to the development of highly fragmented and inefficient banking systems, exposed to repeated systemic crises. In many countries, the financial reform process has gone beyond the traditional banking institutions in an attempt to eliminate this inefficient institutional fragmentation, and has brought reforms to nonregulated finance companies and even pawnshops. In almost every case, however, these “first generation” reforms have excluded the credit union industry.

Recently, the failure of some large credit unions in several countries in Latin America has sparked the interest of the banking regulatory authorities and intensified public debate on the issue of credit union regulation.¹ Interest in the prudential regulation and supervision of credit unions is long overdue. Although these intermediaries have been present in financial markets since the 1950s, during most of this period they have operated in a de facto free banking or laissez-faire environment without any form of prudential regulation or supervision.²

Credit unions have a mutual form of ownership and were originally conceived of as charitable, nonprofit institutions, organized through the collective efforts of the middle- and lower-income segments of the population. The primary objective in organizing these institutions was to supply financial services to a population that has historically been underserved by the banking systems present in Latin American and Caribbean countries. Credit unions have played a particularly important role within the thin, rural financial markets that exist

² For a good historical review of the free banking experience worldwide, see Dowd (1993).
throughout the region. Today, most credit unions offer a diversified menu of financial products and services that attend the needs of households and firms, intermediating resources between domestic savers and borrowers.

The ability to effectively manage or supervise any financial intermediary requires a clear understanding of the principal sources of risk. Many of the risks inherent in the transactions carried out by these financial intermediaries parallel those of a typical banking institution. However, credit unions require important adjustments in their prudential regulations, as compared with those of the typical shareholder-owned banking institution. Credit unions have a unique ownership/governance structure and certain special operating characteristics, such as the geographic concentration of their loan portfolios and the nature of their clientele (micro and small entrepreneurs).

The purpose of this chapter is to identify and analyze some of the distinctive characteristics of the credit union as a financial intermediary and to explore some of the implications these may have for the design of an appropriate regulatory and supervisory system. The first section provides some general background information on credit unions throughout the region. The second section focuses on the current legal and regulatory framework within which credit unions operate, illustrating the important failings and the need for structural reform. The third section identifies and analyzes the most relevant differences between the credit union and a typical private banking institution, and the implications for the design of prudential regulations for the former. The fourth section investigates practical issues related to the incorporation of credit unions within the current banking supervisory system, as well as the possible difficulties with the transition process. The fifth section presents the major conclusions and recommendations.

**Background**

There is almost universal agreement regarding the need to establish prudential regulations and external supervision for financial intermediaries as a result of information asymmetries (primarily with regard to small depositors), as well as the risks of moral hazard introduced by the government's provision of an implicit or explicit safety net. The public generally assumes that, because the government authorities have granted licenses for these institutions to operate and have delimited the scope and nature of their activities, the financial institutions must be operating in a safe fashion (Rojas-Suárez 1997). These arguments are particularly relevant in the case of the credit unions whose member/client base is typically concentrated among the most economically vulnerable segments of the population. All other things equal, this population is less able to effectively monitor the financial health of a particular financial institution than the more
affluent segments of society, and the loss of their savings is likely to have a greater impact on their welfare.

The need for an effective system of external supervision is especially important for credit unions because of the dual nature of the incentives for participation of its members (owners/clients) and the implications this has for institutional governance and prudential management (Smith, Cargill, and Meyer 1981; Benston 1986; Poyo 1986). The incentives for owner/client participation in a credit union are not homogeneous, as in the case of a stockholder-owned financial institution. The stockholders of a corporation are motivated primarily by the return on their investment through dividend payments and the appreciation in the market value of their shares. Their participation in the governance of the institution is driven by this single incentive. By contrast, credit union owners/clients are motivated primarily by the value of the services they obtain from their institution. Their goals as owners and the policies they wish the credit union to follow may be quite different and even contradictory, depending on whether they are motivated primarily as net debtors or net creditors (depositors) of the institution.

An important note of caution is in order. Care should be exercised in placing undue faith in the ability of any external supervisory agent to detect structural and operational weaknesses in a financial intermediary, and to act in a timely manner to correct them. First and foremost, a necessary condition for the stability of any financial intermediary is the existence of a set of external and internal operating incentives that are consistent with prudent financial management. The historical experience of the credit union industry throughout the region clearly illustrates how the introduction of directed credit lines and other externally generated policies and programs (by donors and governments alike) are inconsistent with good prudential management and therefore have served to undermine credit union stability. Under these conditions, the existence of external supervision by government regulatory authorities is insufficient. Furthermore, because credit unions have operated without prudential supervision during almost all of their history, the introduction of supervision and the incorporation of credit unions into the public safety net have the potential for introducing serious moral hazard problems. The risks inherent in the transition toward full integration within the formal financial system must be recognized and effectively managed.

Although the credit unions’ share of the overall domestic financial system is relatively limited when measured by their share of total savings or credit, these financial intermediaries play a particularly important role in secondary rural towns. Transactions costs in rural financial markets are so high as to make exchange impossible through traditional institutional structures. As a result, exchange in these markets is typically carried out through personalized or informal systems that provide self-enforcing contracts.
Credit unions are a type of institutionalized rotating savings and credit association (ROSCA), which has clear informational advantages when operating within rural markets. Because of its low-cost operational structure, the credit union is particularly well suited to supplying financial services in thin markets, which are generally devoid of even the most basic banking services. However, as these financial intermediaries grow very large (perhaps supplying services to thousands of members) or operate in large urban centers with highly transient populations, their informational advantages are rapidly exhausted.

Credit union systems throughout the region experienced a period of externally induced growth during the 1960s and 1970s, as a result of large subsidized agricultural credit programs promoted by donors and governments. Credit unions have been the target of highly subsidized credit programs from external donors and from their own governments for two reasons. First, the credit unions have a benevolent image within a cultural ethos that deeply distrusts the traditional banker. Second, credit unions are often prevalent in rural (and thus more impoverished) areas.

By 1980, the credit union industry entered a period of severe crisis and decline as a result of growing delinquency in its loan portfolios, related directly to these targeted external credit programs. The macroeconomic instability that followed during the 1980s further weakened credit union balance sheets, as massive devaluations caused defaults on international loans, and growing domestic inflation turned interest rate structures negative in real terms. The design of the external credit programs introduced severe distortions to incentives within the credit union sector. The result was the development of a highly dysfunctional second tier of the federated credit union systems, built upon the intermediation of external sources of subsidized credit. In many countries, entrenched bureaucracies within these second-tier institutions have served as one of the obstacles to reform within the credit union industry.

The curtailment of programs of subsidized external credit from donors, beginning in the mid 1980s, allowed the credit unions to gain financial and institutional independence from the credit-driven “integrated development” model. The credit unions were able to turn their attention to the task of providing efficient financial services to the populations within the local communities in which they operated. As a result, the last 10–12 years have seen a significant turnaround and growth of those credit unions that have focussed on market-based principles of financial intermediation and on domestic savings mobilization as the primary source of loanable resources. However, this “success” further highlights the urgent need to rapidly integrate credit unions within the legal, regulatory,

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3 See Bouman (1989) for a discussion of ROSCAs.
and supervisory systems that seek to provide the basic elements of an institutional framework for ensuring a safe and sound financial system.

Legal and Regulatory Framework of the Credit Union Sector

Throughout the region, credit unions in each country are chartered and regulated within the framework of cooperative law. These laws, which date back to the late 1950s and early 1960s, in most cases have not been reformed since they were originally enacted. They were an attempt to establish a common legal and regulatory framework for all types of enterprises organized with a cooperative ownership structure. Currently, enterprises that fall under this legislation are engaged in diverse activities, such as wholesale marketing, retailing (including supermarkets), agricultural production, transportation, and financial intermediation (credit unions). Pharmacies organized in the form of a cooperative have had to conform with the general health regulations established by the ministry of health, and the transportation cooperatives with the traffic laws. However, despite the fact that credit unions are nonbank financial intermediaries, generally they are not subject to the prudential regulations or supervision of banking superintendencies throughout the region.

As part of the cooperative legal and regulatory frameworks that are in place throughout the region, government cooperative development institutes or departments have been created to promote, organize, charter, and supervise all types of cooperative organizations. In some countries, these institutes are simply a specialized department within the ministry of labor; in other countries, they are autonomous institutions with direct representation of the cooperatives on their boards of directors. In addition to the fact that these organizations have conflicting institutional objectives (that is, promotion and supervision), they have commanded little of the government’s budget and are severely underfunded relative to the tasks assigned to them. As a result, in virtually every country in the region, these organizations cannot be relied upon to provide even the most basic statistical information about the number of cooperatives and cooperative members, and the total resources managed by the cooperative institutions. Furthermore, because of their conflicting institutional objectives and the highly specialized and technical skills required for the prudential supervision of financial intermediaries, they should not be relied upon to carry out this supervisory function.

Governments throughout the region have typically treated cooperative institutions and credit unions in particular with an excessive degree of regulatory forbearance. The governments have supported the promotion and development of these financial intermediaries through cooperative development agencies and internationally funded development projects, creating incentives
for the low-income population to deposit their savings in these financial intermediaries. At the same time, most countries have allowed credit unions to operate virtually without prudential supervision and outside of the government safety net. Implicit in this policy is the assumption that only shareholder-owned financial institutions should be constrained by prudential regulations. This policy framework places at risk the savings of the most vulnerable part of the population. Credit unions can and should be expected to perform up to the same prudential standards imposed on the rest of the financial intermediaries.

In view of the credit unions’ small share of domestic financial markets and the high costs of establishing and financing supervisory structures, it is difficult to argue that countries should create and maintain a separate, specialized public sector institution exclusively for the prudential supervision of credit unions. Substantial investments are required in terms of state-of-the-art information systems and highly trained specialized staff. Duplicating this investment for the supervision of credit unions would be unnecessarily costly and inefficient, particularly in view of the relatively small size of the total assets managed by these financial intermediaries. Finally, the separation of supervisory functions by type of institution would undermine the inherent regulatory synergies that would derive from having all types of financial intermediaries within the same regulatory and supervisory system.

Over the last ten years, financial markets throughout Latin America have been experiencing a significant process of reform. These reforms have concentrated on liberalizing financial transactions, reforming legal frameworks, tightening prudential regulations, strengthening banking supervision, and increasing the independence of central banks (Westley 1995). The outright closure or reduction in size of state-owned agricultural development banks has been another of the important policies carried out as part of the financial reform process. The scaling back or closure of these institutions, with their extensive branch networks throughout the rural areas, further highlights the need to strengthen the legal and regulatory frameworks and the supervision of credit unions because credit unions will be called upon to play an increasingly important role in the provision of financial services in thin, under-banked rural markets.

The institutional strengthening of banking superintendencies throughout the region has been one of the most important, although time consuming and difficult, components of these financial reform efforts. According to Westley (1995), eight of 26 countries in the region still do not have a “modern bank law or set of regulations,” and only about half of the countries have “reasonably good” banking supervisory systems. Gavin and Hausmann (1997, p. 150) conclude:

“The limitations of the Latin American state are particularly important in exactly those areas where effective state action is most required
for building a sound financial system. . . . In short, Latin America today possesses a comparative disadvantage in providing the public goods required for an effective financial system. The unstable macroeconomic environment threatens financial institutions whose business is largely confined within national borders. And deficiencies in the legal, regulatory and supervisory infrastructure limit the development of local financial intermediation by domestic and foreign financial institutions."

Three arguments are used to justify the exclusion of credit unions from the banking supervision system. First, credit unions are mutualist organizations, operated and managed by their members/owners, and therefore information asymmetries are not a problem. Second, the banking supervision system lacks the institutional capacity to oversee credit unions. And third, these financial intermediaries are small and therefore do not represent a systemic threat to the financial system as a whole. Active opposition by the credit union industry in many countries has also served as an important obstacle to the integration of credit unions within the banking regulatory structure. Finally, regulatory forbearance on the part of government officials, who mistakenly believe that subjecting these financial intermediaries to external supervision will somehow damage the interests of the low-income population, also explains their exclusion.

In some countries, distinctions are made between those institutions that only transact with their members and those that operate with the general public, basically assuming that information asymmetries are less problematic with the former. Experience has shown that this is not the case. Precisely because these financial intermediaries have specialized in servicing the financial needs of a market segment comprised of middle- and low-income clients, the principal argument of protecting small uninformed depositors, which serves to justify the need for prudential regulation and supervision of financial intermediaries, is particularly relevant in the case of these financial intermediaries. According to Benston (1986, p. 18), the arguments supporting the external supervision of mutuals such as credit unions are even stronger than for stockholder-owned banking institutions:

"The mutual form was adopted for these institutions because they began as charitable or fraternal, nonprofit organizations. . . . But unlike the situation for stockholder-owned enterprises, monitoring by stockholders and the security market is not present. Consequently, should a mutual institution be operated inefficiently or fraudulently, there is a need for a supervisory government agency to step
in to protect the equity in the assets that, in effect, belong to the community.”

Legal frameworks and systems for prudential supervision of banks are generally weak throughout the region, and domestic financial systems are dominated by commercial banks. Therefore, the first-generation financial reforms of the late 1980s and early 1990s concentrated on supervisory (and other) issues related to large banking institutions. However, as the regulatory and supervisory authorities have gotten control over the formal banking system, they have begun to extend their reach to cover institutions such as the credit unions, as part of a wave of second-generation reforms.4

I have argued that there is ample need for external supervision of the credit union industry and that this function should be carried out by the traditional banking supervisory institutions. However, the design of effective regulatory and supervisory systems for credit unions requires a good understanding of the intricacies of their internal incentives and operational structures, particularly in view of their mutual-based ownership structure. The next section highlights some of the important differences between banks and credit unions in their structures and incentives, as well as the implications these differences have for the design of prudential regulations and supervision.

**Special Risk Characteristics of Credit Unions as Financial Intermediaries**

In view of the highly specialized nature of the expertise required for supervision of financial intermediaries, the regulatory synergies discussed earlier, and the fact that credit unions mobilize deposits primarily from large numbers of small depositors, the incorporation of the credit union industry within the purview of banking superintendencies throughout the region is long overdue. Success in both the operation and supervision of these financial intermediaries depends on a clear understanding and management of the risks inherent in their operations.

When compared with the typical banking institution, the operations of most credit unions are exceedingly simple, and experienced banking supervisors should have little difficulty in evaluating the risk characteristics of their financial transactions. However, significant differences in credit union ownership structure and governance have important implications for the design and implementation of prudential regulations. More specifically, because of their mutual-based ownership structure, it is important to understand what motivates people to join and participate in credit unions, in order to design incentive-compatible

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4 About half a dozen countries in the region currently regulate and supervise credit unions, or at least have begun the process of doing so.
regulations that contribute to improved prudential management and thus to the stability of credit unions.

Although external regulation and supervision may contribute to improving the safety and soundness of any financial intermediary, ultimately, it is the structure of the internal incentives of the primary decisionmakers (the boards of directors and managers) that determine the profitability and financial stability of the institution. According to North (1990, p. 3), institutions are: "the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction. In consequence they structure incentives in human exchange, whether political, social or economic." Because the members of the credit union are simultaneously owners and clients, their incentives as clients are directly translated into the operating policies and procedures of the institution in their role as owners. It is particularly important to understand the structure of incentives in human exchange within a credit union, because it differs substantially from that of a stockholder-owned bank and affects the governance of the institution.

Credit unions throughout the region are diversified financial intermediaries, providing financial services to practically all sectors of the local economy: commerce, agriculture, industry, and services. Their operations are concentrated in the micro and small enterprise segments of the market. In addition, credit unions are active in the area of consumer finance and housing finance. In most cases, they fund their operations from domestic savings and therefore are forced to compete for deposits with other financial intermediaries. As a result, they confront the same types of risks as all other stockholder-owned financial intermediaries, such as the following.

- **Fraud and malfeasance.** This is one of the most important sources of failure for all types of financial intermediaries. In view of the fact that most credit union systems have been operating without a regulatory or supervisory framework, it would not be surprising to find that it constitutes a serious problem for this industry.
- **Interest rate risk.** The vast majority of credit unions are unaware of the exposure of their institution to interest rate risk. Those institutions that engage in aggressively mobilizing hot money (highly interest-sensitive, short-term deposits—mostly from nonmembers) are also those that experience the greatest risk.
- **Securities speculation.** Only a few credit unions are large enough to invest directly in the domestic capital market. However, many credit unions maintain a large proportion of their liquid reserves in second-tier institutions (credit union federations), which, in many cases, may lack the requisite technical competence to effectively manage their investments in a prudent fashion.
• **Foreign exchange risk.** Given the transactions of most credit unions, their exposure to exchange rate risk is negligible. Important exceptions may occur within dollarized economies, such as Bolivia's.

• **Risk within related companies (or departments).** Multipurpose cooperatives, with savings and credit departments, represent one of the most serious risks here.

• **Credit risk.** To their benefit, the loan portfolios of many credit unions are highly diversified among different sectors of the local economy. However, credit union loan administration policies and procedures may not contain the necessary safeguards for dealing with credit risks, and credit officers may not have the requisite training. Another significant source of credit risk is lack of sufficient geographic diversification.

• **Operations risk.** The operational costs of credit unions are relatively low when compared with other, similar financial intermediaries, such as non-governmental organizations. However, the low wages paid by credit unions have represented a perennial problem, often leading to excessive turnover in personnel. Because of a lack of prudential norms in most cases, credit union leverage ratios are often excessively high, subjecting them to a rapid deterioration in their profitability in a sudden economic downturn.

• **Liquidity risk.** A lack of skills in asset/liability management, the pursuit of hot money, and a sudden decline in the performance of their loan portfolios have landed many credit unions in financial difficulties. Other types of financial intermediaries have had similar experiences.

• **Regulatory risk.** For most of their history, credit unions throughout the region have operated without prudential regulation and supervision. As a result, they have not been subjected to the typical regulatory risk as understood in the literature. However, credit unions have been subject to substantial risks from economic regulation by governments and external donors. Credit unions have been used to channel subsidized credit and to operate what are effectively social welfare programs. These programs tend to limit the ability of participating financial intermediaries to effectively manage the risk in their loan portfolios, and so the incentives for people to join and participate in credit unions become highly distorted. Economic regulation of this type undermines the financial viability of participating intermediaries, introducing very serious problems of solvency and institutional sustainability. Following the disastrous experience with these programs and policies in the 1970s and 1980s, their use was drastically

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5 Regulatory risk stems from the regulatory authorities imposing operational restrictions, such as branching limitations or product and service restrictions, all of which constrain the ability of the financial intermediary to manage its risk effectively.
curtailed. However, as credit unions have recovered in the 1990s, these intermediaries are being considered once again as conduits for targeted credit programs.6

In general, the financial products and services offered by credit unions are similar to those of stockholder-owned banking institutions (although much simpler) and, as a result, the risk profile they present is also quite similar. Therefore, the design and implementation of the vast majority of prudential regulations need not differ substantially from those applied to any other financial intermediary. However, because of their unique ownership structure and its implications for prudential risk management, particular attention should be drawn to capital adequacy requirements.

**Capital Adequacy**

Capital adequacy requirements represent the single most important regulatory requirement for the effective management of risk-taking by financial intermediaries. In fact, the entire logical construct of the prudential regulations designed for the banking industry assumes the presence of a group of owners, with substantial individual equity investments, and a clear and homogeneous objective of maximizing the risk-adjusted rate of return on their investments. The financial structure of credit unions throughout the region includes shares as a distinct and separate instrument from deposits (passbook savings and time deposits). According to the cooperative law definition of shares, they represent the risk capital of the institution and may be withdrawn only when the member leaves the credit union. Although the practice in most countries is to distribute dividends on shares at the end of the fiscal year based on that year’s profitability, in some countries the practice has been to pay a fixed rate of interest on this financial instrument instead.

The mutual-based ownership structure of the credit union means, by design, that the members have a dual relationship with the institution, as both its owners and clients. Consequently, credit union members do not have a single, homogeneous objective they are seeking to maximize, as can be reasonably assumed in the case of stockholder-owned financial institutions. In fact, credit union members’ objectives may change over time, as a result of dramatic changes in their financial transactions with the institution.

Most members of credit unions are drawn to the institution in order to gain access to efficient and competitively priced financial services, such as deposits and loans. In effect, credit union shares simply serve as a compensating

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6 Recent experience in Colombia with channeling housing subsidies through credit unions is another vivid example of how destructive this type of economic regulation can be.
deposit required to gain access to a loan, serving to increase the effective rate of interest on loans and to ration the available supply of credit among its members (Poyo 1986). The rate of return members may obtain on their share accounts, as owners of the cooperative, has never been a motivating factor for joining the institution. As a result, we can safely ignore the return on shares as a motivating factor for joining the credit union; therefore, we are left with incentives related only to financial services: savings and loans.

A complicating factor is that the members themselves have differing incentives for participation in the institution, and their objectives may conflict, depending on whether they are primarily net debtors or net savers in the credit union (Smith, Cargill, and Meyer 1981). Those members motivated to join the credit union to obtain deposit services will focus on the safety of the institution, competitively priced deposit services (that is, high deposit rates), and low transactions costs. They are likely to support investments that improve the institutional infrastructure, including greater professionalization of management. Members who are primarily net borrowers will favor lower interest rates on loans (and therefore on deposits) and an attitude of institutional forbearance toward loan collection and delinquency. They are likely to favor external indebtedness over aggressive deposit mobilization, and are less likely to be concerned with investing in the professionalization of management.

The legal framework in most countries defines the minimum number of members required for the creation of a credit union (typically 20) and some very small lower limit on the total value of their shares. However, it is generally silent regarding the share of risk assets that must be maintained as capital; therefore, the institution has no limit on its leveraging. Because the demand for shares is induced by the demand for loans, there is a direct correlation between the value of shares and the size of the loan portfolio. Shares represent a compensating deposit for loans, rather than an equity investment.

Not only have the net borrowers effectively withdrawn their shares in the form of a loan, but also they have borrowed the resources of the net savers and other creditors of the institution. As a result, in a financial crisis, this “risk capital” is not available; it has already been loaned out to net borrowers, who are unlikely to repay these funds if they perceive that they will be unable to borrow again or effectively withdraw these funds at a future date. Therefore, this risk capital does not provide effective protection to those members who remain net savers of the institution or to other creditors.

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7 Deposits in virtually all credit unions throughout the region are not protected by deposit insurance. Concern for safety of the institution is directly related to profitability, capital adequacy, and loan delinquency (including low institutional tolerance for loan delinquency).

8 Typically, credit unions grant loans whose amount stands in some fixed relation to the value of member shares, such as 2:1, 3:1, 5:1, or 10:1.
Given current definitions and practice in most countries, member shares (aportaciones) should not be included in the definition of the capital of the institution for purposes of determining solvency (capital adequacy) ratios. In order to be considered part of the financial institution's equity capital, shares would have to fulfill three conditions. First, they would have to be a permanent source of funding. This condition typically is violated because the credit union normally must refund their shares to all members who leave the cooperative. Second, these funds would have to be available to absorb operational losses, which cannot be the case if net borrowers effectively withdraw their investment in the credit union by becoming delinquent on their loans. Third, these funds cannot impose mandatory servicing requirements on the institution. This is clearly not the case in some countries that have established the practice of paying monthly interest on these funds.

Member shares, then, have characteristics of both an equity investment (in that they cannot be withdrawn until the member leaves the credit union) and a liability (in that they can be withdrawn either by leaving the credit union or through loan delinquency). Thus, it may be worthwhile to consider reforming the function of shares in either of two directions. First, share accounts could be merged with basic passbook savings accounts, converting them into clear, short-term liabilities. Or, second, restrictions could be imposed on share accounts so that they resemble the shares of a typical stockholder-owned institution.

The first solution has at least four drawbacks. First, it increases the interest expenses in those credit unions in which only dividends had been paid on shares, increasing the risk of insolvency because interest payments must be made, whereas dividend payments were optional. Second, because shares have been a type of forced savings, transferring these balances to a passbook account might very well lead to the withdrawal of a significant volume of these funds, particularly if member preferences for savings balances are well below the levels they now possess. This may create liquidity problems for the credit unions, both in the transition and in the longer run due to the loss of a more stable, long-term funding base.

Third, the risk capital of the institution will be comprised of only donations and retained earnings. As a result, credit union members will no longer have an individual ownership instrument or personal financial stake in the institution. In addition, such institutional capital does not contribute to improving the governance of these mutual-based institutions.

Fourth, if shares were eliminated from capital, the solvency ratios of most credit unions would fall drastically, and many credit unions would become insolvent. The solvency ratios could only be strengthened through a dramatic increase in profitability and the retention of virtually all profits over a significant period of time. The situation is even more serious considering that most credit
unions have not accumulated sufficient bad debt provisions to compensate for
the true level of risk of their loan portfolios. In view of these problems, the con-
version of shares into a pure deposit instrument does not seem attractive.

Conversely, the conversion of credit union shares into true risk capital is a
much more interesting possibility because it retains individual ownership and
strengthens the capital structure of the institution. In order for shares to be in-
cluded in the definition of capital, credit unions can no longer be permitted to
reimburse the value of member shares to withdrawing members. Rather, a sec-
ondary market would have to be established in which the shares of withdraw-
ing members could be sold to new members who want to join. The credit union
would not redeem the shares directly, but would serve as a conduit to facilitate
transactions between individual members.

As a practical matter, the stock exchange cannot determine the price of
credit union shares because few, if any, credit unions would ever be traded there.
However, a book value (net asset value) can be established once these institu-
tions have complied with the prudential norms related to the appropriate provi-
soning of their loan portfolios, as well as other relevant regulations. This would
ensure that accumulated losses or profits would be appropriately reflected in
the value of each member’s shares in the credit union, which does not now oc-
cur because of the use of par value (original purchase price) rather than net asset
value in share valuation.

As an initial step, external auditors could be required to determine the net
asset value of each credit union on a periodic basis (perhaps annually, in view of
cost considerations) until this calculation could be incorporated into the credit
unions’ regular accounting and financial reporting practices. In the short run,
the obvious problem with this is the discontinuity in pricing, which would al-
low transactions to take place only once a year. In the short run, it is likely that
the members will continue to have every incentive to minimize their invest-
ments in shares, and therefore this is not likely to create a significant obstacle.

However, the benefits would be that credit unions could include shares as
part of their capital account, with individual investment decisions in shares be-
ing directly affected by the profits or losses of the institution. Individual owner-
ship of the institution would also be enhanced, and, presumably, so would
decisions to actively participate in its governance in order to safeguard the insti-
tution and the value of each member’s own shares.

Under the institutional arrangements that currently prevail in Latin
America, typically, credit union deposits are not covered by any deposit insur-
ance scheme. Therefore, it is only the net savers of the credit union who have
any incentives to monitor the safety and soundness of their institution. In view
of this situation, the practice, which is becoming more pervasive, of allowing
credit unions to mobilize deposits from nonmembers tends to undermine the
primary source of stability of the institution. Although nonmember depositors may have some incentive to monitor the performance of the institution, they cannot participate directly in its governance through shareholder meetings, and cannot effectively influence the institution’s policies and procedures. Their only option at the first sign of any difficulties is to withdraw their deposits.

I conclude that credit union shares should be converted to true risk capital, and all credit union clients should be required to contribute some of this capital to help build the institution and improve its governance. The minimum solvency ratio of capital to risk-weighted assets probably should be set somewhat higher for credit unions than for fully diversified commercial banking institutions, in view of the generally limited geographical diversification of credit union loan portfolios and their more problematic governance structure.

**Other Regulations**

Because of their special ownership and operating characteristics, credit unions require special prudential regulations or a different regulatory treatment in several additional areas.

**Entry Requirements**

The very minimal entry requirements established in the current legislation of most countries (for example, 20 people, each putting up a small amount of share capital) have led to the proliferation of credit unions throughout the region. As a result, the excessive number of credit unions cannot become competitive financial intermediaries because of their lack of economies of scale and the significant regional concentration of their loan portfolios. Regulations should raise the entry requirements for establishing new credit unions and governments should put in place procedures for close coordination between cooperative development agencies and banking superintendencies.

**Portfolio Diversification**

The limited geographic diversification of their loan portfolios presents a significant operating risk for credit unions. Prudential norms should not only address issues related to the concentration of loans extended to individuals and groups of related individuals, but should also seek to promote greater geographic diversification. Higher capital adequacy requirements for smaller institutions with more limited geographical diversification will effectively recognize that these institutions are more risky than a well diversified financial institution. This may provide the necessary incentives for greater institutional consolidation.
Multipurpose Cooperatives

All financial intermediation carried out by cooperatives should be restricted to specialized institutions. Multipurpose cooperatives with a savings and credit department should be prohibited. In many countries, members’ savings finance investments in unrelated nonfinancial enterprises, such as in pharmacies, supermarkets, agricultural production, and marketing.

Insider Lending

Prudential norms should prohibit loans to all credit union directors, committee members, and their families while the directors and committee members are in office.9

Liquidity Risks

Credit unions confront severe liquidity risks because generally they are not included in the regulated financial sector, and therefore they do not have access to the lender-of-last-resort facility of the central bank. In most countries, credit union systems have developed centralized liquidity pools in order to deal precisely with this type of situation. Although they function well in smoothing the seasonal liquidity problems confronted by individual institutions, these centralized liquidity pools have often proven to be insufficient in confronting systemic crises within domestic financial markets.10

Until credit unions are fully integrated into the formal financial system and, as a result, gain access to the lender-of-last-resort facility of the central bank, their risk of suffering a liquidity crisis, and of this leading to a solvency crisis, is greater than for a bank. Consequently, prudential regulations should mandate higher liquidity and capital adequacy ratios for credit unions than for banks. The immediate incorporation of credit unions into the lender-of-last-resort facility without the necessary prudential controls having been established by the supervisory authorities could introduce severe moral hazard problems, and should be avoided.

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9 In the Dominican Republic, among the credit unions affiliated with the rural credit union federation AIRAC, any loan requested by a member of the board of directors or by an employee of an individual credit union is referred to the federation for analysis and approval. These loans are booked at the federation level and are administered and collected there.

10 The experience of the Costa Rican credit unions during 1987–89 is a case in point. The financial crisis that began among nonregulated finance companies rapidly undermined the stability of the credit unions. It was only when this crisis began to be felt in the regulated commercial banking sector that the monetary authorities acted to constrain the crisis by injecting liquidity into the banking system.
Nonmember Deposits

As a result of their particular ownership structure and the implications this has for the prudential management of the institution, deposits from nonmembers should be prohibited. The transactions costs associated with joining a credit union should be reduced, but every depositor, including nonmembers, should be asked to make a conscious decision to become an owner of the enterprise by investing in its shares. Transactions with nonmembers call into question the entire notion of a mutual ownership structure. Such transactions also undermine the single most important stabilizing element in the prudential management of these intermediaries, namely, the vigilance of depositors who are active within the credit union and concerned about the safety of their savings.

External Debt

The level of external indebtedness (external to the membership) of the credit union should be strictly limited in order to avoid these intermediaries being used as conduits for targeted credit programs, such as the agricultural credit programs of the past or the microenterprise lending programs of the present. External indebtedness tends to reduce the presence of net savers in the institution, thus tending to negatively impact prudential governance. Given the characteristics of credit unions as mutual, nonprofit organizations, widely distributed throughout the countryside, there is a substantial risk that governments throughout the region, multilateral development banks, and other donors will be inclined to use these institutions as channels for their favorite microenterprise credit programs. The institutional strengthening these institutions achieved over the last 10 years could be undermined quite rapidly if external indebtedness is not constrained.

Rotation

Limited turnover of members of the board of directors and management team is sometimes viewed as signaling a problem within credit unions. Although credit unions are cooperatives and have a democratic form of governance, this should not lead to the conclusion that the lack of frequent turnover is a sign of problems.

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\[11\] Traditional credit union practice requires a board member to recommend a potential member, who then takes a series of courses on cooperative philosophy in order to be eligible to join. These requirements impose substantial transactions costs on the membership process without any real benefits to the institution. Detailed screening, not cooperative courses, should take place once a member requests a loan.
within the institution. The knowledge and experience required to effectively run a financial intermediary is quite extensive, and frequent turnover of the board of directors or of the management team is likely to impose severe costs on the institution in its operational efficiency and profitability. In fact, most successful credit unions have achieved a degree of stability in their board and management team. However, the membership at large needs some system of internal and external supervision and evaluation of the administrative capabilities of their board and management team in order to make informed decisions regarding their continued support or replacement. Hence, regulations should not mandate an overly rapid rotation of board members, but should increase the transparency of credit union operations in order to facilitate informed decisionmaking by the membership.

**Practical Issues of Credit Union Supervision**

Although there may be agreement on the need to establish prudential norms and supervision of credit unions, there are practical difficulties stemming from the high costs of direct supervision. The minimal entry requirements in most countries have led to a proliferation of credit unions; in some cases, the number of credit unions is many times larger than the total number of regulated banking institutions. In some countries that have instituted credit union supervision, the superintendence's strategy has been to directly supervise only the large credit unions, defined in terms of some minimum level of assets. This approach is certainly practical, and may even be somewhat rational from the point of view of potential asymmetric information problems.12

However, selective supervision is likely to place many institutions—particularly small, rural institutions—at risk because of a competitive disadvantage. All else equal, depositors will seek out those institutions that are supervised over those that are not. Supervision provides a competitive advantage for a larger, regulated credit union to open a branch office in a small town in direct competition with another credit union that is not supervised. The introduction of prudential norms and stricter entry requirements, as well as increasing competition in the domestic financial markets, will naturally cause the consolidation of the credit union system, leading to a reduction in the number of institutions in the market. However, this process should be the result of market forces playing out against an unbiased regulatory backdrop, and should not be shaped by a lack of regulatory neutrality.

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12 Information asymmetries may be somewhat less of a problem in small credit unions than in large ones due to the fact that in small credit unions the members are more likely to know one another and have greater information about their institution.
In order to deal with the substantial administrative costs associated with prudential supervision of the credit union system, banking superintendencies need to utilize adjunct systems for data collection and oversight whenever practical. Delegation of some responsibilities to second-tier private cooperative organizations (for example, national credit union federations) as well as more intensive use of external auditing firms will help to reduce the administrative burden on banking superintendencies. Second-tier organizations can play an important supporting role, not only in the collection and initial processing of information (following strict guidelines established by the banking superintendency), but also in the provision of technical assistance to the credit unions in their efforts to come into compliance with prudential regulations.

Greater regulation of the procedures to be followed and of the information to be reported in external audits (which by law must be conducted and paid for by the individual institutions) will go a long way toward improving prudential supervision without imposing additional costs on the banking superintendency. For example, extending the external auditing process over the entire year, with partial quarterly examinations, would improve the quality of the information available to the supervisory authorities. And making this information public would contribute toward strengthening market-based regulation (Nicholl 1996).

Credit unions in most countries have been operating without any form of prudential regulation or supervision, and in isolation from any public sector safety nets, such as the lender-of-last-resort facility of the central bank and the deposit insurance fund. Yet, credit unions have continued to grow, largely avoiding systemic collapses. In part, this is due to the disciplining threat of runs by credit union depositors. However, there is a real danger that once credit unions are perceived to be protected by either of these safety nets, serious problems of moral hazard could be introduced. Therefore, the incorporation of credit unions within the banking supervisory system and their inclusion within the public safety nets available to other regulated financial intermediaries must be judiciously timed and properly sequenced. Even their simple inclusion within the regulatory framework may give credit union administrators the signal that they are protected from failure by the monetary authorities, which the administrators may interpret as a green light for risky behavior and loans. For the same reason, including credit unions in any deposit insurance scheme before prudential controls have been adequately developed could have a very serious impact on the financial stability of the entire credit union system.

The credit union system is likely to face difficult obstacles in attempting to comply with the prudential regulations and information requirements that are part of the external supervision process. Credit unions not only have serious weaknesses in terms of their professional capabilities, but also in their management information systems. These institutions are likely to require a substantial
amount of technical support if they are to be expected to satisfy the requirements of the banking superintendency, particularly in the short run. In order to help ensure compliance with these requirements, second-tier institutions should invest resources in supporting their affiliated credit unions in such areas as management information systems, unification of accounting practices, and management and personnel training. Multilateral development banks and other donors can play a very constructive role by supporting this process with technical assistance resources.

Conclusions and Recommendations

The credit union industry throughout the region has been operating within domestic financial markets since at least the 1950s virtually devoid of any system of prudential regulation and supervision, effectively in a free banking environment in most countries. Although the monetary authorities throughout the region have been engaged in the reform of the legal, regulatory, and supervisory systems for the banking industry, in most countries the credit union system has been excluded from this process.

The financial problems of some of the larger credit unions in several countries in the region have intensified the public debate regarding the prudential supervision of these financial intermediaries. The current legal and regulatory framework for credit unions requires major reform. Furthermore, the responsibility for prudential regulation and supervision should be transferred to the banking superintendency for three reasons. First, prudential regulation and supervision require highly technical expertise. Second, cooperative development agencies face institutional weaknesses and conflicts of interest in attempting to supervise the same institutions they are meant to promote. And third, consolidating these functions within one organization, such as the banking superintendency, would generate positive regulatory and supervisory synergies.

In order to reduce the substantial additional costs that credit union supervision would impose on the banking superintendencies in the region, some delegation of the actual field examination and data collection functions could be introduced (with appropriate institutional incentives and sanctions), and greater reliance could be placed on more detailed external audits. All credit unions, regardless of size, should be incorporated within this regulatory framework because arbitrary selection by size introduces serious, government-imposed distortions within the financial marketplace, discriminating precisely against those smaller institutions operating in the thin, rural markets that most require supervision services.

Although the incorporation of the credit union industry into the system for banking supervision is long overdue, the transition toward this new struc-
ture has risks. Credit unions have been operating without any form of government regulation or supervision, with excessive risk-taking by the boards of directors and management constrained by the threat of depositor withdrawal. The formal supervision of credit unions and their incorporation into the public sector safety net (lender of last resort, deposit insurance, and government bailouts) could lead to a relaxation of this market discipline and result in severe moral hazard problems. The supervisory authorities must exercise great care in the timing and sequencing of these changes in order to minimize these moral hazard problems; for example, formal supervision must be reasonably well advanced before access to the safety net is granted.

Credit unions are multipurpose financial intermediaries, mobilizing deposits and using these resources to fund a highly diversified loan portfolio, which includes loans to micro and small enterprises in virtually all sectors of the economy. In addition, credit unions provide consumer and housing finance to households in their target markets. Although their financial transactions are typically simple, they are quite similar in nature to those of other financial intermediaries, and so many of the prudential regulations can be similar as well. However, credit unions differ in important ways from banks in their ownership/governance structures and in certain key operational characteristics such as the greater geographic concentration of their loan portfolios and the nature of their clientele (which includes many micro and small entrepreneurs), all of which necessitates special additional regulations or different regulatory treatment.

The principal difference between credit unions and stockholder-owned financial intermediaries relates to the incentives for member participation in the governance of each type of institution. The complicating factor in the case of credit unions is that members have differing incentives for participation (which may in fact put members into conflict with each other), depending upon whether they are primarily net debtors or net savers.

The most important regulatory instrument designed to constrain excess risk-taking by any financial intermediary is the capital adequacy requirement. Although the legal framework for credit unions defines shares as risk capital, the characteristics of this instrument and general practice require that shares be considered a liability. The recommended policy for the regulatory authorities would be to make this instrument in fact conform to the definition of true risk capital. Shares should be priced at their net asset value by the institution, transacted exclusively in a secondary market, and not repurchased directly by the credit union itself. This practice would strengthen the capital structure of these institutions and contribute toward improving the incentives for the general membership to actively participate in credit union governance. The practice of allowing credit unions to mobilize deposits from nonmembers should be prohibited because it tends to undermine the most effective mechanism to promote greater
monitoring of the credit union by the membership and improve its governance. Finally, the minimum solvency ratios of capital to risk-weighted assets probably should be set somewhat higher for credit unions than for fully diversified commercial banking institutions.

Because of their low overhead structure and access to local information, credit unions are particularly well suited to supplying financial services in the thin markets that exist in rural areas in developing countries. This role is becoming even more important because public sector agricultural development banks have been closed or reduced in scope in several countries in the region. The rapid growth experienced by the credit union industry in recent years highlights the urgent need for regulatory authorities to turn their attention toward incorporating these intermediaries into the existing banking supervisory structure.

The improved performance of the credit union industry is a welcome result of their turn toward the domestic market—a turn that came in reaction to failed subsidized, targeted credit programs in the 1970s and 1980s. At the same time, the relative success credit unions have had in competing in domestic financial markets places them at increased risk of being used to channel new credit programs, now targeted at the microenterprise sector. Large volumes of external credit flowing from governments, multilateral development banks, or other donors can easily disrupt the idiosyncratic governance structure of credit unions. National governments and donors have important opportunities to participate in strengthening the credit union industry. Provision of specialized technical assistance and training to both the superintendency and the credit unions during the transition process toward complete integration of credit unions into the supervisory structure is of prime importance.
REFERENCES


In Bolivia, the 1958 General Law on Cooperative Enterprises (Ley General de Sociedades Cooperativas) created credit unions, which arose in response to the need for credit services. Credit unions were sustained through the savings and mutual cooperation of sectors of the population with little access to traditional banking services. From the outset, their constituencies were drawn mainly from the middle- and lower-income strata of both urban and rural populations, and included wage earners, merchants, small industrial and agricultural producers, artisans, and microentrepreneurs.

Over time, the cooperatives expanded the instruments they used for attracting funds and became true savings and loan organizations, offering their clients new deposit modalities, such as savings accounts and certificates of deposit. In response to the growth of some of the credit unions, whose scale of operations practically made them “small banks,” the Law on Banks and Financial Entities, No. 1488, of April 14, 1993, included credit unions as full-fledged financial entities. They were classified as nonbank financial institutions and were given all the rights and obligations of such intermediaries. The purpose of this reform was to keep up the sustained development of the credit union system.

Prior to Law No. 1488, credit unions carried out their activities pursuant primarily to the 1958 General Law on Cooperative Enterprises. Nonetheless, the supervision of their operations as financial intermediaries revealed gaps or areas that were not sufficiently spelled out. In response, rules and regulations needed to be issued in order to protect the safety and soundness of the credit unions and attract a diverse array of financing sources, including state financing, with which they could increase the supply of credit to their clients.

In order to be able to monitor and supervise the credit union system adequately, the Superintendency of Banks and Financial Entities (SBEF) began to prepare regulations covering the formation and operation of credit unions. The underlying premise of this work was that those credit unions whose operations are based on attracting resources in the form of savings deposits, time deposits, or any other form involving interest rate remuneration should be subject to prudential rules and oversight. The resulting regulations governing the formation
and operation of credit unions were approved through Supreme Decree 24439 on December 13, 1996.

Credit Unions in the Bolivian Banking System

In 1993, SBEF and the World Council of Credit Unions, with the support of the United States Agency for International Development, undertook a census of the credit union sector. This study revealed that as of December 1992, Bolivia had some 202 active credit unions, with total assets of $250 million. This figure represents approximately 4 percent of the total assets of the financial system as of December 31, 1997 (table 8.1).

Most of the 202 credit unions engage in savings and loan operations exclusively with their members, are located in rural areas, and offer credit services to sectors of the population without access to traditional banking services. Of the 202 credit unions, at present 17 report their financial statements to SBEF. Of these, three currently have operating licenses.

One-half of credit union lending is for financing small businesses (commerce and production), just over one-third is for housing, and the rest is for consumer credit. Loans made by credit unions generally range from $1,000 to $10,000; rarely do the largest loans exceed $50,000, even in the larger credit unions.

Table 8.2 sets out the size breakdown of the portfolio of the credit union system and of the portfolios of the banks, savings and loans associations, and private financial funds. The portfolio of banks and savings and loan associations is comprised mostly of loans greater than $10,000 (90 and 69 percent of their portfolios, respectively). By contrast, 73 percent of credit union portfolios is made up of loans less than $10,000.

Bank loans concentrate a large percentage of total lending in the hands of a small number of borrowers—90 percent of all credit goes to 13 percent of all

<table>
<thead>
<tr>
<th>Table 8.1. The Number of Entities and Volume of Assets in the Financial System in Bolivia, 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>Entities</td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>Percentage of total financial system</td>
</tr>
<tr>
<td>Assets</td>
</tr>
<tr>
<td>Millions of dollars</td>
</tr>
<tr>
<td>Percentage of total financial system</td>
</tr>
</tbody>
</table>

*Note: All figures are as of December 31, 1997, except for the credit unions, which are as of December 31, 1992.*
### Table 8.2. Loan Portfolio Breakdowns by Size of Loan, Bolivia, 1997

<table>
<thead>
<tr>
<th>Loan size and indicator</th>
<th>Banks</th>
<th>Savings and loan associations</th>
<th>Credit unions</th>
<th>Private financial funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loans up to $10,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (millions of dollars)</td>
<td>409</td>
<td>90</td>
<td>133</td>
<td>115</td>
</tr>
<tr>
<td>Percent</td>
<td>10</td>
<td>31</td>
<td>73</td>
<td>91</td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>196,978</td>
<td>24,131</td>
<td>57,700</td>
<td>123,827</td>
</tr>
<tr>
<td>Percent</td>
<td>87</td>
<td>75</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td><strong>Loans more than $10,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (millions of dollars)</td>
<td>3,751</td>
<td>197</td>
<td>49</td>
<td>11</td>
</tr>
<tr>
<td>Percent</td>
<td>90</td>
<td>69</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30,420</td>
<td>8,064</td>
<td>2,775</td>
<td>497</td>
</tr>
<tr>
<td>Percent</td>
<td>13</td>
<td>25</td>
<td>5</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>All loans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (millions of dollars)</td>
<td>4,160</td>
<td>287</td>
<td>181</td>
<td>126</td>
</tr>
<tr>
<td>Percent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>227,398</td>
<td>32,195</td>
<td>60,475</td>
<td>124,324</td>
</tr>
<tr>
<td>Percent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note: All data are as of December 31, 1997.*

Over time, the cooperatives expanded their array of savings mobilization instruments and became true credit unions, offering their clients different types of deposit modalities, such as savings accounts and certificates of deposit. Table 8.3 reflects the extent of development of the credit unions in relation to the banking system. The credit union system has grown considerably faster than the banking system: credit union assets climbed 155 percent in 1993–97, compared with 49 percent for banking system assets. These figures corroborate the importance of credit unions in financial intermediation and the need to put in place a regulatory framework to enable the system to function and be competitive under a set of uniform rules.
Table 8.3. The Development of Credit Unions and the National Banking System in Bolivia, 1993–97

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit unions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets (millions of dollars)</td>
<td>90.6</td>
<td>124.4</td>
<td>126.7</td>
<td>175.3</td>
<td>231.3</td>
<td>155</td>
</tr>
<tr>
<td>Loan portfolio (millions of dollars)</td>
<td>62.4</td>
<td>92.4</td>
<td>98.6</td>
<td>148.9</td>
<td>181.1</td>
<td>190</td>
</tr>
<tr>
<td>Loan arrears/total loan portfolio (percent)</td>
<td>18.1</td>
<td>9.8</td>
<td>13</td>
<td>9.6</td>
<td>8.12</td>
<td>−55</td>
</tr>
<tr>
<td>Administrative expenses/assets (percent)</td>
<td>5.4</td>
<td>6.3</td>
<td>7.4</td>
<td>6.8</td>
<td>6.2</td>
<td>15</td>
</tr>
<tr>
<td>Net earnings/net worth (ROE) (percent)</td>
<td>0.8</td>
<td>−1.6</td>
<td>0.7</td>
<td>5.8</td>
<td>10.5</td>
<td>1,213</td>
</tr>
<tr>
<td><strong>National banking system</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets (millions of dollars)</td>
<td>3,275</td>
<td>3,402</td>
<td>3,842</td>
<td>4,444</td>
<td>4,867</td>
<td>49</td>
</tr>
<tr>
<td>Loan portfolio (millions of dollars)</td>
<td>2,404</td>
<td>2,568</td>
<td>2,820</td>
<td>2,972</td>
<td>3,376</td>
<td>40</td>
</tr>
<tr>
<td>Loan arrears/total loan portfolio (percent)</td>
<td>6.2</td>
<td>3.6</td>
<td>6.2</td>
<td>4.8</td>
<td>4.46</td>
<td>−28</td>
</tr>
<tr>
<td>Administrative expenses/assets (percent)</td>
<td>3.5</td>
<td>3.1</td>
<td>3.6</td>
<td>3.5</td>
<td>3.6</td>
<td>3</td>
</tr>
<tr>
<td>Net earnings/net worth (ROE) (percent)</td>
<td>11.9</td>
<td>14.3</td>
<td>2.3</td>
<td>12</td>
<td>10.3</td>
<td>−13</td>
</tr>
</tbody>
</table>

The Supervision and Regulation of Credit Unions

For a long time, credit unions pursued their development subject only to the General Law on Cooperative Enterprises, without regard to the Bolivian Central Bank Law. The former regulates activities in the general cooperative sector; the latter regulates the operations of all financial intermediaries and seeks to maintain their soundness as a means of safeguarding the deposits they manage. Within this framework, the institutions subject to supervision include those credit unions that finance their lending activities by routinely mobilizing deposits in the form of savings accounts, certificates of deposit, or any other form of attracting savings remunerated at a fixed or variable rate of interest.

Credit unions operate with member shares and deposits and provide credit to those who lack access to formal banking services. Credit unions have developed considerably in Latin America in the last decade, capitalizing on the major market gaps left by formal financial intermediaries. Nonetheless, in many countries, the growth of credit unions was accompanied by scant regulation and supervision, leading some credit unions to crisis and dissolution (118 dissolved in the case of Bolivia).

In response to the development of the credit union system in Bolivia, the regulatory framework, approved with Supreme Decree 24439 on December 13,
1996, was created with two objectives. The first objective is to strengthen credit unions by a series of mechanisms that foster their solvency, liquidity, and prudent management. The second is to delimit the jurisdiction of state agencies for the promotion, regulation, and control of the cooperative and financial sectors.

Supreme Decree 24439 fosters greater participation by credit unions in the financial system, specifying and differentiating two types of credit unions that provide loans. It also attempts to legally harmonize for the credit unions the terms of the General Law on Cooperative Enterprises, the Bolivian Central Bank Law, the Law on Banks and Financial Entities, and Supreme Decree 24436, which creates the Fund for Strengthening the Credit Union System.

Supreme Decree 24436 draws a distinction between two types of credit unions: open and closed. Open credit unions are cooperatives constituted under the General Law on Cooperative Enterprises. Their only purpose is to generate savings from and make loans to their members. Consequently, their activities are governed by legislation that is applicable to the financial sector. Closed credit unions are cooperatives constituted under the General Law on Cooperative Enterprises. They do not take deposits; they lend exclusively to their members.

This classification is aimed at achieving adequate harmonization and demarcation of authority, such as exists between the Central Bank of Bolivia and SBEF, the agencies that govern the operation of the financial system, and the National Institute of Cooperatives (INALCO), the agency that regulates the activities of the nonfinancial cooperatives. The purpose is to have the agencies operating separately but in harmony with one another, drafting, enforcing, and monitoring the regulations, management, and operation of the credit union system. Closed credit unions are governed by the regulations that will be established by INALCO. In preparing these norms, INALCO will use as a reference the set of regulations established by the Central Bank of Bolivia and SBEF for the open credit unions. SBEF supervises the open credit unions.

**Formation**

Open credit unions, on becoming members of the financial system, are subject to the provisions of the Law on Banks and Financial Entities, the Bolivian Central Bank Law, and other related resolutions. These credit unions are constituted under the General Law on Cooperative Enterprises, upon approval by SBEF, which issues the required operating license. To give its approval, SBEF must first undertake certain studies on the future operational feasibility of the credit union and the solvency, background, and suitability of the founding members and future directors. Moreover, the operating license is issued subject to compliance with Articles 15 and 16 of the Law on Banks and Financial Entities, which specify the minimum technical and legal requirements that must be met to obtain an
operating license. Personal documentation must be submitted for the members of the board of directors, the supervision committee, and the management staff of the credit union in order to determine each individual’s personal professional ethical standards and general suitability for their position. In addition, internal operations manuals must be prepared and submitted, and the credit union must demonstrate that it meets the minimum requirements for paid-in capital.

**Minimum Capital**

Setting a minimum amount of capital as a requirement for the operation of an open credit union reconciles two objectives. The first is that the amount of capital should be sufficient to ensure that the credit union has the resources it needs to operate in an efficient manner given the services it intends to offer, its expected volume of business, and the associated operating and infrastructure costs and working capital needs. The second objective is that it should foster a competitive market, free of oligopolistic practices.

Under these premises, the minimum capital requirements have been reduced, along with credit union lending limits, in order to ensure that credit unions continue to serve the needs of their market segment. In addition, the operations on both sides of the balance sheet that credit unions can engage in have been curtailed. In setting minimum capital requirements, it was also considered that the amounts should be constant in real terms. To this end, the requirements are indexed, so as to keep them permanently up-to-date.

In light of the concepts described above, four minimum capital categories have been established for open credit unions wishing to obtain an SBEF operating license:

- **Category 1.** 150,000 special drawing rights
- **Category 2.** 250,000 special drawing rights
- **Category 3.** 630,000 special drawing rights
- **Category 4.** 5,500,000 special drawing rights

Credit unions meeting the minimum capital requirements specified for categories 1 and 2 are authorized to engage in basic financial intermediation, primarily mobilizing deposits and making loans, within the following limits established by the Law on Banks and Financial Entities:

- Total lending to a single borrower must be no greater than 20 percent of net worth.
- Investments in fixed assets and other enterprises must not exceed the net worth of the credit union.
• No insider lending.
• Maintenance at all times of the minimum solvency ratio of capital to risk-weighted assets.

For category 3, the minimum capital requirement is the same as the amount required of a private financial fund (FFP). Thus, credit unions in this category can engage in the same operations as an FFP, except for financial leasing and for portfolio operations and discounting of debt instruments with financial entities abroad. The credit unions in this category can engage in the following additional operations beyond those permitted for categories 1 and 2:

• Issuing and placing debt instruments, which may or may not be convertible to share certificates.
• Obtaining loans from financial entities abroad.
• Obtaining loans from the Central Bank of Bolivia.
• Discounting commercial debt instruments whose maturity is one year or less, in order to carry out credit operations.
• Issuing warrants (warehousing receipts) for movable property collateral of which the credit union may or may not take possession.

For the level of capital in category 4, which is the minimum required to establish a bank, the credit union is authorized to engage in most operations that banks can do. This includes checking accounts, with prior authorization by SBEF. Table 8A presents a detailed description of the permitted operations for open credit unions.

**Strengthening and Stabilizing Capital**

One of the primary objectives of the regulations is to strengthen and increase the capital base of the credit unions. Bearing in mind that share capital has always been variable, the regulatory and bylaw provisions described below have been adopted to undergird—without violating basic credit union principles—the stability of share capital contributions through rules that establish the conditions under which the return of these capital contributions is to be deferred.

**Joining and Withdrawing**

The regulatory framework for open credit unions retains the principles of open membership and voluntary withdrawal that have inspired the credit union movement from the outset. However, it adds certain restrictions required by the nature of financial intermediation. The purpose of these restrictions is to diminish
the volatility of credit union share capital. To accomplish this, credit unions are obligated to redeem a retiring member’s share certificates within 90 days, with two exceptions. The first exception applies if any of the technical limits specified in the Law on Banks and Financial Entities or in the associated regulations are breached. Principally, these limits are a capital adequacy ratio less than that required by Supreme Decree 24439 for the respective credit union category, and the existence of current or cumulative losses. The second exception applies if the total value of all share certificates is less than 90 percent of their balance at the outset of the respective fiscal year. This restriction seeks to stabilize the net worth of the credit union so as to protect depositors’ interests.

**Distribution of Surpluses**

In order to foster the capitalization of credit unions by attracting larger share capital contributions (rather than by always building credit union reserves), the distribution of the annual surplus is determined as a function of the amount and permanence of the shares held by each member. In this way, shares may become an investment vehicle remunerated at a rate of return foreseeably higher than that paid on savings accounts and certificates of deposit, rather than being a compulsory contribution lacking in profit motive.

The credit union regulations set three restrictions on the distribution of cash surpluses in order to make share capital less volatile. First, there must be a report by an independent external auditor that contains no qualifications. Second, there must not be any cumulative losses. Third, none of the technical or legal limits established by the Law on Banks and Financial Entities, the Bolivian Central Bank Law, or their regulations should be breached.

**Capital Adequacy Requirements**

Capital adequacy requirements establish the minimum ratio between a financial institution’s net worth and its risk-weighted assets, in order to limit debt carrying capacity and fix an amount of capital sufficient to cover the credit risk of the intermediary’s assets. The regulations currently in force in Bolivia for open credit unions establish different capital adequacy requirements for credit unions in the four categories given above, with lower ratios required for credit unions with larger amounts of capital. The following scheme is employed:

- **Category 1.** Ratio of net worth to risk-weighted assets of at least 20 percent.
- **Category 2.** Ratio of net worth to risk-weighted assets of at least 15 percent.
- **Categories 3 and 4.** Ratio of net worth to risk-weighted assets of at least 10 percent.
Management

The regulations related to credit union management are aimed at achieving the healthy development of the Bolivian credit union system, taking into account the following basic principles, which have been adopted with very good results in the operations of credit union systems in many countries.

- **Cooperative self-help.** Persons in similar circumstances pool their financial resources and jointly take on the risks and responsibilities associated with operating a credit union, thus eliminating the disadvantages of competition.
- **Self-management.** The members themselves organize the internal workings of their credit union, so that its structure is not subjected to the undue influence of third parties. The members choose the credit union board of directors and committees. In addition, members have executive and oversight functions and decide on the activities of their common cooperative organization, observing the principle of one person-one vote.
- **Self-accountability.** The members of a credit union are responsible for the continued existence and the maintenance in good standing of their cooperative undertaking. To this end, they assume their responsibilities jointly vis-à-vis others, generating trust in other organizations of the economic system.

The regulations are aimed at disseminating the principle that the member is both owner and client in open credit unions, which explains their dual nature. On the one hand, viewed in terms of its economic relationships, the credit union should be considered an enterprise. On the other hand, as a social group, its members constitute an association of individuals. These two aspects are interrelated, as each shapes the other.

In view of these considerations, the credit union management regulations set out the rules governing the formation and functioning of boards of directors and supervision committees, so as to help strengthen management, establish clear lines of authority for decisionmaking, and reinforce internal control systems. In addition, they regulate the activities of the credit unions’ internal auditors. The management regulations enable SBEF to take preventive measures to control mismanagement of any open credit union because all credit union bylaws must require prudential management of financial intermediation activities. Therefore, any corrective measures deemed necessary may be adopted immediately.

**Credit Limits**

The same technical limits that apply to financial entities specialized in making small loans apply to both open and closed credit unions. First, no loan should be
made and no loan balance should be maintained with a borrower or borrowing group for more than 3 percent of the net worth of the credit union. Second, all loans made to a borrower or borrowing group in amounts greater than 1 percent of the credit union’s net worth should be duly collateralized. Third, no deposit accounts should be kept in any financial intermediary for a sum in excess of 20 percent of the credit union’s net worth. These technical control measures seek to diversify the risks to which credit unions are exposed in their operations, and to force credit unions to demand better guarantees for the largest loans.

Limit on Indebtedness with Financial Entities of the State

The limit on indebtedness with state financial entities or funds (or both) is set at one-third of the credit union’s total assets. This prudential measure prevents undue concentration from government sources of a credit union’s loanable funds, which could undermine the purpose of the credit union system. In addition, this limit encourages credit unions to utilize different markets and sources for obtaining the resources to be intermediated.

Share Certificates as Security for Loans

There is a prohibition on using credit union share certificates as security for loans because if this practice were permitted, it could lead to decapitalization of a credit union through loan defaults. A credit union’s capital, including its share capital, provides global security to all credit union depositors and creditors, and must not be used as collateral by individual members.

Transparency of Operations

The regulations issued by SBEF to foster transparency of public information in open credit unions are similar to those that are applied to the rest of the institutions engaged in financial intermediation. Closed credit unions must make available to their members sufficient and timely information on credit union loans and investments, so that members are able to exercise the degree of control they deem appropriate.

Merger and Transformation

The regulations allow the possibility of two or more credit unions merging for the purpose of attaining the asset threshold required to obtain an operating license as an open credit union. In this case, the merger must be authorized by SBEF after analyzing the viability of the combined entity and the margin of pro-
tection it affords depositors and the general public. In addition, the regulations provide for the possibility that an open credit union might become another type of financial intermediary or rise to a higher category within the four categories established for open credit unions (based on the minimum capital), after receiving authorization from SBEF.

In this framework, a closed credit union may also become an open one, upon authorization by SBEF, once the minimum capital requirement has been met and ownership has been individualized.

Voluntary Dissolution

Like transformation and merger, the voluntary dissolution of an open credit union must be authorized by SBEF to protect the interests of the depositors and the financial system as a whole. SBEF must first ensure that the credit union has sufficient assets to meet its liabilities. The regulations also spell out the methodology to be followed in managing voluntary dissolutions.

Regulation and Forced Liquidation

The regulations governing the operations of open credit unions require the adoption of financial security measures to satisfy depositors and safeguard the financial system as a whole. Should these measures fail, SBEF, pursuant to the Law on Banks and Financial Entities, must intervene in the credit union, with two purposes. The first is to regularize its financial activities, so that the credit union can return to normal operations. Second, if the anticipated normalization is not obtained, it must proceed to an orderly forced liquidation of its operations, pursuant to the law, and keeping to a minimum the negative effects on the financial system as a whole.

When moving to the forced liquidation phase, SBEF serves as executor and applies a set of predetermined procedures in accordance with the provisions of the Law on Banks and Financial Entities. SBEF is charged with carrying out the entire process, until the credit union declared to be insolvent has ceased to exist.

Strengthening Credit Union Bylaws

Credit unions must bring their bylaws into line with the legal and regulatory provisions that govern many aspects of their existence: organizational, administrative, operational, and managerial, as well as those pertaining to relations among members and credit union dissolution.

In order to assist the credit unions in adapting their bylaws expeditiously and with the least margin of error, SBEF has prepared Model Bylaws for Open
Credit Unions, which include the set of rules that these cooperatives must observe. These model bylaws are based on the General Law on Cooperative Enterprises, the Law on Banks and Financial Entities, the Bolivian Central Bank Law, the Law on Pensions, and Supreme Decree 24439. In accordance with these laws, the model bylaws do the following:

- Define open credit unions as nonbank financial entities that are specialized or have a single purpose, and that intermediate resources among their members, the public, the state, and other financial entities. They have limited liability.
- Define the position of the board of directors as the executive body, which oversees credit union operations in accordance with the general plans and rules laid down by the general assembly. The board of directors is also entrusted with the administration and representation of the credit union.
- Establish a maximum number (seven) and a minimum number (three) of members of the board of directors; the exact number is to be determined by the members, and included in the bylaws of each credit union.
- Establish prohibitions, disqualifications, and incompatibilities for the members of the governing bodies of credit unions.
- Recognize the various functions and powers of the members of the board of directors, which are classified as directing, normative, administrative, and controlling. The directing function ensures that the credit union complies with all legal and regulatory provisions, sets policies, and approves operational and management plans and programs. The normative function includes issuing rules that are required as per the bylaws and in accordance with the decisions of the general assembly, approving loan and deposit rates, and approving the rules for joining the credit union. The administrative function entails approving annual budgets, granting specific powers to the credit union's manager, convening the general assembly and calling elections as appropriate, appointing and removing the manager, forming and dissolving specific committees and commissions, and approving the participation of the cooperative in credit union leagues and other, similar institutions. The control function consists of giving initial approval of the financial statements and the annual report prepared by management, together with the respective external audit report, and evaluating budget execution and the financial status of the cooperative on a monthly basis.
- Establish the joint and several liability of the members of the board of directors with respect to the assets of the cooperative, the veracity of the information provided to the authorities, the existence and content of the books containing the minutes of the board meetings and the credit union's accounts (for purposes of internal control), and the timely correction of
any irregularities detected by the supervisory or other oversight authorities.

- Define the supervision committee as the entity which acts as the internal supervisor of the operation and management of the credit union, assigning the committee specific authorities, and determining its liabilities in case of nonperformance or negligence.
- Establish the number of members (3) and alternates (2) of the supervision committee, to be elected by the general assembly in accordance with the law and bylaw provisions.
- Define the authority and functions of the supervision committee, which are essentially that of overseeing the operations of the board of directors and management. One of the important responsibilities of the board of directors is to propose the slate of internal auditors to the general assembly.
- Ensure that the credit union has an internal auditor or internal audit unit (whichever may be needed given the volume and complexity of the cooperative's operations), and ensure that this auditor or audit unit is free to carry out its important work fully and without restrictions.

Meeting the Requirements of the New Regulatory Framework

SBEF has issued regulations aimed at bringing the currently operating credit unions into line with Supreme Decree 24439, within the specified period of time and to the extent that they can do so. It has allowed the credit unions a period of adjustment and reprogramming in order to meet the standards required to obtain an operating license. This transition period is meant to help ensure that Supreme Decree 24439 does not become an insurmountable obstacle to the continued operations of those credit unions which, even on a very small scale, are engaging in financial intermediation with reasonable safety and efficiency.

The process of bringing the credit unions into line with Supreme Decree 24439 is regulated by SBEF by means of the following two resolutions. Resolution SB/31/97 of April 14, 1997, relates to the operation of the open credit unions. Resolution SB/32/97 of April 14, 1997, relates to the technical and legal requirements that credit unions must meet to obtain an SBEF-granted operating license.

The process of bringing credit unions into line with the regulatory framework so they can engage in financial intermediation has four stages. The first stage gives instructions to the credit unions to decide whether to operate as open or closed credit unions. The second stage involves the receipt and evaluation of requests and the formation of priority groups. The third stage entails monitoring and inspection. The fourth stage is the granting of an operating license.

As a result of the instructions published by SBEF and INALCO, 65 urban and rural credit unions have declared their intention to bring themselves into line
Table 8.4. Deposits in Credit Unions that Have Declared their Intent to Obtain an Operating License, Bolivia, 1997

<table>
<thead>
<tr>
<th>Credit union</th>
<th>Deposits (thousands of dollars)</th>
<th>Credit union</th>
<th>Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jesús Nazareno</td>
<td>35,501</td>
<td>34. San Bartolomé</td>
<td>649</td>
</tr>
<tr>
<td>2. San Martín de Porres</td>
<td>21,851</td>
<td>35. Litoral</td>
<td>616</td>
</tr>
<tr>
<td>4. Loyola, Ltda.</td>
<td>7,693</td>
<td>37. Santísima Trinidad, Ltda.</td>
<td>574</td>
</tr>
<tr>
<td>5. Hospicio, Ltda.</td>
<td>6,558</td>
<td>38. San Francisco Solano</td>
<td>494</td>
</tr>
<tr>
<td>7. La Merced</td>
<td>4,723</td>
<td>40. Caranavi, Ltda.</td>
<td>437</td>
</tr>
<tr>
<td>9. San Pedro, Ltda.</td>
<td>3,625</td>
<td>42. Magisterio Rural</td>
<td>403</td>
</tr>
<tr>
<td>10. Catedral</td>
<td>3,354</td>
<td>43. San Pedro de Aiquie, Ltda.</td>
<td>396</td>
</tr>
<tr>
<td>11. San Pedro Multiactiva, Ltda.</td>
<td>3,030</td>
<td>44. Tacuyapaj, Ltda.</td>
<td>360</td>
</tr>
<tr>
<td>12. Jisuno</td>
<td>3,027</td>
<td>45. La Trinidad</td>
<td>357</td>
</tr>
<tr>
<td>13. Trapetrol</td>
<td>2,704</td>
<td>46. Occibol</td>
<td>289</td>
</tr>
<tr>
<td>14. El Alto</td>
<td>2,527</td>
<td>47. Vinto, Ltda.</td>
<td>271</td>
</tr>
<tr>
<td>15. Chorolque</td>
<td>2,503</td>
<td>48. San Carlos Borromeo, Ltda.</td>
<td>264</td>
</tr>
<tr>
<td>16. Mons. Félix Gainza</td>
<td>2,357</td>
<td>49. Paulo Sexto, Ltda.</td>
<td>262</td>
</tr>
<tr>
<td>17. Montero</td>
<td>2,272</td>
<td>50. Sarco, Ltda.</td>
<td>261</td>
</tr>
<tr>
<td>18. Incahuassi, Ltda.</td>
<td>2,076</td>
<td>51. 2 de Junio Abasto</td>
<td>225</td>
</tr>
<tr>
<td>19. Quillacollo, Ltda.</td>
<td>1,884</td>
<td>52. Cantera, Ltda.</td>
<td>219</td>
</tr>
<tr>
<td>20. San Gerardo, Ltda.</td>
<td>1,873</td>
<td>53. Coofracruz</td>
<td>210</td>
</tr>
<tr>
<td>21. Financiacoop</td>
<td>1,623</td>
<td>54. El Buen Samaritano</td>
<td>203</td>
</tr>
<tr>
<td>22. Educadores Gran Chaco</td>
<td>1,578</td>
<td>55. Vía y Obras, Ltda.</td>
<td>190</td>
</tr>
<tr>
<td>23. Nuestra Señora de la Asunción</td>
<td>1,570</td>
<td>56. María Auxiliadora, Ltda.</td>
<td>189</td>
</tr>
<tr>
<td>24. San Gabriel</td>
<td>1,545</td>
<td>57. Los Remedios, Ltda.</td>
<td>188</td>
</tr>
<tr>
<td>25. Cristo Rey, Ltda.</td>
<td>1,491</td>
<td>58. Madre y Maestra</td>
<td>165</td>
</tr>
<tr>
<td>26. San Mateo</td>
<td>1,417</td>
<td>59. Concordia, Ltda.</td>
<td>102</td>
</tr>
<tr>
<td>27. San Roque</td>
<td>1,340</td>
<td>60. Asipac, Ltda.</td>
<td>97</td>
</tr>
<tr>
<td>28. Catedral</td>
<td>931</td>
<td>61. Probol, Ltda.</td>
<td>9</td>
</tr>
<tr>
<td>29. San José de Punata, Ltda.</td>
<td>869</td>
<td>62. Finandia</td>
<td>4</td>
</tr>
<tr>
<td>30. Comarapa</td>
<td>793</td>
<td>63. Vivienda Bermejo</td>
<td>0</td>
</tr>
<tr>
<td>31. Empetrol, Ltda.</td>
<td>789</td>
<td>64. Unión Fátima, Ltda.</td>
<td>0</td>
</tr>
<tr>
<td>32. San Antonio, Ltda.</td>
<td>758</td>
<td>65. El Progreso</td>
<td>0</td>
</tr>
<tr>
<td>33. Trinidad</td>
<td>758</td>
<td>Total</td>
<td>159,246</td>
</tr>
</tbody>
</table>

Note: The 65 credit unions listed have declared their intent to obtain an operating license from the Superintendency of Banks and Financial Entities.

with Supreme Decree 24439 and to undertake financial intermediation operations with an operating license from SBEF (see table 8.4). At the same time, 42 credit unions have indicated to INALCO that they would come into line with Supreme Decree 24439 by operating as closed credit unions, as shown in table 8.5.

Among the 65 credit unions that have applied for an SBEF operating license, 18 presently provide information to the Superintendency on a regular
Table 8.5. Credit Unions that Have Declared their Intent to Operate as Closed Credit Unions, Bolivia, 1997

| 1.  | San Francisco Borja           | 22. | La Pacena                      |
| 2.  | Cofan                        | 23. | San Andrés                     |
| 4.  | Magisterio Rural Sucre       | 25. | San Miguel                    |
| 5.  | San Francisco                | 26. | Santa Lucía                   |
| 6.  | San Lázaro                   | 27. | Santiago de Coripata          |
| 7.  | San Miguel                   | 28. | Santiago de Munaypata         |
| 8.  | Senac                        | 29. | Superbancos                   |
| 11. | Cacef                        | 32. | Eucaliptus                    |
| 12. | El Piñal                     | 33. | Senac                         |
| 13. | Parroquia Santa Ana          | 34. | San Martín                    |
| 14. | San Francisco de Asís        | 35. | 18 de Julio                   |
| 15. | Teléfonos Automáticos        | 36. | Cordepo                       |
| 16. | Alianza y Progreso           | 37. | 16 de Julio                   |
| 17. | Avance                       | 38. | La Santa Cruz                 |
| 18. | Central                      | 39. | Padre Fortunato               |
| 19. | Cobee                        | 40. | San José                      |
| 20. | Empleados de Comibol         | 41. | Trapetrol Oriente             |
| 21. | Huayna                       | 42. | Ingenio Azucarero Bermejo “Caciab” |

Note: The 42 credit unions listed have declared their intent to the National Institute of Cooperatives to operate as closed credit unions.

basis. These cooperatives already have the minimum capital required by Supreme Decree 24439, and thus have greater development potential, at least from the perspective of net worth. The remaining credit unions have begun the process of obtaining an SBEF operating license and are attempting to meet the new requirements, especially the requirement pertaining to minimum capital, for which they have two options.

The first option is to access resources from the Fund for Development of the Financial System and Support for the Productive Sector (FONDESIF). This Fund, as provided in Supreme Decree 24436 of December 13, 1996, collects resources, which are used to strengthen the capital accounts of credit unions and other private sector financial institutions. The Fund has $30 million earmarked for the credit union system. It approves operations to strengthen credit unions by providing low-interest, long-term loans. Credit unions can gain access to these funds after submission and approval of a plan for strengthening their capital. The plan must indicate how the resources will be used and provide at least a three-year projection of the credit union’s financial position, in light of which its viability as a financial intermediary will be determined.
The second option is to merge with other credit unions. This process is provided for in the regulations and can occur in either of two ways. Merging by integration implies creating a new enterprise and dissolving the predecessors. Merging by incorporation means that one credit union absorbs the other, including all its assets and liabilities, and the new entity adopts the legal status of the absorbing institution.

Conclusions

The economic reforms being implemented in Latin America have underscored the need to maintain stable financial markets that make it possible to allocate available resources safely and efficiently. The role of the state in this context is four-fold:

- To highlight the key responsibilities assumed by directors and managers.
- To help bring about conditions to ensure the prudential management of resources.
- To prevent individual and systemic crises.
- To endow supervisory entities with adequate technical capacity and broad powers.

The avoidance of individual and systemic crises in recent years has required superintendences to transcend the limits of traditional supervision, with its narrow focus on the banking sector, and to include within their purview other sectors or activities that have needed greater attention, such as the case of the credit union system in Bolivia. Crises of various magnitudes have had to be addressed as a result of irregularities in routine deposit-taking from the public. The legal and regulatory framework for the formation and operation of credit unions, setting out all the requirements that need to be met, has been put in place precisely to bring credit unions—which play an important role in the financial system—under supervision.
<table>
<thead>
<tr>
<th>Operation</th>
<th>Categories 1 and 2</th>
<th>Category 3&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>To receive deposits in the form of savings accounts, certificates of</td>
<td>Only savings</td>
<td>Only savings accounts</td>
<td>Checking accounts with authorization by SBEF</td>
</tr>
<tr>
<td>deposit, and checking accounts</td>
<td>accounts and</td>
<td>and certificates of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>certificates of</td>
<td>deposit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>deposit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To issue and place new shares of stock for capital increases</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To issue and place mortgage bonds</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To issue and place bank bonds, which may or may not be convertible to</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>regular shares</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To obtain subordinated loans</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To obtain loans from the Central Bank of Bolivia</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To obtain loans from financial entities in Bolivia and abroad</td>
<td>Only from Bolivian</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>financial entities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To accept bills drafted against themselves, whose maturity is no more</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>than 180 days from the date of acceptance, and that originate from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>foreign trade operations for goods and/or services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To issue traveler's checks and credit cards</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Operation</th>
<th>Categories 1 and 2</th>
<th>Category 3</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To make short-, medium-, and long-term loans, with personal, movable property or mortgage guarantees</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>To discount and/or negotiate securities or other commercial debt instruments whose maturity is one year or less</td>
<td>To discount commercial debt instruments whose maturity is one year or less, in order to carry out credit operations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>To issue guarantees of various types</td>
<td>To issue warrants (warehousing receipts) for movable property collateral of which the credit union may or may not take possession</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>To open, give notice of, confirm, and negotiate demand or time letters of credit</td>
<td>Only with Bolivian entities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To receive drafts (bills of exchange) or other negotiable documents, and to engage in collection, payment, and transfer operations</td>
<td>Except for payments and transfers</td>
<td>Except for payments and transfers</td>
<td>X</td>
</tr>
<tr>
<td>To issue money orders and make wire transfers demandable in the country or abroad</td>
<td>Only in Bolivia</td>
<td>Only in Bolivia</td>
<td>Only with Bolivian entities</td>
</tr>
<tr>
<td>To engage in foreign exchange operations, including the purchase and sale of foreign exchange, for their own operations</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
**Table 8A. (continued)**

<table>
<thead>
<tr>
<th>Operation*</th>
<th>Categories 1 and 2</th>
<th>Category 3b</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>To purchase, keep, and sell, for their own account, securities registered with the National Securities Commission</td>
<td>Only certificates of deposit from Bolivian financial entities, securities from the Central Bank of Bolivia, and treasury bills</td>
<td>Only certificates of deposit from Bolivian financial entities, securities from the Central Bank of Bolivia, and treasury bills</td>
<td>X</td>
</tr>
<tr>
<td>To purchase, keep, and sell, for their own account, instruments that represent bonds quoted in the stock market and issued by financial entities</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>To purchase and sell commercial debt instruments for their own account</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>To act as intermediary, on behalf of their clients, in the subscription, placement, purchase, and sale of securities after funds have been duly transferred</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>To rent safe deposit boxes</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>To carry out trust commissions and operations</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>To acquire real estate to be used in their own business activities</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>To operate with credit cards and traveler's checks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To enter into financial leasing contracts</td>
<td></td>
<td></td>
<td>X</td>
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<table>
<thead>
<tr>
<th>Operation</th>
<th>Categories 1 and 2</th>
<th>Category 3(^b)</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>To serve as a financial agent for investments or loans, in the country, of resources from abroad</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>To engage in factoring operations</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>To engage in operations in which borrowing is collateralized by securities (operaciones de reporto)</td>
<td></td>
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<tr>
<td>To have an ownership interest in financial services companies and insurance companies</td>
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<tr>
<td>To form syndicates with other banks or financial entities to make loans or provide guarantees</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>To keep balances in correspondent banks abroad</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>To administer mutual funds in which third parties can make investments</td>
<td></td>
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a. Operations authorized for banking institutions.
b. Operations engaged in by private financial funds.

Note: X denotes permitted operations.
This chapter describes the historical background of the cooperative institutions that have provided savings and credit services to lower-income groups in Mexico and the rise of modern credit unions, in particular, the sociedades de ahorro y préstamo, or SAPs. It explains the structure of Mexico’s National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores or CNBV), and CNBV’s approach to supervision. It discusses the steps being taken to consolidate, strengthen, and develop SAPs in Mexico and examines the problems and challenges that arise in their regulation and supervision.

The Start of the Credit Union Movement in Mexico

Credit union-type arrangements have existed in Mexico since the late nineteenth century, in the form of rural savings funds (cajas de ahorro rurales). Their purpose was to help the underprivileged classes.

In 1950–51, a group of Mexican priests who had studied Canadian credit unions introduced the Canadian model, thereby launching the modern version of the credit union movement in Mexico. That development played an important role in expanding savings and credit opportunities for low-income families.

The structure of the system in Mexico was similar to the Canadian credit union system. It had three levels: the credit unions themselves, which were mainly regional in scope; the federations, each of which grouped together the credit unions from several regions; and the national confederation, made up of the federations. This system was controlled through strict adherence to self-regulatory measures, including: (1) the adoption of uniform bylaws, operating modalities, accounting systems, provisioning regimes, and supervisory mechanisms, and (2) the provision of federation-level support systems to credit unions for the protection of their depositors. All of this was carried out under the direction of the confederation. These credit unions were the first institutions in Mexico to make a close link between saving and lending as a basic operating method. This principle was accompanied by methodologies for educating and organizing the members of the credit unions.
Despite these accomplishments, the credit union movement operated at the margins of the formal financial system. Individual credit unions had the legal status of civil partnerships or community associations, although some states passed local laws to regulate credit unions and give them additional legal capacities.

**The Rise of Modern Credit Unions**

In 1991, as part of the modernization of the Mexican financial system, the law regulating nonbank financial intermediaries incorporated within its purview an entity to be known as the sociedad de ahorro y préstamo (SAP). This recognition opened the way for credit unions in the formal financial system and contributed to national economic development by bringing formal financial services to regions that previously had none. It also helped to curtail the practice of usury. In addition, an effort was made to foster the development of SAPs, in order to institutionalize this form of financial intermediation.

In contrast to the other entities that make up the Mexican formal financial system, SAPs are not considered businesses. The law defines SAPs as associations that have legal status and that own assets, have variable capital, and are nonprofit organizations. According to the law, SAPs can take deposits from and make loans to their members exclusively, and may make investments that benefit the membership as a whole.

The share capital of SAPs is made up of share certificates that may be acquired only by individuals, microenterprises, or small businesses. No member may hold more than one share; therefore, SAPs operate on the cooperative principle of “one person-one vote.”

The following principles guide the operations of SAPs: members are free to join and withdraw, all members enjoy equal rights and have equal obligations, and regional development is an important goal. In view of their characteristics and social objectives, SAPs are exempt from the bonding requirement that applies to other types of financial intermediaries. That is, prior to their establishment, SAPs do not have to make a deposit with the authorities to guarantee that they will meet the obligations to which they commit in obtaining their operating license. Like all institutions in the Mexican financial system, SAPs fall under the jurisdiction of the Ministry of Finance and Public Credit for their authorization to operate and their legal structure, the Central Bank for the form of their operations, and the National Banking and Securities Commission (CNBV) for their supervision and accounting regulations.

**Initial Experiences**

The financial crisis that has affected the Mexican economy since 1994, together
with certain structural deficiencies in the law, have allowed only a limited number of unsupervised credit unions (cajas populares) to become SAPs, thereby gaining entry into the formal financial system. Indeed, in 1993–95, only 20 authorizations were granted to establish SAPs, of which 14 entailed the transformation of previously unsupervised credit unions (the largest brought together 23 cajas populares) and six were newly created institutions.

Serious problems arose in this period, particularly with SAPs that did not evolve from the existing, unsupervised credit unions. Licenses were revoked for seven SAPs, including one of the largest, which had a 22 percent share of total SAP assets. This credit union operated from the outset with an excessively commercial orientation. It grew disproportionately as it took in resources by offering higher-than-market deposit rates and made unsecured loans on preferential terms and without collateral. It had a heavy and burdensome administrative structure, as well as deficient information and accounting systems that led it to operate with large losses. CNBV found it necessary to intervene in the management of this credit union. With the support of a bank, the credit union was kept in operation for 20 months to safeguard the public’s savings and to stave off a crisis in the sector. During that period, the most important problems were corrected to the extent possible. The credit union was ultimately liquidated.

Several important shortcomings have been detected in SAPs that have been liquidated and in some of those that continue to operate. Of course, there are major differences in the degree to which these shortcomings constitute a problem for any particular credit union.

- The lack of institutional policies leads many members to seek, as their sole aim, credit on preferential terms or deposit instruments with especially high interest rates. These members, who do not intend to remain in the credit union, cause it to fall short of the principles and objectives that these institutions should have. This problem is associated with a lack of focus and a failure to identify the correct market segment, leading the institution into areas other than savings and lending services for lower-income sectors.
- Certain practical difficulties pose an obstacle to the representation and effective participation of SAP members in the governance of their credit union. In many cases, SAPs cannot hold assemblies and constitute governing bodies because of the large numbers and geographic dispersion of their members. This problem leads to the formation of entrenched groups in positions of power. By manipulating virtual assemblies, these groups can remain in leadership positions and thus maintain control over the direction and management of the SAP.
- Credit administration difficulties cause problems for SAPs. For example, some SAPs accept members who join solely to obtain a loan, without
intending to maintain any regular savings. This practice results in a disproportion in the credit-to-savings ratio. In other cases, SAP officials grant loans at lower-than-market interest rates to friends and family members, with negative impacts on loan delinquency and credit union liquidity.

- Inefficient management of some SAPs has resulted in high operating costs, leading to low or even negative rates of return.
- The low amounts of individually held share capital and the low or negative rates of return achieved by many SAPs mean that these institutions often have a shortage of capital on which to base their operations. This leads to a lack of solidity and to vulnerability.

Despite these problems, supervisory actions and corrective measures have prevented the collapse of the SAP sector while culling out the weaker institutions. Hopefully, these actions will result in greater public confidence in the SAPs. Such enhanced public confidence together with planned regulatory improvements should make SAPs solid, stable, and ready for future expansion and development.

Mexico’s National Banking and Securities Commission

Mexico’s National Banking and Securities Commission (CNBV) is responsible for the supervision of commercial banks, development banks, brokerage houses, and nonbank financial intermediaries. This last category includes SAPs.

CNBV’s Office of the Vice President for Specialized Supervision supervises brokerage houses, recently created commercial banks, and nonbank financial intermediaries. There are seven categories of nonbank financial intermediaries—with a total of 419 entities, including 311 credit cooperatives (uniones de crédito) and 16 SAPs.

The general lines of supervision are similar for all financial intermediaries; however, supervision of SAPs is special in certain regards, given their particular capital structure and their status as nonprofit entities. For example, in commercial banks, it often falls to shareholders to meet additional capital needs. By contrast, in credit unions, the owners cannot be called upon to increase or replenish capital. In credit unions, the amount of share capital is generally very low and, in some cases, merely symbolic; moreover, credit unions must limit individual share capital to one share per member. Therefore, increases in net worth can occur only by capitalizing the operating surplus of the credit union or through a massive influx of new members.

Mexico has no deposit insurance scheme to protect the depositors of nonbank financial intermediaries. This lack of insurance presents a problem for the
financial authorities because many savers still believe that the government must respond when such intermediaries become insolvent, despite the fact that the law expressly states that the federal government assumes no liability whatsoever for the obligations of these institutions.

The supervision of nonbank intermediaries is carried out, as is typical for financial institutions, at two levels: off site and on site. Off-site supervision involves a desk review based on the financial information received each month. This review focuses on verifying compliance with the applicable regulations; checking the reasonableness of the figures; evaluating the performance and trends of the individual institutions and sectors; and issuing early warnings based on performance indicators for liquidity, portfolio quality, preventive reserves, capital adequacy, indebtedness, productivity, efficiency, and rates of return. As for rates of return, the review checks primarily that revenues suffice to cover operating costs. In addition, a rating is given to each financial institution. This may be followed by prudential actions such as the initiation of corrective programs, which may include cost cutting, evaluation, and control of risk exposure, among others.

Once the problem areas have been detected, the supervisory authority sets its inspection priorities in the form of an annual program, taking into account the large number of financial institutions it must supervise with an insufficient quantity of human resources. The on-site visits usually entail a full review of each selected financial institution, although, in some cases, the visits are limited to the inspection of specific areas.

In 1997, 20 percent of all nonbank financial entities were inspected; 27 percent have been scheduled for 1998. With respect to SAPs in particular, 76 percent had on-site inspections in 1997 and 80 percent had on-site visits as of November 1998.

To give some idea of the sector’s size, as of November 30, 1998, the assets of all nonbank financial intermediaries equaled 4.2 percent of total commercial bank assets, and SAP assets equaled 0.4 percent. On average, each SAP has $40.7 million in assets and 60,400 members. However, these figures are not representative; just two SAPs together account for 76 percent of total assets and members.

A total of 520 employees in CNBV are assigned to supervise all institutions in the financial system; 17 percent of them work on nonbank financial intermediaries and 2.3 percent on SAPs. In 1998, CNBV charged each SAP $148 per million dollars in assets for supervision, an average of $6,023 per SAP. These charges covered approximately 40 percent of the total cost of supervision, with the sector receiving an implicit subsidy equal to the remaining 60 percent. In the immediate future, plans are in place to reduce this subsidy by incorporating new SAPs, once new rules are issued for their operation. In the medium term, once the sector is consolidated, an effort will be made to increase the fees in direct proportion to the amount of each SAP’s risk assets, until the subsidy is eliminated.
Actions Taken to Consolidate and Strengthen SAPs

Substantial supervisory efforts have been made in Mexico, mainly to correct anomalies and inefficiencies, to train SAP directors, and to detect unsustainable SAPs whose operating license should be revoked. One of the first results to come from CNBV’s program of SAP supervision was the standardization of financial information reporting requirements, which resulted in greater transparency and in the creation of benchmarks to assist in making comparisons among these institutions. In addition, the supervision program has restrained irregular and illegal activities. And it has contributed to the improvement of SAP management by fostering the establishment of better credit administration systems based on financial discipline, institutional policies and efficient procedures, and explicit operations manuals.

Table 9.1 provides a comparative presentation of some financial indicators for SAPs from December 1996 and 1997 and November 1998. A comparison with the equivalent indicators for the commercial banks would not be representative and is not undertaken in view of the marked differences in the size and characteristics of the two sectors, the effects of the bank rescue, and the recent introduction of new accounting criteria to which SAPs have yet to adapt.

The increase in the delinquency rate, the decrease in the provisioning for delinquent loans, and the decrease in the capitalization index were all caused by the anomalous situation of one SAP in the northwestern region of the country whose deteriorating indicators and increased volume of resources had an unfavorable impact on the overall system indicators. This SAP’s operating license was revoked recently, and the SAP will be liquidated.

I believe that in the medium term, the financial health of the SAP sector will improve with the gradual elimination of nonviable SAPs, the efforts of the remaining SAPs to improve their performance, and the effect of the new regulations and CNBV’s supervision. With regard to the new regulations, now that the SAPs have provided feedback, the final draft of these regulations is being prepared. The new regulations will update and make improvements to the existing regulatory framework, and help to create the conditions needed for the healthy development of these credit unions.

Among the main changes contained in the new regulations are provisions regarding SAP membership assemblies and managing and governing bodies. Currently, these aspects of the SAPs do not work well because of the large number of members and, in some cases, their geographic dispersion. Therefore, the new regulations specify that an assembly should be held that includes no more than 200 representatives. The regulations direct SAP branches or groups of branches to elect these representatives and set out minimum requirements and
specific obligations for them. Each representative shall serve no more than four years and shall receive no remuneration.

Similar conditions are provided for the members of each SAP’s board of directors, which may not have more than 15 members, with no member serving more than eight years. Fifty percent of the board members elected periodically should be new to the board. These actions strengthen members’ participation and delimit the powers and obligations of the directors. In addition, the concept of a sponsoring institution is introduced. This concept is taken from the Spanish savings bank system, where the sponsoring institutions consist of Spain’s 50 savings banks, which account for approximately half of the resources in that country’s financial system.

The sponsoring institution could consist of juridical persons, such as foundations, civic associations, trade unions, institutions that provide private assistance, professional associations, religious groups, or other types of entities that the authorities consider apt to assume that function. It has been suggested that commercial or industrial companies that have large numbers of workers or employees could play this role. As a matter of strategy or social policy, these companies may wish to organize a SAP to benefit their personnel. The sponsoring institution would have as its basic functions the promotion and organization of the SAP. These responsibilities require making a contribution to the SAP’s start-up capital. These contributions could not be withdrawn, and would not be considered share capital. Nonetheless, except in the pre-operational stages and during initial operations, the sponsoring institution may not exercise corporate control over the SAP. However, the sponsoring institution would have certain rights, such as a permanent minority representation in the SAP’s assembly and on its board of directors.

Other elements of the new regulations are related to SAPs’ exposure to risk through their loans and other assets, liabilities, and contingencies. The regula-

### Table 9.1. Financial Indicators of the SAPs (percent)

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<tr>
<td>Delinquency rate (delinquent loans/total portfolio)</td>
<td>8</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Provisions for uncollectable loans/total portfolio</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Provisions for uncollectable loans/delinquent loans</td>
<td>40</td>
<td>45</td>
<td>37</td>
</tr>
<tr>
<td>Capitalization index (net worth/assets at risk)</td>
<td>14</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Net worth/total liabilities</td>
<td>9</td>
<td>8</td>
<td>8</td>
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a. SAPs count as “delinquent loans” only the overdue payments, not the entire remaining balance, of past due loans.

b. Net worth includes the shares paid in by the members (share capital), legal reserves, operating surpluses or losses from previous years, revaluation of fixed assets, profit or loss for the current financial year, and others (for example, grants or support received from third parties).

Note: Values are for December in 1996 and 1997 and November in 1998.
tions strengthen prudential norms, limit the assumption of risk, establish minimum solvency requirements, avoid excessive credit concentration as well as abusive and discriminatory lending practices, and increase provisioning requirements for past due loans.

Given these conditions, it is expected that a regulatory framework that is appropriately adjusted to the social characteristics of SAPs, accompanied by appropriate fiscal incentives, will help attract those credit unions that are currently operating informally to become regulated, so long as they are able to meet the requirements. In addition to these regulatory changes, the rise of the Mexican Association of SAPs (Asociación Mexicana de Sociedades de Ahorro y Préstamo, AMSAP) has been encouraged. AMSAP has come to play an active role as an interlocutor for the sector in dealing with the authorities on issues of mutual concern. It has begun to offer some services for its affiliates, including management training. For the future, AMSAP plans to develop a deposit insurance fund, financed through the contributions of member SAPs. It has made contact with, and received advisory services and technical support from, the Spanish Confederation of Savings Banks.

**Issues and Challenges of Supervision**

In Mexico there is a large but dispersed market for savings and credit services for lower-income households and smaller businesses. This market includes providers such as solidarity funds (cajas solidarias), popular credit unions (cajas populares), savings and credit cooperatives (cooperativas de ahorro y crédito), non-governmental organizations, and SAPs. Of all of these, SAPs are the only ones that are part of the formal financial system and therefore under official supervision. Consequently, it is impossible to measure accurately the size of this market, which no doubt has significant growth potential to offer additional savings services as well as many other types of financial services, including money transfer and payment services.

The solidarity funds, promoted and sponsored by the Ministry for Social Development, operate mainly in marginalized rural zones and indigenous communities. They are capitalized using funds from the recovery of loans granted by the government solidarity program. Loans are made out of the solidarity fund’s capital, and savings are invested in financial institutions in government or bank debt instruments.

Savings and credit cooperatives entered the financial landscape recently, with the promulgation of the New General Law on Cooperative Enterprises of August 1994. Until that time, savings and credit activities were not provided for in the existing cooperative law. A number of former popular credit unions (cajas populares) became savings and credit cooperatives. The savings and credit coop-
eratives are not part of the formal financial system and are not subject to government regulation and supervision.

The nongovernmental organizations providing financial services are generally established as private assistance institutions, dedicated mainly to microfinance (credit and savings). They are directed at marginal populations, especially in the rural and peripheral urban areas. Their credit and other operations draw on specialized techniques and procedures used in other countries, which are adapted to the sectors and groups being served. One of the most widely used techniques is that of solidarity groups, whose members receive individual loans for which the group as a whole assumes liability. Each group usually has a leader in charge of ensuring the members’ punctual compliance with their obligations.

The extent to which the state should bring all of these entities providing unregulated financial services for lower-income groups under official regulation and supervision, and under what conditions it should do so, are both controversial issues. It would be desirable for the authorities to regulate and supervise all financial intermediaries that take deposits from the public. The authorities should particularly regulate organizations whose clients have low incomes and minimal skills to evaluate and select financially sound institutions in which to entrust their savings.

Moreover, it is contradictory that of an array of entities that perform similar financial intermediation activities, some are regulated and supervised and others are not, because the latter could give rise to bankruptcies and social problems, as has happened in other countries. Although in theory it appears desirable to introduce order into this market, in practice, doing so is not risk free. It would be prudent to incorporate only financially viable institutions into the formal financial system, but this practice could lead to a situation in which those who do not qualify, on account of their shortcomings, could be put in serious jeopardy. They would be perceived as high-risk, their sources of financing would be limited, and they might see a massive exodus of depositors.

The supervisory authorities should be endowed with broad powers to enable them to carry out their functions well, without implying that there are any government guarantees. The supervisory mechanisms should be adapted to the number of institutions and their characteristics, as well as to the structure and operating capacity of the supervisory body. Supervision fees should be set so as to avoid giving subsidies.

At the same time, incentives should be put in place to develop solid self-regulatory mechanisms that complement formal supervision. These mechanisms should be based on timely, transparent, and reliable information that allows for market discipline to operate. In due course, the possibility of setting up a deposit insurance fund, administered by the self-regulatory organization, should
also be evaluated. In this context, it would be advisable to help strengthen not only the role of the organization that performs the self-regulatory functions, but also the role of external auditors, as they provide assistance to the supervision process.

The consolidation, strengthening, and healthy development of SAPs and, more generally, of financial institutions that serve lower-income groups, requires that such institutions operate under market conditions. This means that these institutions should not receive subsidies. They should reduce transactions costs and compete within the bounds set by appropriate prudential regulation and supervision, all in an economic environment governed by effective anti-inflationary policies.

Specific actions should be taken to improve the methods and techniques of supervision and to increase the professional level of the supervisors. In this regard, one of the most important programs that will be carried out this year involves research into the organizational systems and supervisory mechanisms used in other countries for supervising institutions of this type.

Finally, projects for the future development of financial services for lower-income groups in Mexico should take into consideration that they are dealing with a little explored and underserved market. The medium- and low-income population, contrary to what many suppose, has a significant capacity for savings that is not always properly channeled. That population needs modern and efficient professional institutions and services. Providing financial services to microenterprises and small businesses can yield an attractive rate of return when these services are properly managed. And the microenterprise sector has an enormous capacity for generating employment. The organization, nature, and characteristics of institutions that provide financial services to lower-income groups, including, in many cases, low operating costs, give these institutions the potential they need to profitably penetrate regions, communities, and social strata that are not attractive to commercial banks.

**Corollary**

This chapter has sought to present an objective description of Mexico's experience with the regulation and supervision of SAPs. Initially, SAPs faced adverse circumstances and a very difficult environment. Valuable lessons from these and subsequent experiences have enabled CNBV to develop better regulatory and  

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1 Here one must distinguish financial savings from aggregate savings. The latter includes not only conventional deposits in financial institutions, but also savings through informal mechanisms, such as rotating savings and credit associations (ROSCAs) and tandas, and hoarding cash or assets that can be easily converted to cash.
supervisory schemes that differ from those that are applied to other financial intermediaries, in view of the unique characteristics of SAPs.

A long road lies ahead to organize and regulate the various types of institutions that provide financial services to lower-income groups in Mexico. Much remains to be done to promote this broad segment of the financial market; to encourage a substantial increase in the financial savings of lower-income sectors, and hence in aggregate savings; and to deliver credit to microenterprises and small businesses. These issues should be accorded priority in Mexico’s plans for economic development and poverty reduction.
Delegated Supervision in a Complete System of Financial Discipline

Helmut Pabst

Credit unions have the potential to allow large segments of the population to participate equitably and democratically in the process of economic development. Credit unions are well suited to this purpose because of the democratic structure of their governing bodies and capital, thanks in part to the principle of “one member-one vote.”

Despite these potential advantages, in most Latin American countries today, credit unions have not met the expectations of their members, the state authorities, or international development agencies. Credit unions have made only marginal contributions to their members’ individual economic progress and have played only a limited role in the development of Latin American financial markets.

One of the major problems underlying poor performance is the lack of an adequate system for ensuring financial discipline. This problem leads to the public’s general lack of confidence in credit unions. This chapter explores the circumstances and methods for delegating supervision to the credit union sector, as opposed to a system of direct oversight by the superintendency of the banking/financial institutions. It also looks at how such delegated supervision would fit within the context of a complete system of financial discipline.

Many of the principles and ideas discussed here are based on my extensive experience with the German system of delegated supervision of credit unions. I spent many years attempting to adapt that system in several Latin American countries, including Bolivia, Chile, and Costa Rica. These countries require an adapted version of the German system, which cannot be copied directly in the very different context of Latin America.

Weaknesses Inherent in Credit Unions

Credit union charters have certain inherent weaknesses that stem from the democratic rules that are embedded in them. These rules and resulting weaknesses are not observed in financial entities of other legal forms. Among the major weaknesses observed in credit unions are the following:
Conflicts of interest arise when credit union members simultaneously play the roles of owner (member), client (borrower), and director (member of the board of directors or its supervision committee).

The members of the board of directors, supervision committee, and loan committee often lack a driving economic interest in the quality of the credit union’s direction and management because they typically do not have large sums of share capital invested in the institution.

Many Latin American credit unions lack direction by and give scant importance to the board of directors.

Many credit unions have difficulty maintaining adequate capital. First, they may have unduly low reserves as a result of failing to earn and capitalize sufficient profits, a clearly inadequate “not-for-profit” policy. Second, the return of shares to withdrawing members affects the stability of the share capital component of a credit union’s net worth. By contrast, in the case of a stock corporation, the sale of stock on the market does not diminish total capital.

Because of these shortcomings, credit unions need an even more efficient system of financial discipline than do other financial institutions, including additional control mechanisms.

Defining a Supervision Policy

The credit union sector can address the lack of financial discipline in credit unions by taking specific steps to address the weaknesses described above. These steps will enable them to develop modern and efficient credit unions that offer competitive services through solid enterprises, and to protect depositors against excessive risk-taking. The credit union sector will need to adopt a financial discipline system that includes appropriate regulatory, supervisory, external auditing, and internal auditing and control mechanisms. Together these elements constitute a complete system of financial discipline.

There are two main options for establishing a supervisory system. In the first option, the state administers the system. This option has less possibility for credit unions to participate in the day-to-day process or to help change the process. In the second option, the state authorities work together with representatives of the credit union sector to produce a delegated system. They introduce delegated supervision and self-regulatory mechanisms that are appropriate to the realities of each country and are important components of a complete system of financial discipline.

Several features characterize the model for supervising the financial operations of credit unions without any delegated supervision or self-regulatory
mechanisms (the first option). The superintendency directly performs all regu-
latory and supervisory work, including on-site inspections. The credit union
sector has little, if any, collaborative or coordinating role. External auditors con-
fine themselves to financial auditing; the inspectors of the superintendency carry
out all other outside oversight activities. The state may protect savings deposits
by means of its own deposit insurance fund or through insurance companies, or
it may provide no coverage at all.

This model of direct supervision may be desirable if either of two condi-
tions hold. The first is if the number of credit unions is small enough that the
superintendency has sufficient staff, budget, and organizational infrastructure to
ensure proper supervision of all credit unions. An increase in the supervision fees
paid by the credit unions in order to cover most or all of the costs of their supervi-
sion may go a long way toward alleviating any staff shortages or other insufficien-
cies. In the longer run, high quality supervision may be well worth the cost to the
credit unions if it succeeds in helping to ensure that they are solid, reliable inter-
mediaries that depositors can trust. Second, direct supervision would be desirable
if the credit union sector has no sufficiently reliable or responsible organizations
capable of carrying out self-regulatory measures.

If the superintendency is incapable or unwilling to carry out credit union
supervision and if a responsible alternative organization exists, then a system of
delegated supervision (the second option) may be useful in helping to impose
financial discipline on the credit union sector. This model requires particular
care when using organizations such as the national credit union federation to
carry out delegated supervision. Such an organization faces an inherent conflict
of interest in its twin roles as a promoter and regulator of credit unions. Because
the credit unions normally own the federation, it may be reluctant to shut down
or assist in shutting down credit unions, especially the largest ones that typi-
cally have the biggest stakes in the federation and wield the greatest amount of
political power. History has shown repeatedly the importance of quickly inter-
vening in and shutting down financial institutions that are becoming or have
become insolvent—before losses mount within the institution and panicky de-
positors possibly spread the contagion to other intermediaries. Fortunately,
mechanisms such as stabilization funds address this reluctance to intervene, re-
stored much of the incentive for early intervention in ailing credit unions.

The Elements of a Complete System of Financial Discipline

A complete system of financial discipline (including the options of delegated
supervision and self-regulatory mechanisms) contains the elements shown in
table 10.1. In the table, the delegated supervision and self-regulation elements
fall under self-accountability measures. Delegated supervision encompasses all
Table 10.1. A Complete System of Financial Discipline

<table>
<thead>
<tr>
<th>Element</th>
<th>Responsible institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td></td>
</tr>
<tr>
<td>Regulation of cooperative legislation</td>
<td>Cooperative development institute</td>
</tr>
<tr>
<td>Regulation of financial operations</td>
<td>Central bank or superintendency</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
</tr>
<tr>
<td>Constitutional supervision (structural)</td>
<td>Cooperative development institute</td>
</tr>
<tr>
<td>Specialized supervision of financial operations</td>
<td>Central bank or superintendency</td>
</tr>
<tr>
<td>Self-accountability measures</td>
<td></td>
</tr>
<tr>
<td>Delegated supervision</td>
<td>Credit union sector</td>
</tr>
<tr>
<td>Self-regulatory mechanisms</td>
<td>Credit union sector</td>
</tr>
<tr>
<td>External financial audit</td>
<td>External auditors</td>
</tr>
<tr>
<td>Internal supervision</td>
<td>Supervision committee</td>
</tr>
<tr>
<td></td>
<td>Internal auditor</td>
</tr>
</tbody>
</table>

a. The names of the responsible institutions given here are illustrative and may vary somewhat from country to country.

the procedures that the superintendency is willing to delegate to private institutions to extend its reach and improve its oversight. It may include not only the elements of a financial and loan portfolio audit, but also an audit of the operations and management of the credit union. However, the superintendency retains the sole right to sanction and intervene in credit unions. The delegated functions are limited to the technical level: providing some information, facilitating the flow of other information, writing reports, issuing opinions, and so forth. Delegated supervision complements, but does not replace, the most basic tasks of the superintendency.

The self-regulatory mechanisms in table 10.1 refer to the fact that to the extent that the superintendency does not issue a comprehensive set of (or any) regulations for credit unions, the credit union sector may opt to issue its own. That is, the credit unions may voluntarily submit themselves as a group to professional and ethical standards of conduct, the adoption of preventive control procedures, solvency standards and other prudential norms, and corrective procedures. These norms and procedures all aim at achieving greater operational effectiveness and bolstering public confidence in the institutions.

The cornerstone of self-regulation is the establishment of a stabilization fund, together with its monitoring and external auditing requirements. The purpose of the fund is to protect the depositors of the affiliated institutions. Typically, the credit union federation establishes the fund and manages its resources.

1 The superintendency typically delegates much of this right when there is a stabilization fund.
DELEGATED SUPERVISION

By regularly contributing capital to the stabilization fund, all credit unions take on the responsibility for any one credit union’s losses. This mechanism provides a major incentive for all credit unions to keep supervision strong and independent. It thus strengthens the prospects for high quality, delegated supervision by national credit union federations by ameliorating the conflict of interest problem noted earlier.

Delegated Supervision and Self-Regulatory Functions

A department of the national credit union federation may carry out the delegated supervision and self-regulatory functions. Alternatively, a completely separate organization that is linked to the sector, but which has an organizational and operational structure that allows it to remain independent in its management and in its judgment, may carry out these functions.

In order to provide a link between the delegated supervisory body and the credit union sector, while retaining the essential independence of judgment, we propose that the board of directors of the delegated supervisor should be made up of members of the supervision committees of the affiliated credit unions. The board may also include persons of public renown who are not involved in the credit union sector. In no case whatsoever should credit union managers or directors serve on the board of the supervisory body.

In addition to compiling, reviewing, and submitting the reports required by the superintendency, the organization to which supervision has been delegated must carry out (or in some cases designate others to carry out) several other important functions. These include management of the stabilization fund and performance of financial audits, operations and management audits, and any special audits that may be requested.²

Management of the Stabilization Fund

The idea behind the stabilization fund is that credit unions join together in a solidarity group and mutually agree to abide by certain prudential rules of financial discipline. The fund accumulates resources in order to be able to manage unanticipated problems that may threaten the solvency of individual credit unions. All credit unions sign an agreement giving the stabilization fund managers the right to intervene in each of their institutions should serious problems develop. The creation of this fund is intended to give the credit unions greater

² Although the simple avoidance of waste dictates that these audits should not be done on the same credit unions by both the superintendency and the delegated supervisor, this obvious division of labor has not always been adhered to in Latin America. Clearly, the superintendency needs to delegate functions to an organization it trusts.
stability; to safeguard the reputation of the credit union system, which might be tarnished, for example, by the bankruptcy of individual credit unions; and to protect the deposits of credit union clients.

The primary focus of the stabilization fund is on intervening in ailing credit unions and putting in place preventive measures to avoid bankruptcy. If necessary, the fund may use its resources to restore a credit union to financial health before its insolvency is publicly disclosed. Stabilization funds may or may not provide deposit insurance, which would pay off each depositor of an insolvent institution up to a prespecified amount. The purpose of the stabilization fund is not to resolve day-to-day credit union liquidity problems; a central liquidity facility managed by the national credit union federation may be of assistance in that regard. Such a facility accepts and remunerates deposits of credit unions with excess liquidity and lends (at interest) to credit unions with short-term liquidity deficits. Stabilization funds, by contrast, aim to resolve longer-run structural problems that threaten solvency. If left untreated, liquidity problems can lead to solvency problems; therefore, the sector should set up a stabilization fund only if it sets up or already has a central liquidity facility as well.

For the authorities entrusted with the stability of the financial markets, a stabilization fund is an especially appealing self-regulatory mechanism because it draws on private resources to restore the financial health of intermediaries. This provides an additional cushion before crises reach the state agency that is vested with the lender-of-last-resort function, typically the central bank.

The External Financial Audit

An external financial audit should be compulsory for all credit unions. For cost economy reasons, those enterprises with low levels of total assets and small volumes of operations may be subjected to this audit only once every two years instead of on an annual basis.

There are several regulatory options for the selection of an agent or organization to perform financial audits for credit unions. Credit unions, through their supervision committees, may do one of the following:

- Choose any auditor affiliated with the national professional auditing association.
- Choose only those auditors that are authorized by the superintendency and by the cooperative development institute.
- Accept the auditing services of the organization to which supervision has been delegated.
- Accept the auditing services of the organization to which supervision has been delegated or that of another firm designated by the super-
intendency and the cooperative development institute. Nonetheless, with the authorization of the superintendence, the cooperative development institute, and the stabilization fund managers, a credit union may contract with a different auditing firm.

I recommend that the credit union sector adopt one of the latter two options, for two main reasons. First, credit unions have particular features that require specialized auditing. Second, past experience has shown that large numbers of credit unions, if given the choice, hire auditors that offer their services at the lowest cost and often prove to be deficient. Or it may happen that, as a result of the competition among auditors for business, the content of many of their reports is colored in favor of the audited institution. However, the last two options for the selection of an auditor may be problematic in those countries that do not permit the establishment of monopolies on the auditing of financial statements.

The Operations and Management Audit

The organization entrusted with delegated supervision should perform the operations and management audit. This audit makes use of the financial audit, complementing it with all the activities of on-site inspection and off-site analysis that would normally be carried out by any superintendency overseeing a financial institution.

Special Audits

The organization in charge of delegated supervision may undertake special audits at the request of the superintendence, the cooperative development institute, or the stabilization fund.

Conclusions

The fact that many families entrust their savings to credit unions should provide sufficient motivation to the authorities to ensure that these deposits are well managed. They should be managed in the same prudent manner as the savings any citizen might place in the largest bank in the country’s financial system.

Sustainable development of credit unions and adequate protection for depositors cannot be achieved without imposing a system of financial discipline on the credit union sector. Delegated supervision and self-regulatory mechanisms may play a helpful role, particularly in cases in which the superintendence has been unable or unwilling to provide oversight. Figure 10.1 illustrates the importance of introducing financial discipline.
Delegated supervision and self-regulation fully coincide with the three main principles of credit unions: self-help, self-management, and self-accountability. The advantages of imposing financial discipline include public recognition and confidence, relevance in the market, prestige, and growth. However, to benefit from these advantages, credit unions will have to make two major commitments:

- Accept, apply, and subordinate themselves to all the mechanisms of delegated supervision and self-regulation noted above.
- Choose suitable persons to take charge of the delegated supervision and self-regulatory efforts. These should be persons of high standing who will command respect both within the credit union movement and in negotiations with policymakers and state authorities.

Instituting a system of self-regulation and delegated supervision will have many advantages for the credit union sector, including the following:

- The leaders of the credit union movement will maintain sovereignty by assuming greater self-accountability (thereby avoiding uncoordinated interventions by the state supervisory authorities).
- The superintendency will achieve the supervision of all credit unions nationwide, without a significant expansion of its organizational infrastructure, personnel, or budget.
- Credit union depositors will benefit from considerable improvement in the level of protection for their deposits.
PART IV

GOVERNANCE
One of the principal challenges which credit unions in Latin America face in order to expand and become more significant actors in the financial marketplace is that of establishing proper governance systems. Stated simply, it is important to analyze whether one of the very strengths of credit unions, member ownership and control, could at the same time be a source of some of the major problems in credit unions as well. This chapter explores the nature of the governance problems that credit unions commonly face, and suggests several means to control or overcome them.

Two major problems of governance arise: the principal-agent problem and the borrower domination problem. The principal-agent problem occurs when the interests of the elected directors and contracted management (the agents) diverge from the interests of the credit union members (the principals). The resolution of this problem depends on clearly and properly specifying and enforcing the institutional rules that define the roles and responsibilities of the actors involved in the governance of the credit union. We call this resolving the decisionmaking/decision monitoring problem.

Although this principal-agent problem can occur in any financial institution, there are at least four complicating factors in the case of credit unions. First, the credit union’s owners are simultaneously its clients. Second, its clients consist of two groups with different interests, net savers and net borrowers. Third, regardless of the amount of wealth they have invested in the credit union, each member gets one vote in electing a board of directors, and each board member gets one vote in deciding any issue before it (one person-one vote). Fourth, the credit union electorate (that is, its members) is often composed largely of low-income individuals without high levels of business experience or great financial acumen.

The second major problem of governance is the tendency of borrowers to dominate the boards of directors of credit unions. To resolve this problem, credit unions should provide balanced and updated services that will attract not only borrowers, but also savers. The presence of net savers on boards will lead to more effective pressure on credit union management and directors for proper
financial management and prudent governance. That will, in turn, protect the
interests of savers and help ensure the credit union’s long-run sustainability.
Restrictions on loans to board members may also counteract borrower domi-
nation or at least ameliorate the resulting problems.

These measures may not be enough. Even where structural rules are clearly
specified and enforced and services are updated, governance problems can still
occur. External supervision serves as a final check against governance problems.
Supervision not only establishes the rules for behavior and the responsibilities
of actors, but also monitors performance and enforces a prudential financial
framework that protects the members and their savings.

Credit Union Governance Structure

Jankowski (1997) notes that the governance and management systems in coop-
eratives perform according to the principles that every member has one vote
and that the activities of the cooperative governing bodies are subject to demo-
cratic supervision by the members. Such principles place a high degree of re-
sponsibility on members to monitor and control how the credit union is run. As
cooperaives, credit unions utilize a governance apparatus composed primarily
of the general assembly, the board of directors, the supervision committee, and
the manager.

The general assembly of membership meets annually and examines the finan-
cial statements of the previous year. It elects the members of the board of direc-
tors and supervision committee. The general assembly is also responsible for
authorizing reforms to the bylaws of the organization, removing members of
the board of directors and supervision committee, and deciding whether to merge
or liquidate the credit union.

The board of directors is made up of members elected by the general assem-
bly of membership. Board members direct the credit union on behalf of mem-
ers and are accountable to the members for the credit union’s successes and
failures. The usual responsibilities assigned to the board include ensuring com-
pliance with bylaws, approving policies, reviewing the financial situation of the
credit union, approving budgets, hiring and evaluating a manager, and report-
ing to the membership.

The supervision committee is the internal supervisory or regulatory mecha-
nism of the credit union’s activities. It is composed of members elected by the
general assembly. The committee’s primary role is to contract an audit of the
credit union’s books and to report to the annual meeting. The committee must
check periodically that reports to members of their account balances agree with
the treasurer’s records. It also makes random checks of loans and other records
and ensures that policies and procedures are being followed.
Although the board focuses on policy and direction, the manager of the credit union makes the daily operating decisions. The board hires a manager to whom it delegates the authority to take charge of day-to-day operations within established guidelines. The manager is accountable to the board. Major responsibilities of the manager include implementing the policies approved by the board, implementing the budget, reporting to the board on the credit union’s status, hiring staff, and overseeing operations. The manager provides significant input to the board on plans and policy decisions, and then makes operational decisions within the approved framework.

**Governance: The Principal-Agent Problem**

Fama and Jensen (1983) characterize two types of organizations. In the first type, owners make the management decisions and bear the risk effects of those decisions on their own wealth. In the second type of organization, ownership and decisionmaking are separated, so that those making management decisions do not bear the consequences of those decisions on their personal wealth. The most common form of institution with separation of ownership from management is the common-stock open corporation. Separation of ownership and decisionmaking increases efficiency by applying technical expertise to decisionmaking. However, the decisionmakers’ interests may not always serve the best interests of the owners. To control this risk, a level of decision oversight is provided to monitor and supervise the decisionmakers.

**Separation of Ownership and Decisionmaking: The Principal-Agent Problem**

Having a large number of owners has the advantage that the total volume of capital amassed can be much greater, and the risk of capital loss can be shared among many individuals. Each member can decide how much to invest in the organization, and thus how much of their wealth to risk. Credit unions are an example of a diffuse ownership organization that accumulates small amounts of wealth from many individuals to finance the institution, and then provides loans back to the community. The credit union collects share accounts (a form of capital) and deposits (a type of loan) in sufficient volume that it can operate on a self-sufficient scale.

As organizations become larger and more complex, they require specific knowledge and skills to make a range of specialized decisions. Individual owners are not likely to possess the required managerial skills and technical knowledge. This situation may require that one or a small number of professionals be hired to make critical management decisions (Fama and Jensen 1983). The specialization of decision management increases the organization’s ability to oper-
ate in an entrepreneurial manner by hiring professional expertise. Yet this separation of ownership and decisionmaking leads to principal-agent problems.

**Separation of Decisionmaking from Decision Oversight**

In order to protect owners from the opportunistic actions of decisionmakers, a mechanism for decision oversight or supervision is needed. Where ownership is dispersed among many, such as in a credit union, it is costly for all members to frequently monitor the decisionmakers. Most of the individual owners lack the skills and information required to oversee managerial actions, and find it more efficient to delegate decision oversight to protect their interests. Accordingly, owners vote for representatives to serve on the board of directors.

The board delegates decisionmaking functions to internal management. The board retains ultimate control to approve and monitor major policy initiatives and the general direction of the institution. The board also has the power to hire and fire and set the compensation of the manager. Board members are liable for penal sanctions if they fail to uphold their fiduciary responsibility in decision control. Decision rules are defined by the credit union bylaws, cooperative and banking laws, commercial contract code, accounting norms, prudential regulations, and organizational budgeting systems. All these factors constrain the decision behavior of agents, help shape the monitoring functions, and specify the performance criteria that determine rewards.

**Governance: Failures in Principal-Agent Controls**

Most financial institutions use mechanisms like those outlined above to separate decisionmaking from decision monitoring and to help control the principal-agent problem. Credit unions add the supervisory committee as a further element of decision monitoring and member control.

In theory, checks and balances within the process of decisionmaking and decision monitoring control the principal-agent problem. However, in practice, governance problems often occur when the rules of decisionmaking and decision control are not clearly or properly specified or are not adequately enforced. In this section we consider operational problems that arise because of this failing. Where problems occur in credit unions, they are frequently due to one or more of the following causes: (1) lack of clear and proper rules separating decision oversight from decisionmaking, (2) unqualified personnel in decision oversight, (3) inadequate managerial competitiveness, (4) failure of membership and boards to exercise fiduciary responsibility, and (5) the one person-one vote system. We close the section with a set of policy recommendations that address these problems.
Lack of Clear and Proper Rules of Decisionmaking

Many cooperative laws and credit union bylaws fail to clearly distinguish directors’ oversight responsibilities from management’s operational responsibilities. A review of most cooperative laws in Latin America and of many credit union bylaws reveals examples of this problem: managerial decisions (such as interest rate determination) made by once-a-year membership assemblies; lack of distinction between the responsibilities of the board of directors and the manager of the credit union in such areas as budgeting and financial expenditure approval; and the assignment of specialized technical responsibilities to elected nonprofessional volunteers (such as loan approval by volunteer credit committees).

Overlapping authorities for operational decisions and the lack of clear guidelines on where one group’s authority ends and another’s begins can produce operational sluggishness. When two or more groups must review a decision, it becomes difficult to reach a consensus that pleases all parties. For example, credit union boards have tabled for committee discussion the development of new credit products and practices.

Such slow decision processes reduce the competitiveness of the credit union in an often rapidly changing financial market. Credit unions can suffer significant disadvantages when the decisionmaking process paralyzes decisions and does not allow managers to respond quickly to opportunities or problems.

Unqualified Personnel in Decision Oversight

The ability of directors to monitor or control a credit union depends on their business acumen and management skills. The democratic election of directors becomes a problem if those elected fail to have the proper credentials and expertise to make sound judgments.

Credit unions are typically founded by local community leaders. Credit unions that begin at a small community or closed-group level often depend on volunteers to manage, operate, as well as direct the institution. The involvement of volunteers lowers operating costs at a time when the cooperative does not yet manage a sufficient volume of funds to hire a full complement of professional staff. Boards dominated by volunteer nonprofessionals can be very responsive to local community social issues, but may fail to have the financial and business expertise required to direct a financial institution.

As credit unions become larger, they engage in more sophisticated operations. Officials enjoy less personal familiarity with loan applicants, so that volunteer credit committees become less effective. As they grow, credit unions eventually generate sufficient income to hire professional staff with specialized expertise to carry out decisionmaking functions. By then volunteers are less involved in op-
erational matters, although volunteer owner-representatives are still called upon for decision monitoring and oversight. Once the credit union achieves a scale that allows it to hire professional staff, it needs to separate the decisionmaking and decision control functions, as previously discussed. The demands placed on directors in terms of their financial and business expertise increases *pari passu* with the size and sophistication of the credit union that they must monitor, and again raises the key issue of board member competence.

### Competitive Managerial Adequacy: The Low Salary Problem

Managerial competence requires that management be competitively remunerated. Many credit union members tend to have lower to moderate levels of income. Members often compare their own salaries with those of credit union employees and tend to criticize credit union salaries that are competitive with those paid by other financial institutions. Directors may also find that managerial salaries are in excess of their own earnings, particularly when the directors are dominated by lower salary level professionals such as teachers. In these cases, the elected directors may interfere with professional management of the institution, constraining management salaries and competitiveness. This interference results in weak administration of the institution, morale problems, and the inability of the credit union to attract the quality of management that can produce strong results or resist the excessive interference of directors in operational decisions.

Credit unions that pay more than is typical in Latin America can earn higher profits (for evidence of this, see chapter 3). Higher wages tend to attract, motivate, and retain better-qualified managers and other personnel. The increased earnings brought in by higher quality staff (and the consequent reductions in training and other turnover costs) more than pay for the increased wage bill itself. Credit unions would also benefit from financial incentives that link managerial remuneration partly to the credit union’s financial performance.

### Membership and Board Failure to Exercise Fiduciary Responsibility

Where credit union ownership is diffused among a large number of members, governance problems may take a form opposite to that of excessive operational interference by directors. For example, driven by the need for economies of scale, some credit unions operate with more than 50,000 or 100,000 members. With ownership spread over such a large group, only a few members may actually carry out the responsibilities of monitoring the performance of the credit union by attending the annual general assembly or by monitoring their elected representatives to the board of directors.
Members may fail to look closely at the prudential actions of the board because any one member may have limited influence on the operations of a credit union that serves so many. At the same time, the monitoring cost to one member of analyzing the operations and financial condition of a large credit union is likely to be high. Members may be tempted to free ride, to let someone else monitor or influence the credit union. When credit union financial management and direction are poor, the loss to the individual member is the impairment of the value of his or her shares. Yet, unless the member withdraws and the credit union discounts those shares or the institution fails, members are seldom aware of such impairment. Therefore, a credit union can operate in poor financial condition for an extended period before members realize that there is a serious problem and undertake corrective action.

With limited overview or attention from the membership, the board, manager, and supervision committee may collude to protect one another’s interests at the expense of the institution. Managers may arrange for high salaries for themselves, and directors and supervision committee members may obtain insider loans for themselves and their friends. This problem occurs particularly where internal as well as external (supervisory) controls are weak.

**One Person-One Vote**

Board members of stock companies or banks often assume their position because they have large shares of the ownership in the institutions that they govern. The credit union board member generally has a much smaller share of the institution’s total capital than his or her counterpart in a bank or other stock company. As such, the effect of an individual board member’s decisions on his or her own welfare may represent a small share of the total impact on credit union members. This may give rise to a serious principal-agent problem between the general membership (the principals) and the elected board members (their agents). One general solution to this problem is to try to ensure that credit union board members have a significant share of their own wealth invested in the credit union, so that the impact of their decisions on their individual wealth will be important to them. Mechanisms for achieving this are discussed in the next section (on the borrower domination problem); in particular, the credit union needs to offer balanced and updated services that will appeal to both large and small savers. Other checks on self-dealing boards include strong internal controls (such as the supervision committee, audits, and fraud prevention systems), good external controls (prudential supervision), and the right of members to elect new directors at the annual membership meeting.
Policy Implications: Reform of Credit Union Bylaws

There is no single or absolute set of answers to the problems presented above. However, they can be significantly controlled by prudential regulations that define director roles and management’s responsibility for technical credit decisions. (Appropriate regulations are outlined in the section on external supervision.) Another means of control is clear rules in the credit union bylaws. The following are seven principles for appropriate bylaws.

(1) **To clarify rules of decisionmaking, the chartering bylaw requirements need to define the decision oversight role of the directors.** Because many credit union board members confuse the roles of decisionmaking and decision monitoring, credit union bylaws need to establish clearly the roles of credit union members, boards of directors, and managers in order to separate clearly decisionmaking from decision oversight. These rules should limit the involvement of the board of directors in day-to-day operations, focusing it instead on policy and direction. The manager’s major responsibilities should include implementing board-sanctioned policies and the budget, administrating daily operations, reporting to the board, and hiring and overseeing staff. If the board usurps these functions, the agility and efficiency of the credit union may well suffer.

(2) **To address the problem of unqualified personnel in decision oversight, bylaws should establish criteria for who is qualified to assume a position as a director.** Directors should have adequate preparation and business experience to provide policy direction and guidance to the credit union.

(3) **Bylaws should set out the appropriate functions of the supervision committee.** Without unduly interfering with the management of the credit union, the supervision committee must be responsible for the credit union’s compliance with its bylaws, for enforcement of internal controls, and for oversight of the board itself. The supervision committee should be held responsible for seeing that the board contracts and receives an annual external audit, and for ensuring that all internal controls are in place and functioning properly.

(4) **Credit decisions need to be made on technical risk analysis criteria by technical staff with appropriate preparation.** Credit union bylaws should not provide a detailed treatment of how to do loan analysis; that should appear in the credit policies. However, the bylaws should identify the body responsible for loan analysis. In small credit unions, the volunteer credit committee reviews and acts on loan applications. This group may have better information about their fellow borrowing members’ risk than a formal institution’s credit officer ever could. However, as credit unions grow larger, the credit committee members cannot personally know all of the loan applicants. In addition, it becomes impractical for these volunteers to approve all loans, given their large number. In any case,
the committee members do not possess specialized risk analysis skills. Consequently, as credit unions grow, volunteer credit committees should be disbanded or assume the role of randomly reviewing compliance of loans with policy and procedures.

The credit committee in many countries has usefully evolved from an elected volunteer committee to a technical committee made up of credit union loan officers and employees with specialized skills. The manager approves small loans. The technical committee approves larger loans that fall within the size parameters and policies approved by the board of directors. The board of directors then considers loans to credit union directors and staff (if allowed) and loans larger than those approved by the technical credit committee.

(5) To address the problem of the board of directors’ failure to exercise fiduciary responsibility, the credit union bylaws need to establish clearly the fiduciary responsibility of directors and their responsibility for monitoring the decisions of management, as well as penalties for failing to meet these responsibilities. The board of directors is accountable to the general assembly and membership for the operating results of the credit union. Removal of board members should be specified in the bylaws for failure to meet their responsibilities, for mismanagement, or for legal improprieties.

(6) Credit union bylaws need to establish ethical codes of behavior and controls on insider loans to avoid conflicts of interest. To hold office on the board of directors, a member should be free of any relation with any of the credit union’s employees, should not have a contractual working relationship with the credit union, and must not have committed any illegal acts or be delinquent in the payment of loans or any other obligations to the credit union. The board member should not participate in any loan or service decisions related to his or her own accounts.

(7) Bylaws should provide for staggered rotation of board members. There is always a need for experienced individuals on credit union boards. However, a limit of two or three terms allows for the circulation of fresh ideas. It also avoids domination of the board by small groups for extensive periods of time.

**Governance: The Borrower Domination Problem**

One factor that distinguishes a credit union from other financial institutions is that a credit union’s owners are also its customers, the savers and borrowers. Thus, the institutional governance system of credit unions must respond to two sets of owner-clients. Credit unions not only face the separation of ownership from decisionmaking, but also contradictions in the interests or objectives of savers versus borrowers.

Moreover, the owners (or principals) of most financial institutions are primarily interested in their institutions' profitability. In credit unions dominated
by net borrowers, however, most of the owners and board members may be primarily interested in cheap and easy loans, rather than the financial viability or profitability of the credit union. The combination of borrower dominated credit unions operating in an environment that lacks clear governance rules provides a temptation for improper manipulation of the credit granting process by directors. The governance distortions caused by borrower domination can be brought into balance through service reorientation, including aggressive deposit mobilization and limitations on external credit.

**Borrower Domination**

The simultaneous presence of savers and borrowers forms the basis for a self-sufficient or balanced financial intermediary. However, the same source of intermediation balance produces conflicts in the interests of the two sets of owners. Net borrowers will demand low loan rates, low transactions costs, and laxness in prudential discipline; net savers will demand high deposit rates and strong prudential discipline to protect their savings. Therefore, although the net savers have strong incentives to see their institution achieve solid profitability performances and high solvency ratios, the net borrowers’ short-term incentives favor conditions (easy access to loans, low loan rates, and lax repayment discipline) that adversely affect the financial viability of the credit union.

The decisions made by management may favor one group or the other. This depends on the business versus social orientation adopted by the credit union, the nature of the membership attracted by the services offered, and the balance of net borrowers and net savers serving on the board of directors of the credit union.

The interest rate and loan screening and collection policies help determine the proportion of members of each type (net borrower or net saver) that is attracted to the credit union. These proportions may then be reflected in the nature of the directorship (borrower dominated or balanced). Borrower dominated credit unions tend to attract new members looking for cheap loans and lax prudential discipline, which tends to keep those credit unions borrower dominated. Balanced credit unions tend to attract net savers as well as net borrowers, which tends to keep them balanced. Hence, there is a tendency for each of these credit union types to perpetuate itself.

**Lack of Clear Rules, Combined with Credit Rationing**

Many credit unions were originally established with a social mission, namely, that of providing cheap credit to poor borrowers. In many traditional credit unions, the deposit rates and types of savings vehicles offered are not adequate for attracting savings on a widespread basis. Members place money in low-yield,
illiquid share accounts in credit unions not for savings purposes, but for the purpose of providing required collateral for their loans. People join such credit unions largely to get access to loans, rather than to deposit their savings. The majority of members are net borrowers who have loans, are waiting their turn for a loan, or have purchased shares to receive a loan in the past and now hold dormant share accounts.

Such traditional credit unions are forced to ration credit by queuing applicants for loans, disbursing only a portion of the amount requested, and rationing loans to a low multiple of what a member has in shares.

Governance problems can become acute when there is excessive and improper manipulation of the credit granting procedures by directors. Credit union members may actively seek election to the board of directors or credit committee by promising loans to friends and supporters after the election. Once elected, the new directors act to fulfill these promises. They may provide supporters with preferential loan treatment by sidestepping the credit rationing process. Or they may see to it that the credit union is lenient with supporters in loan approval or collection.

These governance problems occur because of the combination of the traditional borrower dominated service structure (with its low interest rates, lax screening and collection standards, and consequent loan rationing) together with circumstances in which rules for decisionmaking and control are not well defined and enforced. Where the rules allow volunteers substantial involvement in operational decisions and the internal controls on insider dealing are weak, directors or credit committee members are able to dole out loans for their own gain and as political favors.

Poyo, González-Vega, and Aguilera-Alfred (1993) note that where credit unions were used as channels for subsidized credit from governments or international organizations, credit unions had little incentive to mobilize deposits. To do so would imply a higher cost of funds and a higher level of effort to mobilize and maintain numerous small savings accounts. These subsidized funds attracted net borrowers to the membership and to directorships. The use of external funds did not require the same level of financial discipline by the credit union’s managers and directors. Often the credit union could default on external loans with limited consequences to the members. The low deposit rates and lack of repayment discipline discouraged most net savers from investing in these credit unions. Therefore, the intermediation of external funds through credit unions reinforced borrower domination of those institutions and interfered with the establishment of a governance structure aimed at ensuring the financial health and sustainability of these intermediaries.

In recent years, the channeling of external credit through credit unions has been greatly reduced as governments and donors have come to realize that tar-
geted credit programs undermine deposit mobilization, credit quality, and ultimately the long-term sustainability of the credit union.

Even in the absence of external credit, borrower dominated credit unions have persisted for long periods in many communities without much competition in providing loans to small-scale operators or low- to moderate-income clients. With financial liberalization coming to many countries in recent years, credit unions are facing increased competition from other financial institutions, which has led to more aggressive provision of competitive deposit services for savers.

**Balanced Financial Intermediaries**

Credit union rehabilitation programs, such as those described in chapters 4 and 5, provide an avenue for converting borrower dominated credit unions into balanced financial intermediaries. The governance distortions caused by borrower domination can be brought into balance through the service reorientation of these programs, including aggressive deposit mobilization and limitation of external credit. Credit unions that utilize relatively liquid savings deposits paying market interest rates as the primary funding source tend to be more equilibrated financial intermediaries. These credit unions attract net savers as well as net borrowers. The threat of withdrawal of deposits due to lack of confidence in a credit union’s management would eliminate its base of funds. This threat forces the directorship and management to operate on sounder principles of adequate capital reserves, loan loss provisions, and liquidity reserves, which protect the savings of the members (see also Poyo, González-Vega, and Aguilera-Alfred 1993).

Competition is one of the most effective catalysts for credit union service reform and improvement. In many cases, a credit union’s shift to improved savings and credit products and to balanced governance has been driven by its loss of a local monopoly on financial services. Faced with increased competition from downward-reaching formal financial institutions, credit unions have improved services for depositors, attracted net savers to boards of directors, and gained greater institutional stability as a result.

**Policy Implications**

Apart from general policies that enhance competition, borrower domination problems can be reduced through the following measures.

(1) **Credit unions need to offer attractive services for both net savers and net borrowers in order to operate as a balanced financial intermediary.** The credit union will be financially strong and sustainable if it is able to balance the demand for credit with the provision of competitive deposit services. Aggressive deposit mobili-
zation will tend to reinforce the representation of net savers on the board of
directors and the pressure on management for strong prudential discipline.

(2) Credit unions and donors should avoid external credit, particularly if it is
subsidized. Experience has shown that external credit programs often weaken
incentives to mobilize deposits and thus reinforce a borrower dominated gover-
nance structure with poor prudential discipline and weak loan recovery.

External Supervision

Even when credit unions have undertaken both reforms of their bylaws to ad-
dress principal-agent problems and savings-led membership expansion to ad-
dress borrower domination issues, these actions often have not been enough to
fully resolve governance problems. Credit unions have still experienced institu-
tional instability due to the inexperience of volunteer directors or because of
poor management and decisionmaking by managers and directors. For example,
some credit unions have invested large amounts on unproductive, showy fixed
assets in order to serve the social goals or self-aggrandizement of high-level credit
union officials.

General market devices that monitor and discipline banks and other com-
mon stock firms include stock markets, bond markets, and banks if the bank or
firm obtains funding from those sources. Because credit unions generally do not
raise funds from these sources, these mechanisms do not apply to credit unions.
Given the absence of these types of market discipline and the generally greater
governance problems of credit unions vis-à-vis banks, prudential regulation and
supervision is even more needed to protect the depositors of the former institu-
tions compared with the latter. Such external supervision can also help to di-
rectly alleviate governance problems. In particular, principal-agent issues can
be reduced if regulation and supervision is used to mandate and enforce many
of the key bylaw reforms discussed above. Borrower domination problems can
be lessened through enforcement of prudential safeguards (including capital ade-
quacy, provisioning, and asset diversification). Such enforcement helps to draw
net savers to credit unions, creating more balanced financial intermediaries.

Three Cases of External Supervision

We now examine three cases in which credit unions have come under exter-
nal supervision. The first two cases are Ecuador and Bolivia, where credit
unions are subject to formal supervision by the Superintendency of Banks.
The third case is Guatemala, where credit unions must adhere to a set of pru-
dential disciplines in order to participate in a financial network. We address
the question of how governance can be improved when credit unions are
regulated, either by the formal sector regulator or by the credit unions’ own second-tier organization.

Credit unions in Ecuador are regulated by the 1994 Financial Institutions Law and its general regulations (Ley de Instituciones del Sistema Financiero del Ecuador, May 3, 1994; Reglamento General a la Ley de Instituciones del Sistema Financiero del Ecuador, June 24, 1994). Currently, approximately 30 credit unions fall under the supervision of Ecuador’s Superintendency of Banks.

Credit unions in Bolivia fall under the 1993 Financial Institutions Law and a 1996 decree that provides specific prudential norms for credit unions (Ley de Bancos y Entidades Financieras de Bolivia, April 14, 1993; Decreto Supremo No. 24439, December 13, 1996). The Bolivian decree distinguishes between open credit unions, which operate with the shares and savings of their members and of the general public, and closed credit unions, which operate only with the shares of their members. Closed credit unions are not supervised as part of the formal financial system, are not required to meet minimum capital requirements, and are extremely limited in the services they are able to offer. By contrast, open community-based credit unions must meet minimum capital requirements, are supervised by Bolivia’s Superintendency of Banks, and offer a wider variety of financial services to their members. In addition to chartering with the cooperative registry, open credit unions must acquire an operating license from the Superintendency of Banks. The supervision system established in 1996 allows three years for open credit unions to meet the standards and requirements defined by the Superintendency, or else to become closed and operate only with member shares.

In Guatemala, credit unions are subject to the Guatemalan Cooperative Act of 1978, as amended in 1979. Cooperative legislation is largely inadequate for financial institutions. Credit unions are excluded from the Banking Act of 1946, which established the Bank of Guatemala and the Monetary Board. The Banking Act provides operational guidelines for financial institutions. There are no parallels in the cooperative legislation, and none of the Banking Act provisions are applied to credit unions. As a result, credit unions receive no oversight from the banking regulator.

In 1993, the National Federation of Credit Unions of Guatemala (FENACOAC) created a membership subgroup for some of its affiliates, the Federated Financial System (SIFFE). The SIFFE subgroup of credit unions is linked together through common products and services that the credit union members may use in different geographical areas of Guatemala. SIFFE limits membership and benefits to those credit unions that achieve certain performance standards and adhere to a set of financial disciplines.

Currently, 16 of the 32 credit unions affiliated with FENACOAC are members of the SIFFE subgroup. For those that meet the standards required for mem-
bership, over 80 points of service are advertised collectively. Members of any credit union in the SIFFE group can make their deposits, loan payments, or withdrawals at the main or branch offices of any credit union affiliated with SIFFE anywhere in Guatemala. Through this interdependent system, credit unions can augment the services provided to their members, and thus improve their competitiveness. Compliance with prudential disciplines is evaluated annually, and members receive a certificate of membership to be placed in a prominent public area.

**Rules Enforcing Governance Roles and Responsibilities**

The Bolivian regulations for credit unions (*Superintendencia de Bancos y Entidades Financieras Circular No. 232, April 14, 1997*) provide a strong model for regulating credit union governance. Circular 232 does this by stating both the functions and the personal liabilities of the board of directors, the supervision committee, and the internal auditor. As such, it establishes preventive systems for internal control and supervision that address problems before external supervision is required.

The Bolivian regulations define the following functions of the board of directors: ensure compliance with all laws; establish policies; approve budgets, financial statements, and annual plans; convene the general assembly; hire and remove the manager; approve interest rates; evaluate the financial situation of the credit union; and approve regulations related to credit union membership. The Superintendency’s regulations establish that the directors are personally responsible for management of the credit union assets; for the accuracy of its financial statements, accounts, and registers; and for legal compliance. The credit union board of directors is obligated to delegate administrative decisions to the manager and to provide managers with specific powers to carry out financial intermediation operations, manage bank accounts, and undertake administrative actions.

The regulations define the functions of the supervision committee as providing reports on compliance with assembly directives and credit union bylaws, reviewing legal compliance of the administration of the credit union without interfering in its management, ensuring that credit union goods are adequately registered, proposing and hiring a qualified external auditor, and hiring an internal auditor. The supervision committee is responsible for bringing to the attention of the general assembly or to the Superintendency of Banks any infractions, need for sanctions, or measures for correction of problems.

Bolivia’s regulations specify that supervised credit unions must hire a professional internal auditor who will carry out these specific functions under the direction of the supervision committee. The supervision committee hires the in-
ternal auditor and the internal auditor reports directly to the committee. The regulations establish the scope of work and standards for internal audits. Internal audit workplans and reports must be provided by the supervision committee to the Superintendency each year.

The external audit reviews business practices and compliance with laws and sector regulations, and verifies the data reported in the financial statement. Audits ensure that internal controls are followed. The external audit can expose abuses or irregularities overlooked by inexperienced credit union governing bodies.

Ecuador’s Superintendency of Banks has established technical and experience criteria for those who may serve on the board of directors of credit unions. A credit union board of directors must have no more than seven members, at least two of which must have university degrees in economics, finance, or related fields. In addition to the degree, they must have a minimum of two years of experience in managing businesses that provide financial services. The new law has a similar requirement for members of the supervision committee. The committee must have three members, at least two of which must have university degrees in administration, economics, or auditing, in addition to two years of experience in auditing institutions that provide financial services. The volunteer credit committee has been totally eliminated and is now replaced by a credit committee drawn from management.

**Regulations to Control Insider Operations**

Ecuador’s regulations stipulate that directors should not receive preferential treatment by the credit union with regard to loan approval or collection. Bolivia prohibits credit union loans to directors, members of the supervision committee, or any family members of these two groups. Loans to the manager and middle-level management staff are also proscribed.

Members of the board of directors and supervision committee receive no compensation for their services to the credit union; however, they may receive reimbursement for expenses incurred while performing work for the credit union on a per diem basis. Bolivian regulations require that per diem payments to directors be subject to approval by the annual assembly.

**Prudential Regulations to Control Borrower Domination**

Borrower dominated credit unions are often characterized by lax prudential discipline. Establishing and enforcing prudential discipline can be of great assistance in controlling borrower domination problems by limiting managers and boards of directors to act in ways that protect the soundness of member savings
and the financial viability of the credit union. This draws net savers to the credit union, creates a more balanced financial institution, and helps remedy borrower domination problems. Law, external regulation, or peer association criteria can set the prudential norms or standards.

In Ecuador, the mechanism for enforcement is legislation that obliges all financial institutions, including credit unions, to undergo periodic examination. Ecuadorean credit unions are subject to the same prudential financial standards and administrative rules as other financial intermediaries. The exception is that credit unions are not required to put liquidity reserves in the central bank, but instead must place 14 percent of deposits in short-term bank notes and government bonds.

Supervised credit unions in Bolivia are required to meet minimum initial capital requirements set in terms of special drawing rights amounts. The 1996 decree establishes four capital thresholds, with a progressively larger range of financial operations available to the credit union at each higher capital level. The Superintendency is authorized to intervene in or liquidate an institution if it fails to meet its minimum capital requirements.

Both the Ecuadorean and Bolivian Superintendencies have issued prudential regulations requiring credit unions to qualify their loan portfolios, provision for loan losses, write off delinquent loans, and meet minimum capital adequacy ratios. Regulations in both countries also establish loan concentration limits. For example, Bolivia restricts loans to any one borrower to not more than three percent of the net worth of the credit union, and to not more than one percent of the net worth if borrowing is based on only a personal guarantee. Loans to a single financial institution cannot exceed 20 percent of the credit union's net worth.

Guatemala's SIFFE group of credit unions ties access to financial networking services to compliance with financial disciplines. The prudential discipline framework that SIFFE credit unions must meet includes delinquency ceilings, provisions for loan losses, requirements for the ratio of capital to assets, and liquidity reserves. SIFFE aims to present a consistent, improved public image of member credit unions in order to gain the public's confidence. SIFFE members seek to distinguish themselves from traditional credit unions by marketing SIFFE as a select group of financially strong, highly disciplined intermediaries.

**Policy Implications**

The degree to which a credit union suffers from governance problems depends on several factors, such as the clarity and enforcement of rules regarding decisionmaking and decision control, the nature of the services provided, the degree of competition that the credit union faces, the strength and aims of indi-
individual personalities, and the quality of management. External supervision can play an important role in preventing and controlling governance problems.

However, external regulation is not the answer to all governance problems. Some regulated environments are still unclear about decisionmaking versus decision oversight roles, for example. Nonetheless, effective regulation can reduce or eliminate many governance problems by enforcing the following prudential standards.

1. Cooperative laws, financial sector legislation and regulations, and credit union bylaws should be consistent in providing clear rules for decisionmaking versus decision control. In general, legislation and bylaws need to avoid involvement of untrained and nonprofessional volunteers in technical decisions and to empower management to make appropriate decisions. Bylaws should aim to discourage the use of credit unions as a political base for the particular interests of individual directors, or the bureaucratization of decisionmaking, which must filter through many committees.

2. Regulations need to declare the functions, responsibilities, and limits of the board of directors and supervision committee.

3. Regulations need to present criteria for qualifications to sit on the board of directors.

4. Regulations need to define the functions, responsibilities, and limits of management. This includes the need to direct the board of directors to delegate administrative decisions to management.

5. Regulations need to specify the requirement for a professional internal auditor and the auditor’s reporting relationship to the supervision committee.

6. Regulations need to specify the requirement and scope of work for annual external audits.

7. Regulations need to control insider operations and conflicts of interest. These include limitations on or prohibition of loans to directors and managers, response to situations of conflict of interest, and controls on directors’ per diem payments.

8. Regulations need to establish basic prudential discipline: minimum capital amounts, minimum capital to asset ratios, loan delinquency provisioning, write-off of uncollectable loans, limitations on nonearning assets, and maintenance of liquidity reserves.

Conclusions

The classical principal-agent problem applies to most commercial institutions. Where ownership is dispersed among a large number of shareholders, such as in a credit union, it is costly for owners to be involved in monitoring the decisionmakers. Control becomes a series of checks and balances across the lev-
els of decisionmaking. Owners vote for representatives to serve on the board of directors. Directors monitor and supervise the decisions of management. Governance problems in credit unions emerge when the decisionmaking versus decision oversight roles are not clearly and properly specified and enforced.

The one person-one vote principle of credit unions has maintained local institutional responsiveness to the individual demands of credit union members. Yet it has also produced the democratic election of directors who bring limited business acumen to the board and who may have little of their own wealth at risk in the credit union. Weak cooperative legislation, chartering by-law requirements, and regulations may fail to provide a clear distinction between the operational decisionmaking responsibilities of management and the oversight decision monitoring responsibilities of the board of directors. The lack of clear rules of decisionmaking can lead to board intrusions on day-to-day management, operational sluggishness, the inability of the credit union to attract competitive management, and the failure on the part of the board of directors to exercise their fiduciary responsibility. Hence, the establishment of parameters for director roles and fiduciary responsibilities is critical to enforcing good governance in credit unions.

This chapter provides several suggestions for the institutional rules of governance that establish the proper separation of decisionmaking from decision oversight. Chartering bylaw requirements can establish clear roles for directors and management, set qualification criteria for directors, outline the responsibilities of the supervision committee, limit the directors’ involvement in day-to-day operations, and clarify the need for credit decisions to be made on the basis of technical risk analysis criteria by qualified technical staff.

The second major type of credit union governance problem, that related to borrower domination, derives from the fact that credit unions differ from other financial institutions because the owners are the customers: the savers and borrowers. The institutional governance system of credit unions must respond to contradictions in the interests or objectives of these two types of owners. Borrowers will demand low loan rates, low transactions costs, and lax prudential discipline, all of which adversely affect the financial viability of the credit union.

If they have a traditional service structure in which shares are largely a vehicle for rationing credit and in which loan and deposit rates are maintained at low levels, credit unions tend to attract net borrowers. Credit unions with these characteristics tend to be unattractive to net savers, and the boards of such credit unions tend to be borrower dominated. Low loan rates of interest and resulting credit rationing, together with borrower dominated boards, encourage a culture of insider lending, favoritism, poor loan selection, and weak collection efforts.

Borrower domination governance problems common to traditional credit unions are ameliorated or eliminated by avoiding external credit and upgrading
savings services. These are keys to attracting net savers to the credit union membership and board of directors where they may pressure credit union officials for the imposition of sound prudential discipline.

Even in cases where they have undertaken both reform of institutional rules to address principal-agent problems and savings-led membership expansion to address borrower domination problems, credit unions have experienced institutional instability. There remains the need for objective external supervision. External supervision needs to provide two critical sets of guidelines: one that specifies and enforces proper institutional rules of governance and another that specifies and enforces a regime of sound prudential management discipline.

The Bolivian regulations for credit unions stipulate both the functions and the personal liabilities of the board of directors, the supervision committee, and the internal auditor. As such, they establish preventive systems for internal control and supervision to address problems before external supervision is required. The Ecuadorean Superintendency of Banks has established technical and experience criteria for those who may serve on credit union boards of directors.

Adherence to a set of prudential disciplines is key in controlling borrower domination governance problems by constraining the behavior of management and boards of directors within boundaries that protect the soundness of member savings and the financial viability of the credit union. Guatemala’s SIFFE system provides an example of prudential disciplines enforced by peer requirements for access to intra-system services and image, instead of by a state regulator.

This chapter suggests that governance problems specific to the credit union form indeed pose challenges not faced by many other forms of organization. However, when several controls are brought to bear on the problems—including well-defined institutional rules of governance, internal controls, service adequacy, prudential management disciplines, and external supervision—these problems can be overcome to produce a stable and balanced financial intermediary.
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PART V

CONSOLIDATION
The Institute for the Mobilization of Cooperative Funds was founded in 1958 in Argentina. It encouraged the merger of credit unions and the formation of regional cooperative banks. One such regional bank, Banco Credicoop, established itself in the area around Buenos Aires in 1979. This chapter discusses the advantages and disadvantages of cooperative banks vis-à-vis credit unions. It lists problems that lead to failure of credit unions and cooperative banks, and suggests some important topics for consideration in the formation of cooperative banks from mergers of credit unions.

Summary of the History of Credit Unions in Argentina

This section describes the four stages that distinguish the development of Argentina's credit unions.

1900–1958

The first credit unions were founded early in the century as mutual aid societies. The early credit unions answered the needs of European immigrants and operated in a simple fashion. The basic instrument was the passbook (libreta de ahorros) and loans were made for social assistance purposes.

1958–1966

The founding of the Institute for the Mobilization of Cooperative Funds (Instituto Movilizador de Fondos Cooperativos, IMFC) gave a boost to credit unions in Argentina starting in 1958. The main objective of this initiative was “to overcome the shortcomings in the credit services available to the productive forces of the country, be they agricultural, industrial, or commercial . . . by constituting an extensive system with all the existing credit unions and contributing to the creation of credit unions where there were none.”

Argentina had 197 credit unions in 1958 (124 of them in Buenos Aires). By 1966, that number had climbed to 974 distributed throughout the country. The
credit unions were primarily urban, and most of the members were small merchants, small industrialists, and artisans. They also included professionals, office workers, technical personnel, and unskilled workers.

The credit unions operated mainly on the basis of checking accounts, using credit union drafts (orden de pago cooperativa) as a means of payment in conjunction with a large-scale clearing system organized by IMFC. These funds were used to make loans, mainly to finance the working capital and investment needs of merchants and industrialists and, to a lesser extent, for consumption purposes. At their height, the credit unions accounted for approximately 10 percent of the total deposits in the country’s financial system.

1966–1972

With the breakdown of Argentine constitutional order in 1966, a series of measures were taken against the credit union movement. The measures were aimed at limiting the use of credit union drafts, which were at the heart of their development. Of the 974 credit unions mentioned above, only about 450 remained by 1971.

1972–1976

In 1972, credit unions were empowered to fully resume the operation of checking accounts, and to endorse and circulate drafts. In addition, it was established that Banco de la Nación Argentina, a state bank, would assume responsibility for organizing the clearinghouse for these drafts. Existing credit unions were further authorized to open branches. Thus, the credit union movement was promoted for a short period.

After the 1976 military coup, the military government prepared draft legislation aimed at reducing the scope of the credit unions. This preliminary draft stripped credit unions of the authority to operate checking accounts and did away with the option of organizing commercial banks as cooperatives (that is, as cooperative banks).

In response, hundreds of thousands of credit union members mobilized to protest these proposals. Despite the difficult context of the military dictatorship in power at that time, they succeeded in modifying the preliminary draft so as to allow commercial banks to adopt the legal form of cooperatives. This ushered in a period of consolidation and of transition from credit unions to cooperative banks.

Mergers and Transformation into Cooperative Banks

Due to the characteristics of the new financial legislation and the large amount of capital required to form a commercial bank, the existing credit unions faced
the alternative of maintaining their autonomy—with restricted operations—or joining the process of mergers and transformation into cooperative banks.

IMFC encouraged credit union mergers and the formation of regional cooperative banks. It also designed model bylaws aimed at preserving the credit unions' democratic and participatory style of management, as well as the full insertion of the new cooperative bank branches in local communities. As a result of this process, 300 of the 400 credit unions that existed in 1979 opted to request such a transformation and 77 new cooperative banks were formed. Added to the eight preexisting ones, this made a total of 85 cooperative banks.

**Founding of Banco Credicoop Coop L.**

Banco Credicoop Coop L. was founded in 1979 as a result of the merger of a group of 44 credit unions located in and around Buenos Aires. Clearly, the decision to merge these credit unions was triggered by the restrictions of the new law. The merger permitted the continued operation of checking accounts, which were the main means for attracting funds and thus making possible loans to the members.

From the outset, the leaders of IMFC and Banco Credicoop recognized the conflict between the need to centralize and expedite operations and the need to facilitate the democratic participation of members. They were aware of the tension between centralizing and standardizing operating rules and preserving autonomy and flexibility for their branches to meet the needs of the various communities in which they operated. Banco Credicoop's bylaws attempt to strike a balance among these factors, as exemplified below:

- The bank's districts match the jurisdictions covered by the branches (former credit unions). District assemblies of members elect the corps of delegates, which in turn designates the members of the board of directors.
- The directors, in addition to their responsibilities for the overall direction of the bank, perform specific oversight functions in its branches, where they also serve on a local board of directors.
- The member of the board of directors from each branch designates from the list of members a certain number to work with him or her. These individuals constitute what is called the committee of associates (comisión de asociados) of the branch.
- Mobilizing deposits and making loans are done exclusively through the branches. Operations that by their nature should be centralized (such as foreign trade and correspondent responsibilities) are reserved exclusively for the main office.
Each branch has priority use of the lending capacity deriving from its deposits to extend credit to members in its service area. Only to the extent that there is no bankable loan demand at the branch are surplus funds transferred to the main office. These funds may be used for loans in other branches or to make investments in the securities or interbank markets.

The first three rules above are aimed at preserving institutional democracy; the last two are aimed at achieving democratic management of financial resources.

The process of forming Banco Credicoop demanded a formidable management and coordination effort that was not without conflict. However, the merger process was facilitated by IMFC’s earlier important efforts to integrate the credit unions both institutionally and operationally. Institutionally, IMFC represented the credit unions before the authorities, and conducted a major public education campaign on cooperative ideals and philosophy. Operationally, IMFC carried out the major task of consolidating the credit unions in the following areas:

- Computer center and systems
- Credit card, with national coverage, accepted in other Southern Cone countries
- Satellite communications network connected to the central bank
- Auditing
- Advisory service on central bank and tax law requirements
- Center for monetary and financial studies
- Printing of forms and documents, and reproduction on microfilm

After the cooperative banks were formed, IMFC continued offering these services to affiliated banks and gradually incorporated other standardized services, such as the following:

- Providing a network of automatic teller machines
- Serving as a savings and loan institution for certain purposes
- Offering insurance
- Coordinating the intake and investment of surplus funds in the interbank market
- Providing advisory services on foreign trade matters

This effort to integrate the credit unions, and later the cooperative banks, lowered the cost of delivering services, due to the economies of scale attained. As noted above, Banco Credicoop was formed by bringing together 44 credit unions. In later years it expanded by adding branches from other cooperative banks that fell into crisis. This was done through buyouts or by the purchase of
assets and liabilities. In all cases, the Bank’s objective was to preserve the availability of cooperative financial services in the various localities.

The expansion of Banco Credicoop and the absorption of other cooperative banks occurred at the same time as the vigorous processes of concentration and gravitation toward foreign trade seen in the Argentine financial system in recent years. The 469 financial entities that existed in December 1980 (of which 179 were banks) were reduced to the current figure of 131 (116 banks). Argentina’s 20 largest banks now account for 72.6 percent of total assets, and foreign banks manage only 41 percent.

**Banco Credicoop Coop. L. Today**

Banco Credicoop Coop. L. has assets totaling $1.94 billion, deposits of $1.30 billion, and a net worth of $194 million. Of the 96 privately owned banks in Argentina, it ranks ninth in terms of deposits. After Argentina’s major private banks were sold to foreign concerns, Banco Credicoop has become the second largest domestically owned private bank, and the largest private bank owned entirely by Argentine nationals. It has a network of 194 branches located in the main cities of the country and in many smaller towns. In some cases it is the only financial institution in a particular region. The size of this network places it third among private banks in terms of number of branches.

Banco Credicoop is a universal commercial bank, offering a full range of commercial and personal financial services. It has 147 automatic teller machines. It is intensely involved in foreign trade through an extensive worldwide network of 300 correspondent banks. Its technological development places it among the top banks serving the Argentine market. All branches are connected in real time, and telephone and on-line banking services are offered. The bank’s bonds carry a local rating of AA– and A+, as determined by international rating agencies.

The bank has formed a group of related companies that offer services complementary to its core banking activities, such as credit cards, a network of ATM machines, pension funds, retirement insurance, general insurance, whole life insurance, a communications network with on-line commerce, a savings and loan association, and electronic clearing of securities.

**Advantages of Cooperative Banks**

Cooperative banks offer advantages vis-à-vis credit unions in terms of the supply of products and services, new sources of financing, diversification of credit risk, and access to larger companies. Cooperative banks also provide economies of scale, a network of branches, improved management, and greater capacity and authority to correct irregularities.
Supply of Products and Services

The creation of Banco Credicoop from the merger of 44 credit unions permitted a major expansion in the range of products and services that were offered. This expansion was further reinforced by the 1977 legislation that allowed all commercial banks to operate as universal banks. Since its founding, Banco Credicoop was able not only to maintain its checking account operations, but also was immediately given the power to offer new services such as securities negotiation and foreign exchange and trade.

In the 1990s, the Argentine financial market attained a depth and complexity that widened the gap between the operational possibilities of commercial banks and credit unions. For instance, commercial banks could issue their own negotiable bonds, sell insurance, and take equity positions in companies providing services that complement financial activities (such as pension funds, life insurance, securities clearance, and ATM networks).

New Sources of Financing

Through consolidation, the cooperative bank gained access to new sources of financing that had been off limits to individual credit unions. These include interbank lines of credit, the issuance of their own senior and subordinated bonds, lines of credit from abroad to finance foreign trade operations, and lines of credit from wholesale public banks.

Diversification of Credit Risk

Although the 44 credit unions that were merged into Banco Credicoop were clearly urban and their members had very similar profiles, some credit unions were located in areas that specialized in a single productive sector (for example, the textile or metallurgical industries). Aggregating their portfolios made it possible to achieve greater diversification of sectoral risk and to diminish the risk of large losses. Risk diversification increased markedly with the incorporation of other cooperative banks from different regions, each with a portfolio having a different sectoral composition.

Access to Larger Companies

It is important to note that the composition of the membership remained unchanged. The bank continued to operate mainly with small- and medium-sized merchants and producers, as well as professionals, office workers, laborers, and artisans. No former or potential member was excluded or adversely affected by the change to a cooperative bank. Indeed, the only difference observed was that
the greater lending capacity of the bank made it possible to offer loans to some moderately large or large firms. Loans extended to this group of companies—individually, and as a whole—are limited by stricter rules than those applied by the central bank. This type of support is offered only when there is surplus liquidity, that is, after the bankable loan demand of the membership is met.

**Cost Reductions from Economies of Scale**

IMFC efforts to standardize products and processes and to provide some central services to individual credit unions made it possible to achieve economies of scale and diminish unit costs. Nonetheless, the formation of the bank made possible further centralization of administrative activities such as accounting, reporting to the central bank, and the collection and recovery of delinquent loans by judicial and extrajudicial means.

Although no formal study has been done of pre- and post-merger costs, experience indicates that substantial unit cost reductions were not achieved immediately, but only as adequate computer systems became available to efficiently centralize administrative tasks. Later, the experience of incorporating branches of other cooperative banks revealed that economies of scale were achieved mainly by reducing central office staff.

**Network of Branches**

IMFC’s efforts to bring about integration made it possible, in the case of some services, for the credit unions to operate in practice as a network of branches. Examples of this include checking accounts, which had a unified clearing system, and credit card operations.

With the formation of Banco Credicoop, it became possible to consolidate and reinforce such networked operations. The possibilities for networking have been further increased by technological advances that make it possible, among other things, to interconnect branches in real time and to create an ATM network. The bank also makes the branches more homogenous in the public eye, for example by having a common name and common branch characteristics, through similar forms and styles of communication, by advertising, and through other means. All of these elements strengthen the network image, which in some cases facilitates use of the bank by new groups of members.

**Improved Management**

At the time Banco Credicoop was established, its top-level managers were drawn largely from the professional and management staff of IMFC and, to a lesser
extent, from the credit unions. Experience has shown that this new corps of managers made an important contribution to the bank through its own managerial effectiveness and by training new managers.

**Greater Capacity and Authority to Correct Irregularities**

The credit unions had a common set of rules and were audited by IMFC. IMFC, in view of its institutional authority, had a certain capacity to correct irregularities in credit union operations. The centralization of decisionmaking that accompanied the creation of Banco Credicoop conferred upon its directors still greater authority and additional tools for enforcing rules and correcting and punishing any aberrations.

**Advantages of Credit Unions**

Credit unions, in turn, have several advantages over cooperative banks, including participation in and knowledge of the local community, members’ participation in the direction and management of credit unions, and operational flexibility.

**Participation in the Local Community**

The credit unions that preceded Banco Credicoop played a major role in the local communities and neighborhoods in which they operated. The fact that they were founded by members of the community, the clearly local nature of their boards of directors and the boards’ concerns, and their links with other community organizations (such as school cooperatives, development associations, chambers of commerce) gave the credit unions deep roots in the local community.

The credit union board members were natural managers widely respected in their community, a fact that drew in many new members. Furthermore, these managers’ deep knowledge of their milieu enabled them to better assess the credit risks of their borrowers.

Credit union operations were facilitated by a financial context in which there was excess demand for credit and negative real loan rates. Credit unions benefited from the abundant financing available from checking accounts, on which they paid no interest, and from low loan default rates. Borrowers also obtained benefits from negative real interest rates and the consequent erosion of the real value of their debts.

**Participation of Members in Direction and Management**

The fact that the board of directors was both autonomous and local facilitated the participation of members in credit union direction and management. The
mechanisms for representation were direct and the decisions that had to be made had to do with matters that were better known, more clearly delimited, and with more immediate impacts than is the case for a large financial entity. All of these elements facilitated extensive participation by members, both on the board of directors and on the various board committees, as well as their informal participation through day-to-day contact with the managers.

Operational Flexibility

The autonomy of the credit unions enabled them to be more flexible in their operations, in particular by designing certain types of loans appropriate for the type of commerce or industry prevalent in their service areas.

Credit Unions versus Cooperative Banks: The Case of Banco Credicoop

As noted above, Banco Credicoop’s managers were aware of the advantages of credit unions and the challenges posed by the centralization of management and the board of directors. Thus, the managers included the measures indicated earlier in the bank’s bylaws.

Given the expansion of the number of its branches (194 nationwide), Banco Credicoop is facing new challenges. According to the current bylaws, the board of directors should be made up of 194 members; however, this would make it impossible for the governing body to function properly. Consequently, the institution is analyzing preliminary draft bylaws aimed mainly at regionalizing certain aspects of the bank’s direction in order to strengthen member participation and better adapt the bank’s operational and institutional activities to the varying characteristics of the regions it serves. Along with a smaller board of directors, groups of advisers would be created for each region that would adapt the decisions of the board of directors to the realities of the regions.

Where Credit Unions and Cooperative Banks Have Failed

In the last two decades, many credit unions and cooperative banks have failed. Indeed, many commercial banks have failed during this period of reconversion and concentration of the financial system, which experienced two deep crises in 1980–82 and 1995.

Of the 85 cooperative banks that existed in 1980, only six remain, accounting for 3.8 percent of total deposits. Of the 100 credit unions, only eight have survived, accounting for 0.08 percent of total deposits in the system. Many of these entities were dissolved, some were transformed into commercial banks or
sold their assets and liabilities to these companies, and the rest were absorbed by other cooperative banks.

This chapter does not attempt to present a detailed analysis, but only to highlight the main causes underlying the problems of many of the credit unions and cooperative banks. The problems include the following:

- The macroeconomic environment had major disequilibria (including some outbreaks of hyperinflation) that most intensely affected the social sectors served by credit unions and cooperative banks and the regional economies in which some of them were located.
- Shortcomings in the management of these institutions were brought on by personnel weaknesses, as well as by deficient management information systems.
- In the particular case of the credit unions that did not undergo transformation, the scant operational possibilities allowed by the regulations sharply diminished their capacity to develop.
- Problems arose in obtaining sufficient capital, which is crucial for cooperative institutions to realize their development potential.
- The cooperative form was denaturalized. Many entities were not authentic cooperatives in terms of their objectives and the nature of their direction and management. This denaturalization, in an environment of inadequate prudential regulation and inefficient supervision, encouraged fraudulent schemes, which led to the insolvency or bankruptcy of the institutions.

Final Considerations

The political, economic, and regulatory environment in Argentina was adverse to the development of the cooperative movement. During the brief periods of democratic government, along with regulations and economic policies favorable to the domestic market and to the economically weaker sectors, the cooperative movement displayed great vigor and efficacy in achieving its objectives.

Today in Argentina and in most of Latin America, a profound process of structural reform is underway in which the key features are economic opening, privatization, and deregulation in the context of insertion into the world economy. This model increases economic and financial concentration, favoring transnational corporations and large local economic groups. It also increases unemployment, worsens distributive equity, and produces greater social marginalization. The increases in concentration and the lack of equity are at least partly the result of a financial policy that promotes concentration in the banking
industry and permits or encourages the denationalization of financial institutions. These lead, in turn, to insufficient credit for small- and medium-scale businesses and for relatively less developed regions.

Consequently, the socioeconomic environment and policies run counter to the development of cooperative institutions. At the same time, the need for such institutions to fulfill their economic and social functions grows ever greater. Until alternative development models are applied in the region, the governments and regulatory agencies of Latin America need to understand and take account of this reality.

**Capitalization of Cooperative Institutions**

In many cases, capitalization has been the Achilles' heel in the development of cooperative institutions. The economic and financial authorities should establish a distinct set of regulations for cooperative entities to allow them to better develop their financial intermediation activities without reducing the protection of savers. Some observers are of the view that in developing economies capital standards should be even stricter than those required under the Basle accord because these standards are being applied to relatively more volatile economies. In the case of Argentina, this view has already been translated into practice.

This line of argument leads to the paradox that sectors with fewer resources in developing countries must put up more capital than more powerful sectors in industrial countries. This contradiction is clearly reflected in the case of cooperative entities because the rigorous capital adequacy requirements cannot be met from member shares or from the reserves generated by the institution. Given that these entities perform the clear social function of democratizing credit by channeling it to social sectors and regions that are not served by the traditional banking system, different regulatory provisions should be adopted for the capitalization of cooperative institutions. These regulations should neither jeopardize the security of savers nor encourage moral hazard in these institutions. Therefore, they should be complemented by a strengthening of the financial safety net (deposit insurance and access to systemic liquidity loans), together with adequate standards on credit concentration and loan quality and effective supervision.

Shortfalls of capital have led some Argentine cooperative banks to become commercial banks, making use of the possibilities offered by the changes of law adopted in response to the 1995 financial crisis. Actual experience highlights the great difficulties of trying to get private, profit-seeking capital to limit its participation to a minority share of the paid-in capital. Normally, such investors aim to guarantee their control and management of the entity, in which case the objectives of mutual aid and rendering service to cooperative activities are under-
mined, and the objective of giving priority attention to small- and medium-scale businesses is neglected.

**Integration in the Credit Union Movement**

Integration is an essential tool for credit unions to be able to address their current challenges. Any general formula to bring about integration must take into account the socioeconomic reality, financial context, legal and regulatory framework, historic origins of the credit union movement, and current economic and institutional realities that credit unions face. The Argentine experience suggests one possible approach: to encourage greater integration through association in credit union federations, maintaining the advantages cited earlier of retaining operational and institutional autonomy. If circumstances make merger and the formation of a cooperative bank advisable, IMFC’s experience in consolidating credit unions would serve as an excellent model to help ensure the viability and success of such an effort.

**Possible New Forms of Cooperative Credit**

In Argentina, as no doubt in most countries of Latin America, the low-income sectors (including self-employed workers, wage workers, and artisans) have major credit needs that go unmet. In many cases, these needs give rise to unregulated intermediaries that loan money on usurious terms, further reducing the incomes of the weakest social sectors. It is difficult for the cooperative banks and even, on occasion, the credit unions, to serve these sectors, either because they have no offices in many of the marginal localities or because of the specific characteristics of the products required to serve these sectors.

It would be important, therefore, to explore the possibility of financial legislation in our countries authorizing the operation of credit unions or other mutuals with more delimited financial operations, but also with lower capital requirements and specific regulatory demands tailored to their operations. Obviously, it is necessary at the same time to guarantee protection for the small savers who invest their funds in these entities. To achieve these purposes, the technical advice offered by national and international institutions would be of great utility.
This chapter is an effort to share the experience of the National Federation of Guatemalan Credit Unions (FENACOAC, Federación Nacional de Cooperativas de Ahorro y Crédito de Guatemala) with other credit union movements in Latin America. It summarizes the most important issues that FENACOAC has been able to resolve, the improvements it has introduced, as well as its new practices, mechanisms, and objectives. These innovations are aimed not only at developing FENACOAC, but mainly at improving the operation of the affiliated credit unions so as to benefit their clients, guarantee their sustainability, and keep them in the Federated Financial System (SIFFE, Sistema Financiero Federado), which I will describe below.

In Guatemala, credit unions were transformed from a position of dependency on external financial resources in the late 1980s, to a position of financial independence based on savings mobilization by the mid 1990s. Having achieved this independence, credit unions then faced their next challenge: to convert themselves from a group of small, isolated, local financial institutions to a much larger, integrated network. By doing this, the credit unions would be able to achieve additional economies of scale in their operations and to pool their branch networks in order to provide greater convenience to their clients, thus further expanding their market reach. FENACOAC was the principal vehicle for moving from a position of independence to one of interdependence.

**FENACOAC before the Reforms**

In order to better understand the reforms made by FENACOAC, it is helpful to understand its traditional, pre-reform operating principles. First, the Federation received its financial support mainly from the spread it obtained in channeling external resources from national and international institutions to the credit unions. To a minimal extent, the credit unions’ share capital also supported FENACOAC. FENACOAC’s role in channeling external funds made the credit unions financially dependent on the Federation, to the point that in some cases 40 to 50 percent of the credit unions’ loan portfolios were financed by loans from FENACOAC. In 1988, external loans for intermediation to credit unions equaled
63 percent of FENACOAC’s assets (figure 13.1). As credit unions shifted to savings mobilization, this share fell precipitously to 8.8 percent by 1994 and to 2.6 percent by 1998.

Second, all services provided to the credit unions, especially those related to technical assistance and training, were fully subsidized.

Third, the vast majority of FENACOAC’s staff was not highly professional and was very partisan to cooperative philosophy. As a result, the services provided by the Federation were generally of poor quality.

Fourth, the members of the credit unions’ governing bodies (the boards of directors and supervision committees) used to be elected because they spoke up and criticized things most often in the various forums, especially during the Federation’s regional meetings and general assemblies. In general, the directors’ attitudes were largely shaped by personal interests, which were increasingly removed from institutional and entrepreneurial concerns.

Fifth, the Federation had advanced little in its aim of standardizing accounting, operational procedures, and the legal framework of its member credit unions (they had adopted many different types of bylaws). The technologies used by the credit unions were very outdated.

Sixth, often the Federation did not stay focused on the provision of financial services. Instead, it would drift toward other business opportunities, failing to attend to activities that would have been more beneficial for the credit unions.
The Federation based its involvement in these other business areas on emotion and its eagerness to turn the credit union system into a panacea for solving all of the members’ needs.

Seventh, the Federation sought to be larger than the credit unions, which were weak, small, and inefficient institutions. It was common for the credit unions to show losses for one, two, or even three consecutive years. The amortization of such losses was deferred to the next year, to the point that in some years nonexistent surpluses would be distributed. Such weaknesses in the credit unions are reflected in high delinquency rates in FENACOAC’s loan portfolio (figure 13.2). FENACOAC loans to member credit unions had a delinquency rate of 25 percent in 1988. The delinquency rate fell to 4 percent by 1990, but rose to 7 percent in 1995 when FENACOAC expanded lending to cooperatives that were not credit unions, and then fell back to 1 percent in 1998.

The Federation’s New Role

By the mid 1990s, FENACOAC had developed a new model for its own operations and those of the credit union system. The new model has yielded positive results in developing the credit unions and in contributing to FENACOAC’s efficient and effective operation. Among the principles in FENACOAC’s new model are the following:
• Opt for financial specialization and begin a process of liquidation of all nonfinancial services and products.
• Recognize that the credit union system has great potential, and that to be able to develop this potential, it should maintain its cooperative nature.
• Design and implement practical and concrete mechanisms for credit union integration.
• Transform the credit unions’ traditional dependence on FENACOAC into a culture of savings mobilization in the credit unions, so that they can attain financial autonomy.

As credit unions expanded their services and marketing programs in the early to mid 1990s, many found that they had saturated their local rural markets and faced limited prospects for further growth. Credit unions also found that they were unable to provide services to their members who traveled to the capital city or to other communities to market their agricultural products or to carry out other commercial activities. As part of its new role, the Federation decided that it would attempt to provide a means to overcome these limitations.

Its strategy entailed the expansion of sound credit unions to neighboring communities and to provincial capitals through the opening of branch offices, and the linkage of credit unions and their branch offices to form an integrated national system for all members of participating credit unions. Members would be able to walk into any office of any participating credit union and deposit or withdraw funds or undertake loan transactions. For such a system to work, each participating credit union must have confidence that the other credit unions are being operated in a safe and sound manner. This requires a commitment to adhere to a rigorous set of financial standards.

The impressive expansion of Guatemala’s credit union branch network was engineered primarily by FENACOAC. Federation staff carried out market analyses to identify those communities that offered sufficient scale to permit a break-even level of operations to be reached within two years. FENACOAC also provided financing to credit unions to open branch offices, as well as technical support.

**SIFFE**

In 1993, FENACOAC created the Federated Financial System (SIFFE), a subgroup of credit unions that is linked by common products and services which are used by members of participating credit unions in different geographical areas of Guatemala. Credit unions have the right to join SIFFE if they adhere to the operational policies, financial disciplines, and performance standards established by the new credit union model. Their adherence is evaluated on a regular
basis, and the member credit unions receive a membership certificate, which they display prominently in a public place. SIFFE's marketing campaigns are focused on the safety and solvency of its members. Membership also provides access, on a preferential basis, to the services of the central liquidity fund. The requirements for joining SIFFE are as follows:

- Affiliation with FENACOAC and up-to-date status on all financial obligations.
- Presentation of monthly financial statements to FENACOAC within five working days of the end of each month, and use of the new standard accounting nomenclature.
- Presentation of an annual business plan with aggressive financial objectives.
- Status of no operational losses in the last two years and no capital in liquidation.
- Maintenance of the loan delinquency rate below 10 percent, counting as delinquent the total balance of all delinquent loans, not just the delinquent installments.
- Maintenance of sufficient provisions to cover 100 percent of all loans delinquent over 12 months.
- Adherence to the practice of writing off all loans more than 12 months overdue at the end of each quarter.
- Use of the PEARLS indicators to evaluate financial performance.
- Annual audits by an external auditing firm.
- Permission for the internal inspection department of FENACOAC to make annual inspections, and maintenance of a favorable rating.
- Signed legal agreement with the Federation regarding participation in SIFFE.

At present, 16 of the 32 credit unions affiliated with FENACOAC belong to SIFFE. These members receive preferential interest rates (of half a percentage point) for deposits to or loans from the central liquidity fund. In addition, they obtain technical assistance and financial aid from FENACOAC for computerizing their operations and expanding their branch networks to new areas.

FENACOAC's communications network supports the transfer of funds among the credit unions that are members of SIFFE. When a SIFFE credit union accepts a deposit, fulfills a withdrawal request, or receives a loan payment from a member of another SIFFE credit union, the first credit union immediately sends a fax to FENACOAC. The Federation then makes the corresponding debit and credit in the accounts of the two credit unions, so as to clear the transaction, immediately sending them a fax to notify them of the adjustment. This program
SAFE MONEY

was designed to reduce the competitive advantage of commercial banks, which offer their customers checking accounts and networks of branches.

SIFFE aims to give the public a better and more consistent image of credit unions, and to win the public’s trust in credit unions. SIFFE has entered the market as a select group of financially solvent and highly disciplined credit unions.

Other Federation Activities in the New Model

FENACOAC has three major purposes in adopting the new model. First, it aims to develop and oversee a financial network to serve its member credit unions—giving policy guidance, providing services, and generally carrying out its role efficiently as a second-tier entity. Second, it seeks to develop a safety net to guarantee the efficient and transparent management of the credit unions’ resources, and to create and bolster public confidence in these institutions. Third, it aims to fulfill its role as a representative and advocate for the credit union system. In order to achieve these basic goals, the Federation is developing the services, actions, and mechanisms described in the following subsections.

Central Liquidity Fund

As part of the concept of the financial network, FENACOAC has developed a central liquidity fund that basically manages the credit unions’ liquidity. As they modernized, increasing their deposit-taking, the Guatemalan credit unions began to exhibit higher levels of surplus liquidity. When the credit unions deposited these funds in banks, they received very limited rates of interest, which were based on deposit size. FENACOAC began to provide a central liquidity fund service to the credit unions, investing large, pooled sums in bank accounts to earn higher interest rates.

Deposits from credit unions, which financed only 14 percent of FENACOAC assets in 1988, increased to 74 percent of assets in 1998, replacing external credit as FENACOAC’s primary source of funds (figure 13.3). The increase in credit union deposits in FENACOAC was mirrored by a decrease in loans to credit unions from FENACOAC (figure 13.4). As credit unions generated surplus liquidity, they demanded very little loan financing from FENACOAC. FENACOAC loans dropped from 30 percent of its assets in 1988 to 2 percent in 1998.

Certain fundamental changes took place with FENACOAC’s move from intermediating external credit lines to managing credit union liquidity. FENACOAC needed to modernize its operational procedures in order to respond to a high volume of immediate deposit and withdrawal requests. The availabil-
ity of highly competitive commercial banking services eliminated the possibility of obtaining large margins. Historically, handling international loans gave FENACOAC gross earnings margins of four to six percentage points. The financial margins of the central liquidity fund had to be reduced to 0.25 to 0.90 percentage points to keep it competitive with the commercial banks. Driven by these tighter margins, FENACOAC also had to stop providing most subsidized services and control operating expenses, which increased from 3.9 percent of assets in 1988 to 4.9 percent in 1991, and then fell to 1.8 percent by 1998 (figure 13.5).

The other main purpose of the central liquidity fund is to protect the credit unions from large, unanticipated cash withdrawals, offering them access to loans for short-term emergency liquidity. This service reduces the need a credit union might have to keep excessive amounts of cash on hand.

**Reserve Requirement Service for Credit Unions**

The reserve requirement service consists of a liquidity mechanism to back up credit union members’ savings. It is a formal mechanism in which an agreement is signed, and there is a well-defined policy. Once the agreement is made, each credit union is required to keep 20 percent of its deposits in liquid form so as to be able to respond to normal or massive levels of withdrawals. Of this 20 percent, half is kept in the credit union in liquid assets, and the other half (the required reserves) in a savings account in FENACOAC’s central liquidity fund.
Other System-Level Operations

In the last seven years, FENACOAC has developed other financial support mechanisms for the credit unions, such as a stabilization fund that it uses to aid individual credit unions with solvency problems. In addition, with technical support from the World Council of Credit Unions and the participation of credit union associations from the United States, FENACOAC plans to handle remittances from Guatemalans living in the United States.

Marketing

Credit unions may offer the best financial services available. However, market surveys have often indicated that the local population was simply not familiar with these services. Therefore, the rapid expansion of credit union branches noted earlier needed to be accompanied by an aggressive marketing campaign. The whole credit union system reached agreement on developing a marketing program on two main levels, national and local. The local campaign, which covers each credit union’s service area, is made consistent with the national marketing program, but is adapted to the culture and services that each local credit union provides to its members.

Private Supervisory Body

As part of the credit union safety net, FENACOAC has begun to form a private supervisory body that will perform a role similar to that of the superintendency
of banks in the banking system. Its functions include supervising and monitoring the implementation of the financial disciplines and the prudential standards used by the credit unions and the Federation, so as to foster members’ confidence in their institutions. The main characteristic of the private supervisory body is that its board of directors is made up of professionals who are independent of the credit unions and of FENACOAC, and who have considerable knowledge of banks, credit unions, and other financial institutions.

Deposit Guarantee Fund

In tandem with the private supervisory body, FENACOAC is developing a deposit guarantee fund, which should generate greater public confidence in the credit unions. Several lines of defense have been strategically established whose objective is to allow the guarantee fund to be used only as a last resort. These lines of defense begin with supervision and include technical assistance and financial stabilization mechanisms. If a problem persists, co-management, intervention, or even a merger can be implemented. Only then, if necessary, will the deposit guarantee fund be used.

The use of the guarantee fund will set into motion a process of special contributions by the rest of the participating credit unions to restore its resources. Initially, the guarantee fund will be constituted by seed capital provided by the Federation, to be increased by periodic and special contributions from the credit unions until it reaches about 1.6 percent of the total assets of the credit union system.
Computerized Technology for the System

Early on, the transfer of information from the branch office to the head office of a single credit union and the clearing of financial transactions made by members of one credit union in another were accomplished by faxing information over telephone lines and by sending computer diskettes via courier. Security and efficiency concerns mandated that FENACOAC develop appropriate computer software that all SIFFE member credit unions might use as a common base for linkages and the secure transfer of information.

FENACOAC has established a private company, SOLFINET, S.A., which will support implementation of the official software of the FENACOAC system. It will train personnel and update software throughout the system (both in the credit unions and at FENACOAC) and will provide technical assistance aimed at helping all the institutions of the system to acquire suitable equipment. However, SOLFINET will not address hardware support concerns.

Governance

Among the functions of the Federation, special importance has been assigned to developing mechanisms and procedures that reduce moral hazard and principal-agent problems. The Federation is implementing procedures for the credit unions and for itself to address and limit abuses of ethical norms and standards of professional conduct by persons who work in any part of the system. It is promoting a code of ethics in the credit unions, along with a formal process for selecting and installing directors and managers. FENACOAC's supervision committee evaluates and screens proposals and candidates for senior management and directorship positions within the Federation, based on strict requirements and descriptions for each position.

PEARLS System

The PEARLS system of financial analysis has been institutionalized in the credit unions and in the Federation. For the Federation, the PEARLS indicators are prepared monthly by the internal auditing office, and analyzed and used by the management group to guide its decisionmaking. FENACOAC's board of directors and supervision committee also use this tool, often on a quarterly basis, to take stock of the Federation's status and progress.

PEARLS has become the common language among credit unions in Guatemala. All credit unions use the PEARLS system to submit financial information

1 See chapter 4 for a discussion of the PEARLS system.
to FENACOAC. The PEARLS financial ratios for each credit union are shared with all other credit unions in the system. Thus, each credit union can monitor the conditions and risks inherent in the others’ operations.

**Uniform Legal Framework**

The Federation has helped to standardize the bylaws used by all of the credit unions as well as by the Federation itself. This standardization gives the system a uniform legal framework. For example, surpluses are not distributed; rather, all net earnings are capitalized and market rates of interest are paid on share capital (as they are on savings deposits). The capitalization of all net earnings has made it possible to strengthen institutional capital and thus bolster the solvency of the credit union system.

**Conclusion**

The cornerstone of FENACOAC’s strategy has been to assist credit unions to overcome their local market limitations by growing and branching into new markets and, by joining together, to offer the convenience of a national network of service outlets. This strategy has allowed the credit unions to achieve additional economies of scale and to offer a fuller range of more competitive financial services. The bringing together of over 80 credit union main and branch offices into the SIFFE network required the preconditions of established financial discipline (PEARLS), consistent policies, and common products among participating credit unions. Credit union branching and networking was also facilitated by the active leadership of the Federation in carrying out market site assessments, financing the construction or acquisition of credit union branches, implementing national and local marketing campaigns, and setting up and supporting the SIFFE network computer systems. The establishment of facilities to address credit union liquidity and solvency problems as well as to provide supervision and deposit insurance have also increased the safety, soundness, and attractiveness of the Guatemalan credit union system and furthered its efforts to grow as an interdependent system.
PART VI

COMMENTARY
The Threat: Financial Liberalization

The past two decades in Latin America have witnessed the gradual liberalization of financial markets as an important economic development strategy. Financial liberalization packages usually include, but are not limited to: 1) freeing up interest rate controls, 2) eliminating subsidized credit programs, 3) reducing exchange rate controls, 4) privatizing inefficient state-owned banking enterprises, 5) developing capital markets, 6) broadening the banking business to include leasing, factoring, and investment activities, 7) opening up local financial markets to competition from international banks, and 8) strengthening the regulation and supervision function (Von Pischke 1997). Some countries in Latin America, led by Chile, have been radically reforming their financial sectors for most of the past two decades. Others lag far behind; their financial systems still show substantial features of financial repression.

The effects of this liberalization on local financial markets have been well documented in those countries where these reforms are most advanced. The freeing up of interest rates has led to positive real rates of return for investors, which in turn has stimulated the growth of secondary financial markets. The freeing up of exchange controls has contributed to free flows of capital and bolstered the growth of equity markets. The growth of equity and secondary financial markets has provided alternative sources of financing for large enterprises and has forced many indigenous banks to reconsider their core business and seek new avenues for growth. In response, these banks have pressured the authorities to broaden the range of banking services they are allowed to offer. The banks have also sought out new market niches. The entrance of large foreign banks into local markets has hastened this process even further. These banks bring top-of-the-line technology, international banking networks, and powerful new services into often-sleepy local markets. This further erodes the indigenous banks’ position in the market.

As a result, commercial banks have entered the area of consumer lending to middle- and lower middle-income clients with great force. Particularly in ur-
ban areas, these consumer credit operations can directly threaten the client base of credit unions. Marulanda (chapter 1), in her description of the growth of consumer finance in Latin America, presents one of the most dramatic examples of the role international banks have had in driving the evolution of local financial markets. Large Spanish-owned banks (Banco Bilbao y Vizcaya and Banco Santander) have established an important presence in Argentina, Colombia, Mexico, Peru, and Venezuela, with at least a 30 percent share of each market.

In most markets, these banks focus on retail banking, offering both savings accounts and consumer finance to the emerging middle class. Growth, measured in hundreds of thousands of new clients and tens of millions of dollars in new lending each year in each of several countries, has redefined consumer credit in Latin America. For example, in its first six months of operations, Banco Santander in Colombia opened 350,000 savings accounts for a total of $205 million (an average account balance of $586). This experience is common in other Latin American countries where these Spanish banks operate.

Cuevas (chapter 2) reports that a large credit union in that same market, Cupocréedito, has almost 500,000 clients, although it has been operating since 1960. Its average deposit size is similar ($462). None of the other five credit unions he included in his presentation had more than 60,000 clients, although all were at least 25 years old and were reporting average portfolio growth of 14–48 percent annually. Cuevas suggests that credit unions can play an important role, especially in rural areas where more than 70 percent of their clients reside. However, the invasion of commercial banks into consumer credit presents a strong challenge to credit unions in several Latin American countries.

Privatizing large state banking institutions and eliminating most subsidy elements from directed credit programs has led to a reduction in the supply of financial services to the poor and to the rural population in many countries. As unprofitable branches close and subsidized credit dries up, the poor and rural populations become increasingly cut off from even basic payment services. Therefore, although the benefits to economic development of financial liberalization cannot be questioned, it carries a cost that increasingly worries those very same policymakers who have sponsored these reforms. As a result, they have turned their attention to organizations that seem to reach poor and rural populations with basic financial services, credit unions and financial nongovernmental organizations (NGOs).

Cuevas suggests that credit unions have several intrinsic advantages over other providers of financial services to lower-income clients, among which he considers their access to community-based credit information, their ability to lend to nonsalaried clients successfully, their lower cost structure, and their more favorable interest rate structures. He particularly considers that credit unions
offer comparative advantages over many of the financial NGOs that serve the lower-income segments of society.

Although a few financial NGOs have indeed redefined the manner of lending to the urban poor and have generated powerful organizations, the vast majority of NGOs that offer microcredit are small and insubstantial. There are probably no more than 100 fully sustainable financial NGOs throughout the entire world. Many thousands of others fall far short of this goal.

Nevertheless, a handful of top financial NGOs in Latin America are reaching hundreds of thousands of microenterprise clients in a sustainable manner with efficient microcredit services. Some of these financial NGOs have been able to turn themselves into regulated financial intermediaries. In their search for a "quick fix," policymakers have turned to these financial NGOs as well as to credit unions in hope that these organizations, whose mission statement incorporates service to the poor and rural populations, will fill the void left by the process of financial liberalization.

The Response: Revitalizing Credit Unions

In Latin America, credit unions have neither prospered nor disappeared. Credit union market penetration in Latin America ranges from a low of 0.16 percent (Chile) to a high of 5.72 percent (Honduras), with most countries falling within a range of 1-3 percent. In Canada, France, Germany, Ireland, Japan, and the United States, market penetration is far greater, ranging from a low of 6.02 percent in the United States to 20.79 percent in Canada. Canada, Germany, and Japan all have deposits equal to approximately 20 percent of total money plus quasi money, which is the measure used for market penetration by Westley and Shaffer (chapter 3). In most countries, well-functioning credit unions constitute a relatively small portion of the total number of credit unions, yet have a disproportionately high percentage of total credit union assets.

Many reasons exist for this relatively weak performance in Latin America. Richardson (chapter 4) identifies "seven deadly credit union sins" that we must address to revitalize credit unions. These are: 1) external dependency, 2) confusing financial information, 3) uncompetitive products and services, 4) poor public image, 5) undisciplined fiscal operations, 6) cookie cutter loan analysis, and 7) social philosophy over common business sense. As these are overcome through revitalization processes, credit unions move from dependent institutions with a poor public image, subsidized loan products, poor financial management and results, entrenched leadership, and a stagnant membership base to independent institutions that can compete in modern financial markets.

Richardson and others have worked in different countries quite effectively on institutional strengthening projects that focus primarily on manage-
ment weaknesses, public image, performance, and, ultimately, financial solvency. Normally, these projects focus on the top third of existing credit unions because these show the greatest potential for substantially improving their performance. These projects report that after support, participating credit unions increase their savings base, profitability, and penetration of local financial markets. They control delinquency and offer rural clients access to basic financial services.

Others point to the organic weakness in credit union governance structure as the key limiting factor to the growth of the movement. Originally founded as part of development efforts, most developing country credit unions encouraged membership primarily as a means to access loans. In most cases, international organizations provided initial liquidity. Founders assumed that the poor could not save. Branch and Baker (chapter 11) suggest that this legacy has meant that most credit unions remain borrower dominated to this day. They speak of the principal-agent problem faced by an organization that is owned by the very same people it intends to serve, but managed by others. Because their individual share capital is so small and expected dividends are likewise insignificant, credit union members look to take out their benefits elsewhere.

Practically speaking, this means that members may try to take out their benefits through loans at low rates of interest, rather than through savings at high rates of interest. Members who already have loans are not particularly interested in the financial health of the credit union, because they have already taken out their expected benefits. Few members have not yet accessed loans; they only save as a claim on future credit union assets. These members should be concerned about general management of the credit union, but they are more concerned with accessing a loan as quickly as possible.

This borrower domination results in credit unions that are illiquid, soft on loan recovery, and poor. They do not charge a high enough spread on loans to administer their portfolios in an aggressive fashion, and suffer from high levels of late payments. Some do not pay professional managers and often, when they do, these managers engage in fraudulent behavior because the oversight function of the credit union’s board is usually relatively unsophisticated. The oversight function of the credit union movement is equally weak; many times it is housed in the same organization that is charged with promoting the cooperative movement’s development, resulting in a schizophrenic mission statement.

Although credit unions in Latin America certainly suffer from all of the ills mentioned above (and then some), these explanations do not fully clarify the difference in performance between credit unions in Latin America and those in industrial countries with high market penetration rates. The difference is striking, yet all credit unions all over the world have the very same governance structure, got started with the same lack of professional staff, and serve similar types
of clients. What explains such a fundamental difference in the performance of these two groups over time?

The Core Constraint: A Confused Mission

The most fundamental and debilitating difference between Latin American credit unions and their counterparts in industrial countries is that the two groups were formed for different purposes. The original cooperatives and similar types of community-based organizations formed during the nineteenth century were constituted to provide financial services to those who were not being served by large banks. By contrast, credit unions in Latin America were established to channel development assistance through locally managed financial institutions. The expectation in nineteenth century Europe was that local residents would benefit from having a bank that would remain responsive to the financial requirements of local citizens because of its ownership structure. The expectation in Latin America was that by joining a credit union, members would gain access to external funds (and, in many cases, land, technical assistance, or other services).

The net saver/net borrower distinction that prevails in the borrower domination discussion misses a central point. All individuals are simultaneously both borrowers and savers. All have transactions balances, emergency reserves, savings for future events such as the college education of children, and investments from which they hope to generate a future stream of income. Everyone has loans to purchase property, cover emergencies, and cover liquidity shortfalls when making everyday transactions. Low-income clients have similar liquidity management requirements, as research increasingly demonstrates. Therefore, they would like to have access to financial institutions that provide them with one-stop shopping for saving, making payments, and obtaining loans.

The nineteenth century Europeans recognized this and established the Raiffeisen and Sparkasse movements to serve local populations. Their institutions were neither saver dominated nor borrower dominated. The local population understood that building a solid financial institution served all of their financial needs best. Therefore, over time, these institutions have grown and maintained a basic competitiveness within the development of a broad financial sector.

By contrast, twentieth century development professionals and well-intentioned, socially committed community workers who formed the cooperative movement in Latin America failed to understand the financial relationships of the low-income clients they sought to serve through credit unions. They assumed that the poor could not save and had no need for "real" financial institutions. Instead, it was presumed that the poor needed what they apparently lacked—more money. Thus, the donor dominated nature of the credit union and cooperative movements came to be.
The crux of the difference in credit union movements between countries in Latin America and the six industrial countries referred to earlier lies, therefore, not in the governance structure itself, but in the very mission of the organization, as truly understood by its members. To the extent that members view their institution's purpose as that of providing access to the very best financial services it can make available, members/owners will require management to build a solid organization that offers security, efficiency, and a variety of well-designed products at the lowest cost. To the extent that members view their organization as a captor of external benefits to be channeled to the members themselves, they measure the expected benefits differently.

In their study of 55 credit unions, Westley and Shaffer (chapter 3) find low levels of delinquency to be highly correlated with credit union policies that communicated to members that the organization was committed to long-term survival and high-quality services. In Bolivia, Guatemala, and Honduras, low levels of delinquency were highly correlated with higher real deposit rates, higher loan rates, higher staff salaries, profitability of the credit union in prior years, and the severity of default sanctions. These results virtually mirror those obtained by a study of 32 open Honduran credit unions (Christen and Vogel 1984). Unfortunately, very little other empirical work of this type exists exploring the causes of loan delinquency in credit union portfolios.

This lack of information means that credit unions continue to spend far too much effort on the perceived immediate causes of borrower default (poor loan application and granting processes, weak follow through, nonexistent management information systems) and not nearly enough effort on the fundamental issue of building strong financial institutions. Strong institutions are the means to the end of maintaining high levels of borrower repayment, not vice versa.

When Vogel and I looked at the causes of loan delinquency in Honduran credit unions in 1982–83, we found that the best credit unions in Honduras had never received important amounts of external funding. Those which had received the most funding were all considered among the worst performers. Ironically, those which had received large amounts of external funding were chosen precisely because they had originally been the strongest performers in the prime markets.

The future of the credit union movement lies in its ability to move toward that vision of its nineteenth century founders—one where members understand that they are building competitive suppliers of a range of financial services. The relatively few successful credit unions in Latin America already understand this (at least those in power do). Most credit unions do not. Well-run credit unions represent the tantalizing exception to the general rule; they tease us with the potential of this powerful model.
The Panacea: Regulation and Supervision?

Credit unions have been utilized for years to channel development agency funds, propped up by cooperative development organizations and sustained by government policy because they serve the poor. Given the void left by the process of financial liberalization in the access of the poor to basic banking services, policymakers are moving both to rehabilitate weak institutions and to regulate and supervise their operations. Most commentators on the challenges facing the credit union movement agree that enhanced rules and regulations, norms, and external supervision are also keys to improving credit union performance (see chapter 11 by Branch and Baker and chapter 7 by Poyo).

For those few credit unions that have adopted the “financial institution building” mission, as opposed to the “channeling external funds” mission, regulation and supervision can have a role similar to that which it has for the banking system as a whole. For the others, regulation and supervision may not be sufficient. If a credit union’s membership and management subscribe to the mission of channeling external funds, the credit union is unlikely to undertake the basic policy reforms necessary to produce a viable, independent, and efficient organization.

Regulation, more than supervision, is a model-building exercise. Regulations determine the desired type of institution and the broad parameters within which it should operate. Supervision is the exercise of making sure the institution operates within those parameters. Credit union regulations are relatively uniform across most of Latin America. They permit easy entrance (low barriers to forming a new credit union), do not eliminate poor performers (they are never really suspended from operating), and establish de facto a laissez-faire environment in which credit unions pretty much do as they please. The net result has been the proliferation of a large number of very small credit unions scattered across the rural landscape. The average size and number of clients of most credit unions is no greater than that of the typical rural branch of the local agricultural development bank.

Those who feel that credit unions must compete in the newly liberalized financial sectors of Latin America increasingly suggest that the credit union movement should consider consolidation, as has happened in Argentina, Colombia, Mexico, and Uruguay. In Uruguay, the movement has consolidated itself by effectively turning small individual credit unions into branches of a larger credit union. The larger credit union can make capital investments, hire qualified professional staff, and offer a variety of quality products required by the competitive environment. It can increase its asset and capital base to levels commensurate with that of smallish commercial banks, although its outreach is far greater.
In Uruguay, the credit union movement was essentially consolidated into three large organizations. Mexico has a significantly larger number of institutions. In Colombia and Argentina, the fusion of cooperatives generated cooperative banks. In Argentina, 400 credit unions were transformed into 85 cooperative banks, and in Colombia cooperative banks number no more than a half a dozen. This consolidation process puts credit unions on an equal footing with commercial banking entities in terms of scale, capital, and (theoretically) access to technology.

In Bolivia, as Trigo (chapter 8) describes, the process evolved quite differently. New cooperative regulation brought credit unions under the umbrella of the Superintendent of Banks and Financial Institutions. The Superintendency developed a sliding scale for credit unions and their supervision. Credit unions that want to be able to offer a broad range of financial services to the general public (especially checking accounts) have a relatively higher capital requirement and stronger supervision program. Those that wish to remain small and serve a limited membership with share savings and simple loan products do not need increased capital and will receive very limited oversight. Clearly, the intent of the Bolivian approach is to let the market determine which of the credit unions will be able to compete in the modern financial sector in Bolivia. In this case, those few credit unions that perceive their mission from the perspective of building financial institutions will probably seek to increase their capital base and grow; others will remain small and eventually may cease operations altogether.

In either model, credit unions face a trade-off. They must submit themselves to standard banking regulations and grow exponentially or they must tend to disappear. Both models start from the premise that credit unions should become part of the local financial sector and, as such, submit themselves to market forces. Credit unions should measure up to competitive standards because the service they offer is essentially indistinguishable from that offered by other banking institutions, even if their clientele is distinct. Reason suggests that the poor should have access to financial institutions that are every bit as solid as those that serve more well-off groups. By this same reasoning, credit unions that do not wish to hold themselves up to banking standards should be allowed only to capture deposits from members of a relatively small community, to which they also make loans. Such credit unions would not look too different from a rotating savings and credit association.

The model developed for credit unions in the future will have fundamental implications for the nature of supervision. Quite simply, the greater the number of smaller institutions, the greater the burden of supervision. It is both more time consuming and more expensive to supervise a large number of institutions. More importantly, from the perspective of a budget-constrained banking superintendency, it makes more sense to dedicate scarce inspector resources to a few
large institutions that carry far more systemic risk than to the credit union movement. After all, the vast majority of credit unions raise less in deposits than the average branch of a typical retail bank.

This reality has meant that even in those countries in which credit unions have been put under the supervision of the central bank or banking superintendency, they are not in practice supervised (with the notable exception of Bolivia). Quick calculations show that unless small- and medium-sized credit unions paid fees that were many times greater as a proportion of total assets than banks, they could not cover the costs of their own supervision. From the regulators’ perspective, unless credit unions (and financial NGOs) clearly offer financial services that otherwise will not be offered to a certain valued target population, the proliferation of a large number of small organizations is counterproductive to the health of the entire financial system. They will, for all practical purposes, remain essentially unsupervised.

If the credit union movements of Latin America wish to continue to insist on revitalizing a large number of small institutions, then they must subject these to the same kinds of market forces facing other banking organizations. Credit unions must compete for deposits, improve the quality and quantity of their payments and loan services, and strengthen their overall financial performance. Only market forces can exercise the quality control required to save the movement from complete obsolescence. In this era of reduced credit subsidies, even for the rural poor, market forces will also help credit union movements separate memberships that seek to build financial institutions from the subsidy seekers. This process of mission clarification will ultimately benefit credit unions by allowing them to focus more clearly on those management variables that will ensure their continued existence.

A regulatory framework that would accompany the revitalization (and culling out) of the credit union movement in a particular country would have to include basic requirements that enforce competitive market conditions among credit unions and between credit unions and other banking institutions. At a minimum, credit unions should be required to report their results in a transparent and public fashion. They should be subjected to external reviews performed by auditors. These reviews must result in a ratings-type score or in a “seal of approval” of some sort that can (and will) be taken away in the event of poor performance.

The credit union movement could undertake these activities on its own (self-regulation) or have an external agency police it in its own interest. Those who have the most to gain (the credit unions themselves) must take the initiative in creating the mechanisms that allow for a sorting out of the good from the poor performers. The movement can engage in self-regulation or subject itself more directly to market regulation.
Self-regulation is normally undertaken by the party which hopes to derive direct economic benefit from the seal of approval granted. Animal breeders protect the value of their stock by inspecting personally each specimen to see whether it conforms to predetermined standards. The advantage of self-regulation is that the party that knows the most about its product does the regulating.

Securities markets use rating agencies to generate independent sources of information about bonds, thus facilitating investors’ choices. This type of market regulation seeks to ensure that potential investors have all of the information they need to make their own decisions. Information transparency is the backbone of this approach, but both approaches ultimately produce a rating of some sort that provides information to the clients/investors about the quality of the good they are purchasing. Both approaches understand that some goods will be of such poor quality that they will be purchased at a vastly inferior price (or left untouched) and that this result is good for the system as a whole.

Conclusion

Credit unions face more direct competition than ever before. The process of financial liberalization leads to deeper financial markets, a greater supply of financial services to the general population, and pressure on traditional banking institutions to reach down-market. Credit unions have a unique market niche that heretofore has remained relatively secure, but that may disappear with the advent of financial NGOs and pressures on banks to become more profitable. Some credit union movements have responded to this process by consolidating in one way or another, with differing degrees of government support (subsidy). Some of these movements have proven to be successful competitors in the provision of financial services to the lower-income strata of the economy.

Much of the attention in the debate surrounding the revitalization of credit union movements has focused on organic structural and management weaknesses. These problems are frequently described in terms of inadequate governance and incentive systems. Although it is accurate, much of this discussion does not center on the most basic cause of the differential performance of credit unions in Canada, Germany, Japan, and the United States vis-à-vis those in Latin America. The fundamental difference between these groups is and continues to be the respective memberships’ perception of the purpose for which the organization exists. This mission confusion lies at the heart of the traditionally poor performance of Latin American credit unions. No support policy that avoids this issue can truly turn credit unions into viable financial institutions that can constitute a significant part of the local financial sector.

Perhaps the single most effective manner for revitalizing the credit union movement is to subject it to market forces. This can be achieved through its con-
solidation and direct competition with banking institutions, or by the applica-
tion of the principle of information transparency and ratings to promote compe-
tition among individual credit unions and between credit unions and other types
of financial organizations.

Regulation and supervision can play an important role in shaping the fu-
ture of the credit union movement. Regulation establishes the basic model
through barriers to entry, mechanisms for culling out bad performers, and by
delineating the range of products and services that can be offered. Diverse op-
tions exist. These range from very few, very large institutions that offer a wide
range of products and services in head-to-head competition with commercial
banks, to a very large number of very small institutions that offer a more lim-
ited range of products and are normally relegated to a much narrower market
segment.

The choice made about the basic credit union model to pursue in any given
country will have fundamental implications for the type of supervision that de-
velops. The fewer the final number of credit unions, the more like banks they
will be. Thus, they can be supervised in much the same way as banks. The greater
the number of smaller credit unions, the greater the supervision burden until
such point as effective supervision becomes practically impossible. As their num-
ber increases, the burden for their regulation increasingly falls to the credit unions
themselves. They must either seek out self-regulatory schemes or subject them-
theselves to the same type of market regulation prevalent in the securities industry.
In either case, it is the industry itself, not the government, that must bear the
primary burden for policing and subjecting itself to market forces if it is to sur-
vive. Otherwise it will lack the necessary dynamism to compete with the growth
of other, far more powerful players, such as the consumer finance divisions of
commercial banks and even a few select financial NGOs.
REFERENCES


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ECONOMIC DEVELOPMENT / FINANCE

Policymakers in Latin America increasingly are turning to policies that have high economic rates of return and a favorable impact on income distribution. By providing financial services to small businesses and poor households—which normally lack such services—credit unions help secure growth with equity. The challenges faced by Latin America’s credit unions today are likely to force them to further modernize and consolidate, fine tune their inherent advantages, improve mechanisms for prudential regulation, and find ways to increase their share of low and middle-income markets. Safe Money presents the new thinking on how credit unions can compete effectively in modern financial markets while still retaining their social mission.

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