Chapter 2

Institutional Preconditions: Testing Readiness and Achieving Sustainability

Mark Cifuentes

Savers need to be able to trust that an institution will safeguard their deposits. When clients deposit their savings in an institution, they assume the risk of not getting the full value of their savings back when they withdraw the funds at a later date. Savers receive payment in the form of interest accrued on deposits in return for taking this risk and for allowing the savings institution to use their funds. Savers want to know that the full value of their deposits will be available when they want or need them. They have also come to expect a real return on their deposits.

In offering savings products, an institution takes on the responsibility of protecting the deposits. Many existing microfinance institutions (MFIs)—non-governmental organizations (NGOs), finance companies, credit unions, or others—are not in the position to begin mobilizing savings responsibly. They first must put in place the structures and disciplines that will enable them to become safe and sound institutions, capable of protecting the savings they mobilize.

Electing to mobilize savings is a strategic, long-term decision. Not only does building trust among clients require significant time and resources, but also preparing the institution to adhere to the financial disciplines to protect savings requires a committed effort. The critical elements for safe and sound savings mobilization take in both environmental and institutional elements. The environmental elements include:

- Enabling macroeconomic environment;
- Legal framework and authority to mobilize savings; and
- Effective supervision.

The institutional elements include:

- Market orientation;
- Effective governance;
- Transparent accounting reporting system;
- Sound financial management;
- System for monitoring financial performance;
- Professional capacity;
- Convenience of service;
- Safe and sound image;
- Market feasibility; and
- Business planning.

Financial institutions are not expected to complete all of the steps or adhere to all of the disciplines outlined in this chapter before initiating a savings program. If that were the case, few MFIs would ever be ready to mobilize savings. Nevertheless, there are seven minimum preconditions an institution must meet *before* mobilizing savings from their members or from the public. These preconditions are:

1. Legal authority granted by the government to mobilize savings;
2. An up-to-date accounting system;
3. Accounting books that are closed monthly, no later than the tenth working day after the end of the previous month;
4. Full provisions for all loans delinquent more than 12 months and for all delinquent loans where the term is past due;
5. A delinquency tracking tool in place and working;
6. A liquidity reserve of 10 percent of total deposits; and
7. Internal control policies and procedures established and implemented.

These seven preconditions, discussed throughout the chapter, establish a level of security in the institution to an extent that savers who place their funds there can be reasonably sure that they will recoup the full value of their deposits. Once an institution meets these preconditions, it can begin mobilizing savings while it continues to put in place all of the critical elements that ensure long-term safety and soundness. The steps presented in this chapter will not, indeed cannot, be implemented in a linear manner; that is, one after the other in sequence. Rather, some steps will be taken at the beginning, others at different stages during the process, and still others as a result of savings mobilization. The steps discussed here are offered as guidelines for practitioners to use in setting goals and managing their institutions.

This chapter draws on lessons learned from the experience of credit unions in Nicaragua, where formerly credit-focused institutions transformed themselves into full financial intermediaries capable of smoothing the flow of funds between net savers and members who need loans. The chapter outlines the steps readers can take to (1) assess whether their own institutions are ready to mobilize savings responsibly and (2) prepare their institutions to mobilize savings.

Environmental Elements

In credit union experience worldwide, three key elements stand out as environmental preconditions for mobilizing savings: manageable inflation, legal authority, and effective supervision. Relative political stability is also necessary for financial intermediation to function.

Manageable Inflation

A stable macroeconomic environment enables financial intermediation. This stability allows an institution to operate at rates that are viable and sustainable, protecting the real value of client savings and earning real returns on loans. When inflation rates are high—12 to 60 percent—savings institutions can use a number of strategies, including variable rates, hard currency value-pegging, and short-term lending, to protect the real value of savings. Inflation rates between 60 and 120 percent allow for only limited short-term operations. When inflation rates exceed 120 percent, savings mobilization and financial intermediation break down.

Legal Authority

Savings mobilization is an agreement, or pact, between two parties: the institution receiving the deposits and the individual placing deposits in that institution. Savings services need to operate within an established legal framework; that is, the law specifies the criteria under which institutions may receive deposits from members or from the public. The legal framework should also identify what recourse savers have to recover their deposits from savings institutions in times of crisis.

An institution must have legal authority to mobilize savings. An institution that is not legally authorized to accept deposits should not initiate a savings program. The penalties for mobilizing savings without the legal authority vary by country, but most often an institution loses its operating authority. A number of options are available to institutions that want to mobilize savings, but do not have the legal authority to do so. They can:

- Convert to a type of institution that has the legal authority;
- Become agencies of institutions that already have the legal authority; or
- Lobby lawmakers to gain the legal authority through changes in legislation.

Effective Supervision

Institutions will be able to mobilize savings responsibly and more effectively within the safety of an adequate regulatory and supervisory framework. Institutions that mobilize voluntary deposits should be supervised by the government regulatory agency responsible for supervision of the financial sector. Effective supervision requires a sound legal system, formalized audit requirements, supervisory monitoring capacity, an established regulatory framework, and authority to enforce the law. Before starting a savings program, managers must investigate key areas such as capital adequacy requirements, liquidity requirements, accounting and reporting standards, audit procedures, and branching regulations to make sure that the institution can comply with the legal requirements for savings institutions.

In cases where no regulatory framework exists, MFIs may proactively advocate for sound regulatory principles and supervisory practices with legislators, regulators, and other policymakers. It is not advisable for an institution to mobilize savings without external supervision. Nevertheless, in the absence of effective supervision, an institution may have to self-regulate by adhering strictly to international financial standards and disciplines, such as those presented in the PEARLS discussion later in this chapter. Self-regulation is not a long-term substitute for effective supervision by a government regulatory agency. It is an option for institutions that are safe and sound, but located in countries where third-party supervision is not yet established.

Market Orientation

Market-oriented operations benefit savers by pricing (or re-pricing where necessary) financial products to provide market returns. This allows the institution to expand the variety of financial services offered, as it responds to competitive pressures in the local financial market. Market-oriented credit unions have found that low-balance, withdrawable savings products are highly demanded in the microfinance marketplace.

Effective Governance

It is the simultaneous presence of savers (who provide the funds) and borrowers (who borrow the funds) that forms the basis for a self-sufficient and balanced financial intermediary. Yet the two groups have conflicting objectives. Net savers demand high deposit rates and strong prudential disciplines to protect their savings, while net borrowers tend to demand low loan rates, low transactions costs, and easy access to credit.

The quality of the savings services offered, combined with the loan screening and collection policies, determine the proportion of net savers to net borrowers in an institution. In member-controlled institutions, this proportion is reflected in the nature of the directorship—balanced or borrower-dominated. Balanced institutions with high-quality savings services will attract net savers as well as net borrowers. The net savers will exert pressure upon management to protect their savings. Borrower-dominated institutions tend to put savings at risk, discourage net savers, and attract those looking for cheap loans, effectively perpetuating the borrower domination.

The threat of widespread deposit withdrawal due to lack of saver confidence in an institution should keep managers on track, since significant withdrawals would eliminate the base of funds in a self-sustaining savings institution. In theory, this threat should force managers to govern effectively and adhere to sound financial principles in order to protect client savings and the sustainability of the institution. Nevertheless, the threat of deposit withdrawal is not always sufficient to ensure that managers will operate with financial discipline. At the institution level, rigorous bylaws and clear policies and procedures are required to establish prudential operating standards. At the state level, third-party supervision is necessary to uphold prudential norms and protect public savings.

Bylaws

The bylaws should be designed to provide flexibility for management, establish prudential financial disciplines, control conflicts of interest, and clarify roles and responsibilities of the parties who govern a savings institution. Bylaws set out clear rules that establish prudential standards and hold managers responsible for financial performance. The bylaws establish financial disciplines, covering institutional capital reserves, liquidity reserves, provisions for loan losses, and write-offs. The bylaws can also outline the principles of operation, such as principles that govern rates of return on savings and interest rates on loans. They do not, however, specify numbers or set controls on interest rates.

Roles and responsibilities. Bylaws outline the roles and responsibilities of the board of directors, managers, and committees. If responsibilities are not clearly defined, managers may be unable to respond quickly to opportunities or problems. Undefined roles and responsibilities in an institution produce operational inefficiency. An inefficient decision-making process may inhibit an institution's ability to respond quickly to market changes in pricing, to manage liquidity, or to protect savings. Oversight is the responsibility of the board of directors. Bylaws should limit the involvement of board members in day-to-day operations

Institutional bylaws. Standard elements of financial institution bylaws establish: registration requirements; mission statement; governance structure; admission, responsibilities, rights, and loss of clients; operating principles and financial disciplines; annual general meeting requirements in the case of credit unions; quorum; responsibilities of the board of directors, general manager, and officers; supervision committee and other committees (such as credit or education); and terms of dissolution or liquidation.

and direct their attention to policy creation and the direction of the institution as a whole. Bylaws establish managerial responsibilities such as implementing the policies, overseeing the budget, administering daily operations, reporting to the board of directors, and hiring and managing staff.

Control conflicts of interest. Bylaws, together with policy and procedure manuals, establish ethical codes of conduct and control insider loans to prohibit conflicts of interest. For example, to be a director, a person must be free of any relation with employees, should not have a contractual working relationship with the institution, and may not have a delinquent loan with the institution. A board member is not permitted to participate in any loan or service decisions related to his or her own account. To minimize conflicts of interest, savings institutions can:

- Institute personnel policies to hire, train, and pay staff.
- Establish policies for the election and training of officials.
- Make sure that all officials and staff understand and adhere to policies and procedures.
- Develop a system to supervise the implementation of policies and procedures.
- Ensure the proper rotation of personnel responsibilities.
- Segregate operational functions.

Accounting System

Before an institution mobilizes savings, it should implement a transparent accounting system that follows generally accepted accounting principles and procedures. The system should be flexible in its capacity and rigid in its controls and standards. It must be cost-effective, promote accuracy, and increase efficiency.

Managers in an institution can take the following steps to establish an effective accounting system:

- Prepare an accounting manual.
- Evaluate the skills and expertise of the accountants on staff.
- Teach basic accounting courses and introduce the accounting nomenclature to accountants, staff, and board members.

- Integrate all auxiliary accounting records, the general ledger, member record cards, bank reconciliation, income statements, and balance sheets into the new accounting system.
- Standardize all forms so they are compatible with the new nomenclature.
- Implement and adhere to accounting closing dates.

In cases where an existing accounting system lacks the necessary nomenclature or adherence to required disciplines, the institution may run parallel accounting systems for three to five months while transitioning to the new system.

Transparency

Transparency is fundamental to credibility and confidence. In financial institutions, transparency is achieved through clear, easy-to-understand accounting and reporting systems. These systems provide managers, directors, government supervisors, and clients with information to monitor the financial management of a savings institution.

Nomenclature

The account nomenclature, or system of accounts, must be consistent with international accounting standards as well as with those established by the government regulatory agency. If the nomenclature of accounts used by the savings institution has not been approved by the appropriate regulatory body, managers should initiate discussions with the financial regulator to ensure that the nomenclature meets all legal requirements.

Adequate accounting nomenclature includes:

- Detailed chart of accounts with clear definitions;
- Definition of reserving and provisioning accounts for loan or investment losses;
- Definition of depreciation and methods of depreciation;
- Definition of revaluation of assets (savings institutions should not revalue assets, even if the law does permit it, since doing so overstates them);
- Levels of accounts;

- A system that does not allow loans to elected officials or employees to be accounted for as accounts receivable;
- Definition of and distinction between transitory capital and permanent institutional capital; and
- Use of cash, not accrued, accounting for loan interest income (interest on loans should not be counted as income until it has been collected).

Components of an Effective Accounting System

Once the accounting nomenclature has been established, managers should make certain that the key components of an effective accounting system are in place. Such a system includes:

- Ledger cards;
- Procedures for payments and disbursements;
- Journal and cash records;
- General ledger;
- Trial balances; and
- Balance sheet and income statement.

Managers should ensure that the new accounting system promotes transparency and adheres to the requirements set forth in local laws and regulations.

Financial Management

As part of beginning or accelerating a savings mobilization program, an institution must establish prudential financial management disciplines as standard, well-understood, and staff-supported practices. These disciplines should be formalized in policy statements and implemented in practice. Financial disciplines are interdependent and mutually reinforcing; therefore, they should be implemented as an integrated system, not in a way that addresses some risks but not others.

Table 2.1 shows core financial disciplines that ensure prudential financial management.

Table 2.1 Prudential Financial Management

Financial Discipline	Target
Delinquency	Less than 5 percent of total loan portfolio over 30 days delinquent
Loan-loss provisions	100 percent of all delinquent loans over 12 months and 35 percent of all delinquent loans one to 12 months
Loan write-offs	100 percent of all delinquent loans over 12 months
Net institutional capital	At least 10 percent of total assets
Liquidity reserves	10 percent of total savings deposits
Non-earning assets	Less than 5 percent of total assets
Operating expenses	Less than 10 percent of average total assets

Loan Portfolio Quality

As an institution mobilizes savings, liquidity increases and the funds are directed into the community as loans. It is critical that savings institutions have in place effective policies and procedures for credit screening and risk analysis to ensure that the loans financed by client savings are collectible. Credit risk management should include strict delinquency monitoring, loan-loss provisioning, and collection procedures.

Credit policies and procedures. Loans must be disbursed according to established credit policies and procedures. Written policies set the levels of authority for granting loans. Policies also define the types of loans offered, loan terms, interest rate policies, loan ceilings, and concentration limits. Lending policies provide guidelines for eligibility, information requirements, security and collateral requirements, and terms for review.

Credit policies promote institutional soundness by assigning credit decisions to a professional staff. A technical credit committee made up of the general manager, the credit manager, the loan officers, and, if necessary, an elected official implements the credit policies and procedures as approved by the board of directors. To minimize risk and facilitate the loan approval process, the credit policies establish tiers of loan approval. Each member of the technical credit committee has the authority to approve loans within certain limits. The technical credit committee as a group approves large, long-term, or high-risk loans. The board considers loans to directors, other elected officials, and staff (if allowed), as well as loans above a certain amount.

Loans are disbursed according to standardized procedures. Loan applications are standardized to provide clear information for credit approval and post-disbursement follow-up. Staff verifies the authenticity of documents and signatures. Members of the board and employees who do not have direct credit responsibilities are prohibited from influencing loan approvals and may not serve as guarantors of client loans. Internal controls separate credit functions so that employees approving loans are not the same as those disbursing the loans.

Credit analysis. Effective credit screening practices improve asset quality and protect client savings. Credit risk is measured most accurately when loans are approved and processed on the basis of the "five Cs": character, capital, capacity, collateral, and conditions.

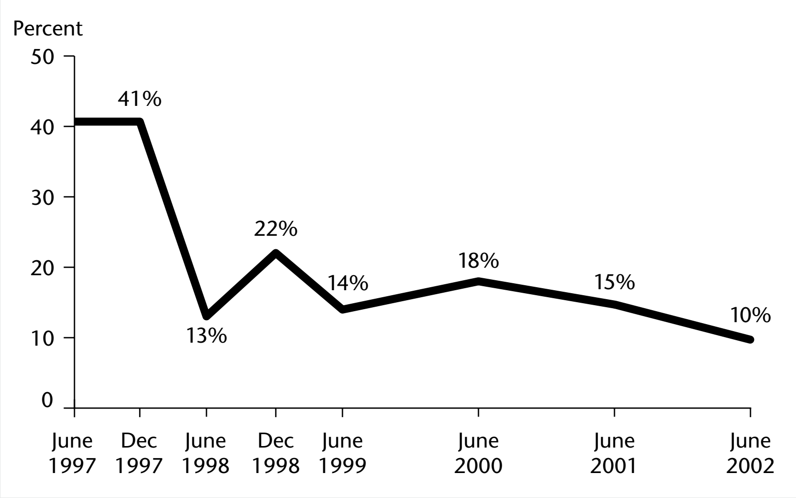
- **Character:** Examines the historical background of the borrower and judgment on his or her willingness to repay; that is, employment, other income-generating activities, education, and performance on past loans.
- **Capital:** Verifies the value of all the borrower's fixed and financial assets.
- **Capacity:** Evaluates the financial condition of the borrower to see if he or she has sufficient income to pay this and other outstanding loans.
- **Collateral:** Assesses the material goods owned by the borrower that can be used to recover the value of the loan in the case of default.
- **Conditions:** Analyzes the economic circumstances and other social conditions of the borrower, and evaluates the purpose of the loan.

Collections policies and procedures. Collections policies are established at the same time as credit policies. Savings institutions that provide credit must establish and implement loan recovery procedures to protect the value of deposits. Recovery strategies include frequent follow-up to gauge progress on pending collections and to

Collections in Nicaragua. Beginning in 1996, a group of 14 Nicaraguan credit unions embarked on a rigorous institutional strengthening program. At the start, these institutions lacked the financial disciplines to undertake a savings mobilization program. They relied heavily on external credit to fund loans for members. In 1996, these institutions were insolvent with high loan delinquency levels. External funds were quickly drying up as donors lost confidence in the credit unions. The institutions adopted the necessary disciplines to eventually mobilize savings, even though many people believed that the poor citizens of Nicaragua were too poor to save.

The consolidated delinquency in the eight credit unions that started the project (the other six joined the following year) was more than 60 percent. After implementing the financial disciplines, instituting aggressive collections, and improving the loan screening process, the institutions reduced delinquency to 13 percent by June 1998. With the destruction of agricultural crops and small enterprises wrought by Hurricane Mitch in October 1998, consolidated delinquency of the affected credit unions rose to 28 percent by May of 1999. An intense focus on collections and improved risk analysis in credit decisions reduced consolidated delinquency to 10 percent by June of 2002.

Figure 2.1 Delinquency in 14 Nicaraguan Credit Unions



prevent new delinquencies. Follow-up should be proactive; for example, financial institutions may send reminder notes or visit the clients who have tendencies to become delinquent before payments are due. These friendly reminders serve to reduce delinquency and build positive client relationships.

Write-offs. Credit policies should include requirements for loan write-offs and procedures for accounting for recoveries. To write off a loan does not mean to forgive a loan. Loans should be written off against the loan-loss reserves when (1) they have been delinquent for longer than 12 months, or (2) when the term of the loan is past due. Writing off delinquent loans allows an institution to maintain a clean balance sheet. As loans are written off, they are sent to lawyers for legal action and collection. Loans written off but then recovered are reentered through the income statement as loan loss provisions. If an institution is fully provisioned at the time of recovery, then collected loans are registered as non-operating income.

Loan income reporting. In addition to delinquency reporting and loan portfolio clean-up, accurate loan income reporting is part of protecting client deposits. Many financial institutions accrue interest on delinquent loans, reporting it as it would have been earned on the regular payment of the loans. However, interest is not income until it is collected. Accrued interest accounting on uncollected loans inflates income reported where it does not exist. To avoid this, savings institutions should record loan interest earnings on a cash basis when they are actually received.

Financial lines of defense. A savings institution protects the value of deposits through three financial lines of defense: loan loss provisions, institutional capital, and paid-in shares. Provisions are established to protect savings against observable risks; that is, loan losses that can be predicted by observed delinquency. If non-performing loans are not recovered, the savings that funded those loans will be lost. For that reason, savings institutions create provision expenses on the income statement.

Provisions are created as a percentage of delinquent loans. A savings institution should create provisions for 100 percent of loans delinquent more than 12 months because these loans are probably unrecoverable. Provisions should be created for at least 35 percent of loans delinquent less than 12 months. Loans less than 12 months delinquent are more likely to be recovered, and hence, require less provision. Loan-loss provisions are credited to the loan loss reserve account on the balance sheet.

Many risks are not observable by monitoring delinquency, such as risks that stem from unexpected losses or systemic shocks. A savings institution builds a second line of defense in reserves retained from earnings, or institutional capital. Institutional capital (capital reserves + retained earnings) should equal at least 10 percent of total assets. Institutional capital is a permanent and non-withdrawable source of capital that can cover operating risks and losses without impairing savings. It can also be used to provide security during a period of macroeconomic instability or during a banking crisis. In addition, institutional capital generates earnings for the institution when it is invested.

In credit unions, members invest shares as risk equity in the institution. In cases where provisions and reserves are not sufficient to absorb losses, these paid-in shares provide another line of defense before member savings are impaired. Common stocks provide this third line of defense in privately-owned institutions.

If a savings institution does not create provisions for loan losses and does not have sufficient institutional capital to back deposits, then savers risk losing the value of their deposits, in proportion to the inadequate level of protection (provisions + capital reserves). Table 2.2 illustrates the point.

In Table 2.2, the financial institution does not have adequate provisions or institutional capital reserves, which reduces the value of the client deposits by $10. This loss in the loan portfolio means that the savings on deposit are now worth $90 instead of $100; savers will recoup only $0.90 for every $1.00 deposited. A well-disciplined financial institution would have had $18 in accumulated provisions and institutional capital to reduce the savers' exposure to delinquency.

Aging the delinquent loan portfolio. In order to be able to create adequate provisions, savings institutions must first age their delinquent loan portfolios. Financial institutions should follow the legal standard for aging their loan portfolios; in most countries, these standards are defined by the central bank. As shown in Table 2.2, delinquent loans put

Table 2.2 Losses Due to Unprotected Delinquency Over 12 Months

a.	Total client savings on deposit	$100	
b.	Loans extended to borrowers	90	
c.	Delinquency of 20 percent (b x .20)	18	
d.	**Total accumulated provisions**	**4**	PROTECTION
e.	**Total institutional capital**	**4**	
f.	Potential losses (exposure to savers) due to unprotected delinquency [(c – (d + e)]	10	
g.	Value of total client savings on deposit (a – f)	90	

savings deposits at risk. When a client misses one payment, the balance of the entire loan is at risk. Given that provisions offset the risk of non-payment, they should be created for the whole loan amount when even one payment is delinquent. Since the likelihood of recovery decreases as delinquent loans age, provisions are defined by the age of the delinquent loans to ensure adequate levels of protection.

There are two ways to create loan loss provisions based on the aging of the portfolio. In some cases, an aging scale is the basis for provisioning. Figure 2.2 shows how provisions are created for a higher percentage of older loans.

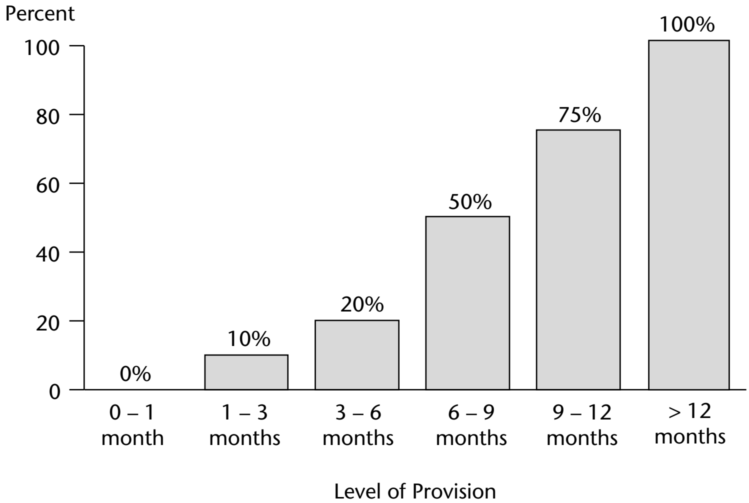
In other cases, provisions are created for 35 percent of loans delinquent one to 12 months and for 100 percent of all loans delinquent more than 12 months. Figure 2.3 shows how provisions are created in this type of system.

An institution may employ either method of provisioning to offset loan delinquency risk. WOCCU recommends the second method because it is easier to calculate, particularly for institutions lacking computerized management information systems that can automatically age delinquent loans.

Asset Quality and Earnings on Assets

Assets can be separated into two categories: earning and non-earning. Earning assets generate the income needed to pay financial costs and operating expenses. Non-earning assets include fixed assets, which do not generate income, as well as delinquent loans, which no longer generate income. Fixed assets decrease the amount of earning assets an institution relies on to earn income. If an institution finances the purchase of fixed assets with cost-bearing liabilities, such as client savings or external credit, then the cost of those fixed assets is higher than if it

Figure 2.2 Aging Scale for Loan Loss Provisions



had been financed by institutional capital (zero-cost funds).

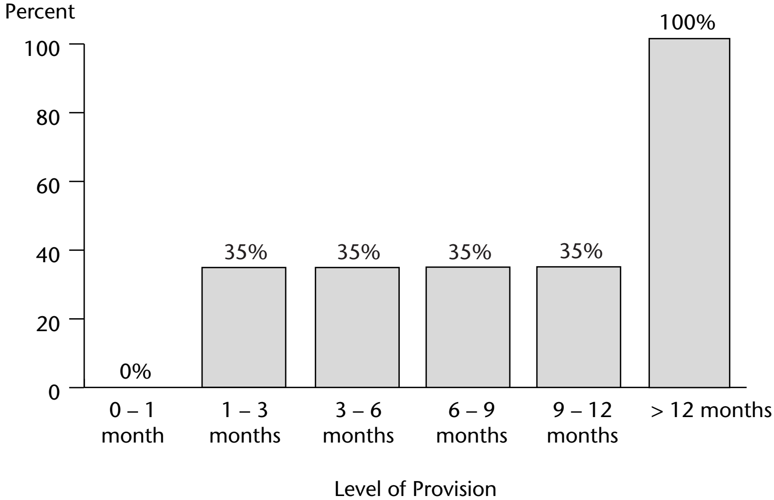
Since loans should generate the highest returns of all assets, loans as a percentage of total assets should be high to maximize profitability. Short-term and long-term investments generate returns, diversify risk, and help maintain sufficient liquidity levels for response to client withdrawal demands.

Other Financial Management Requirements

Cash flow analysis. Cash flow analysis identifies sources of incoming funds and determines how those funds are used; it explains changes in cash accounts. Cash flow analysis enables managers to determine if there is or will be sufficient liquidity to generate the income necessary to cover financial and administrative costs, disbursements of new loans, and savings withdrawals. Institutions should not raise savings and then use them to pay operating expenses; this would impair savings and raise costs to the institution. Managers can make better decisions and better determine when to seek external financing if they know the cash flow in their institutions.

Liquidity management. An institution's ability to mobilize savings depends on the confidence of local clients. If there is a perception that

Figure 2.3 Standard Level for Loan Loss Provisions



the institution lacks the funds to pay out savings, then both small and large savers will lose confidence and withdraw their deposits. A savings institution should maintain cash liquidity reserves of at least 10 percent of withdrawable deposits to ensure response for withdrawal demands. For large accounts above a certain amount (determined by management and the board of directors), liquidity reserves of 20 to 25 percent of withdrawable deposits are required to offset the concentration risk.

Asset-liability management (ALM). Smaller savings institutions tend to provide short-term loans financed by short-term liabilities, such as savings. As financial institutions become more sophisticated and clients demand longer-term loans, managers must ensure that an appropriate ALM program is used. If an institution mismatches assets and liabilities, it runs the risk of having insufficient liquidity to return funds to savers when their deposits mature. For example, an institution cannot fund a five-year housing loan with a deposit product that will mature in one year. An ALM program tracks the rotation of the savings and loan portfolios. It also matches loan products to savings products by age, risk, and size to ensure that loans are financed by liabilities that can sustain the required funding levels for the full terms.

Computerization. Computerization of accounting and management systems can significantly reduce the transaction costs associated with providing savings services, especially for small accounts where transaction costs are a large proportion of the balance. Computerized accounting systems improve the accuracy and transparency of financial information and, as a result, the quality of management and monitoring. At the same time, computerization is not a precondition to mobilizing savings. Institutions with manual operations can launch and maintain successful savings programs, but require increased human resources to service the greater number of accounts and clients. In deciding whether to invest in computerization, managers in a savings institution must weigh the increased fixed-asset and operating costs against the potential gains.

Monitoring Financial Performance

An institution should adopt a standardized, well-balanced financial monitoring system before it begins a savings mobilization program. WOCCU's PEARLS financial performance monitoring system was derived from the original CAMEL model and adapted for credit unions in varying stages of development. PEARLS is a quantitative tool that attempts to remove the subjective elements of evaluation. Other monitoring systems, such as ACCION's CAMEL model, include qualitative measures of evaluation and indicators that are specific to microfinance institutions.

PEARLS

WOCCU developed PEARLS in 1990 as a tool to guide the financial management and to evaluate the operations of credit unions in Latin America. Since then, PEARLS has evolved into a standardized management and supervisory tool used to monitor and evaluate credit unions worldwide. The PEARLS system is made up of 44 financial ratios (including the 13 key ratios bolded in the table) that provide a complete measure of a credit union's financial performance. The system is also applicable to other savings-based MFIs. Each element of PEARLS looks at a critical element of financial operations:

P = Protection

E = Effective Financial Structure

A = Asset Quality

R = Rates of Return and Cost

L = Liquidity

S = Signs of Growth

Before an institution mobilizes savings, it should establish financial disciplines to protect savings from risk. The most obvious risk to a financial institution stems from potential losses caused by loan delinquency. The **Protection (P)** indicators measure whether the institution has adequate provisions to absorb expected loan losses. P indicators monitor the solvency of the institution; that is, its ability to return the full value of deposits to savers.

The **Effective Financial Structure (E)** of a savings institution is constantly changing, particularly under rapid growth conditions. The E indicators monitor the structure of both sides of the balance sheet—they show the sources and uses of funds. On the asset side, indicators monitor where the funds are invested: loans, liquid investments, financial investments, or non-financial investments. This helps managers use funds where they will earn the highest returns. On the liabilities side, the indicators show where the primary sources of funds are: deposits, shares, external credit, or institutional capital. As a credit union evolves in response to market conditions, its financial structure changes, moving from dependence on shares and external credit to depending on voluntary savings deposits to fund assets. This evolution is captured in the E indicators.

Asset Quality (A) indicators measure the problem areas that have the greatest impact on profitability. Savings-based institutions must generate income to pay returns to savers if they are to continue to attract deposits. When loans become delinquent, when fixed assets are high in relationship to total assets, or when an institution invests savings in non-earning assets, the institution will fail to produce the income necessary to pay financial costs and operating expenses.

The **Rates of Return and Cost (R)** indicators tell an institution what it earns on the various uses of its funds: loans, liquid investments, financial investments, and non-financial investments. The R indicators also reveal the costs that the institution pays to acquire the various sources of funds: savings deposits, shares, and external credit. This information enables managers to identify sources of funds that minimize financial costs and to match the returns on uses of funds with the costs of sources. The indicators provide a spread analysis of the gross margin, operating costs, provision costs, and net income.

Liquidity (L) indicators measure the ability of the institution to ensure that adequate liquidity is available to meet the withdrawal demands of savers and the disbursement demands of borrowers.

Signs of Growth (S) indicators measure the growth rates of membership, as well as the growth rate on both sides of the balance sheet. The comparative rates of growth in savings and loans tell the institution what impact—balanced or unbalanced—growth will have on liquidity and profitability. The S indicators allow managers to monitor the growth of institutional capital as required to maintain adequate capital levels of protection during periods of high growth.

Interrelationships. Each PEARLS indicator is interrelated with others. The following example demonstrates the relationships among indicators as savings increase. As Savings Deposits (S5) increase, then Total Assets (S11) will increase. This will require an increase in Net Institutional Capital (S9) to reach the goal of 10 percent of Total Assets (E9). Institutional Capital (S9) will grow if Net Income/ Average Assets (E12) grows. E12 will grow if the institution becomes more efficient, maintaining Total Operating Expenses/Average Total Assets (R9) at 5 percent or less. Another way to increase E12 is to decrease Total Loan Delinquency/Gross Loan Portfolio (A1), meaning that the Total Loan Loss Provision Expense/Average Total Assets (R10) would also decrease. The third way to increase E12 is by maximizing Total Gross Income Margin/Average Total Assets (R8). To maximize R8, an institution needs to ensure that its most profitable investments, Net Loans/Total Assets (E1), are performing. E1 is adversely affected by Liquid Investments/Total Assets (E2) and Financial Investments/Total Assets (E3). As more funds are invested in E2 and E3, less funds are available to invest in E1. But, E2 and E3 provide easily accessible funds and diversification of the investment portfolio to ensure that the institution has sufficient liquidity, ST Investments + Liquid Assets – ST Payables/Savings Deposits (L1), to meet the withdrawal demands of savers (L1 should be a minimum of 15 percent). Managers must constantly evaluate the effects that a change in one ratio will have on the other indicators so they can monitor the impact this change will have on the institution.

The PEARLS monitoring system evaluates the financial condition based on the information provided from the financial accounts. For PEARLS or any other financial monitoring system to generate accurate indicators, an institution needs to have a transparent accounting system with accurate account information. The goal of PEARLS is to promote balance, efficiency, and maximum return on assets in a financial institution. Table 2.3 sets out the PEARLS Monitoring System Indicators.

The goals in Table 2.3 are WOCCU's *International Standards of Excellence,* established specifically for credit unions. Annual targets for achieving these standards will vary depending on each savings institution's phase of development. As institutions strive to reach the goals, managers should evaluate progress quarterly.

Table 2.3 The PEARLS Monitoring System

Indicator	Description	Goal
P = PROTECTION		
P1	**Allowance for Loan Losses/Delinquency > 12 months**	**100%**
P2	**Net Allowance for Loan Losses/Delinquency 1-12 months**	**35%**
P3	Total Write-off of Delinquent Loans > 12 months	100%
P4	Annual Loan Write-offs/Average Loan Portfolio	Minimum
P5	Accumulated Loan Recoveries/Accumulated Loan Write-offs	100%
P6	Solvency (Net Value of Assets/Total Shares and Deposits)	> = 110%
E = EFFECTIVE FINANCIAL STRUCTURE		
E1	**Net Loans/Total Assets**	**70 – 80%**
E2	Liquid Investments/Total Assets	Maximum 20%
E3	Financial Investments/Total Assets	Maximum 10%
E4	Non-financial Investments/Total Assets	0%
E5	**Savings Deposits/Total Assets**	**70 – 80%**
E6	**External Credit/Total Assets**	**Maximum 5%**
E7	Member Share Capital/Total Assets	10 – 20%
E8	Institutional Capital/Total Assets	Minimum 10%
E9	**Net Institutional Capital/Total Assets**	**= E8**
A = ASSET QUALITY		
A1	**Total Loan Delinquency/Gross Loan Portfolio**	**< = 5%**
A2	**Non-earning Assets/Total Assets**	**< = 5%**
A3	Net Zero-cost Funds[1]/Non-earning Assets	> 200%

[1] *Zero-cost funds is equal to Non-interest Bearing Liabilities + Non-institutional Capital + Institutional Capital.*

Table 2.3 continued The PEARLS Monitoring System

Indicator	Description	Goal
R = RATES OF RETURN AND COST		
R1	Net Loan Income/Average Net Loan Portfolio	Entrepreneurial Rate
R2	Total Liquid Investment Income/ Average Liquid Investments	Market Rates
R3	Total Financial Investment Income/ Average Financial Investments	Market Rates
R4	Total Non-financial Investment Income/ Average Non-financial Investments	> R1
R5	Total Interest Cost on Savings Deposits/ Average Savings Deposits	Market Rates > Inflation
R6	Total Interest Cost on External Credit/ Average External Credit	Market Rates
R7	**Total Interest (Dividend) Cost on Member Shares/ Average Member Shares**	**Market Rates > = R5**
R8	Total Gross Income Margin/ Average Total Assets	Variable–Linked to R9, R11, R12
R9	**Total Operating Expenses/Average Total Assets**	**5%**
R10	Total Loan Loss Provisions/Average Total Assets	Dependent on Delinquent Loans
R11	Non-recurring Income or Expense/Average Total Assets	Minimal
R12	**Net Income/Average Total Assets**	**Linked to E9**
L = LIQUIDITY		
L1	**Short-term Investments + Liquid Assets – Short-term Payables/Savings Deposits**	**Minimum 15%**
L2	Liquidity Reserves/Savings Deposits	10%
L3	Non-earning Liquid Assets/Total Assets	< 1%
S = SIGNS OF GROWTH		
S1	Net Loans	Dependent on E1
S2	Liquid Investments	Dependent on E2
S3	Financial Investments	Dependent on E3
S4	Non-financial Investments	Dependent on E4
S5	Savings Deposits	Dependent on E5
S6	External Credit	Dependent on E6
S7	Member Shares	Dependent on E7
S8	Institutional Capital	Dependent on E8
S9	Net Institutional Capital	Dependent on E9
S10	Membership	> 12%
S11	**Total Assets**	**> Inflation**

Bold Denotes the 13 Key Indicators

CAMEL

The principal objective of the original CAMEL system was to provide an analytical tool for regulators to use when monitoring financial institutions. ACCION has developed a CAMEL monitoring system specifically for MFIs. The ACCION CAMEL framework analyzes and rates 21 quantitative and qualitative indicators. The key indicators are:

C = **Capital Adequacy:** Leverage, ability to raise equity, and adequacy of reserves.

A = **Asset Quality:** Portfolio-at-risk, write-offs, portfolio classification system, productivity of long-term assets, and infrastructure.

M = **Management:** Governance/management, human resources, processes, controls and audits, information technology, and strategic planning and budgeting.

E = **Earnings:** Adjusted return on equity, operational efficiency, adjusted return on assets, and interest rate policy.

L = **Liquidity Management:** Liability structure, availability of funds to meet credit demand, cash flow projections, and productivity of other current assets.

There are three main differences between the PEARLS and the CAMEL monitoring systems:

1. PEARLS uses strictly quantitative measures while CAMEL uses both quantitative and qualitative measures.
2. PEARLS evaluates the financial structure of the balance sheet to determine the effect on efficiency and profitability.
3. PEARLS measures growth rates so that managers can maintain effective financial structures and continually adjust with the impact of growth on the institution.

Whether an institution uses PEARLS, CAMEL, or another monitoring system, it must adopt a standardized, well-balanced system that enables managers to monitor financial performance *before* engaging in savings mobilization.

Returning to the case of the 14 Nicaraguan credit unions, Table 2.3 shows how we can use PEARLS indicators to evaluate the significant advances in the disciplines of these institutions.

Table 2.3 Financial Structure of 14 Nicaraguan Credit Unions

Indicator	Goal	June 1997	June 1998	June 1999	June 2000	June 2001	June 2002
E1: Net Loans/ Total Assets	70 - 80%	64%	66%	72%	79%	71%	69%
E2: Liquid Investments/ Total Assets	max 20%	4%	9%	12%	8%	16%	19%
E5: Savings Deposits/ Total Assets	70 - 80%	2%	7%	16%	26%	36%	52%
E6: External Credit/ Total Assets	0%	54%	33%	35%	35%	29%	19%
E7: Shares/ Total Assets	max 20%	12%	16%	13%	10%	8%	8%
E9: Net Institutional Capital/Total Assets	min 10%	- 4%	34%	29%	19%	19%	19%
A1: Total Delinquency/ Gross Loan Portfolio	< 5%	41%	13%	14%	18%	15%	10%

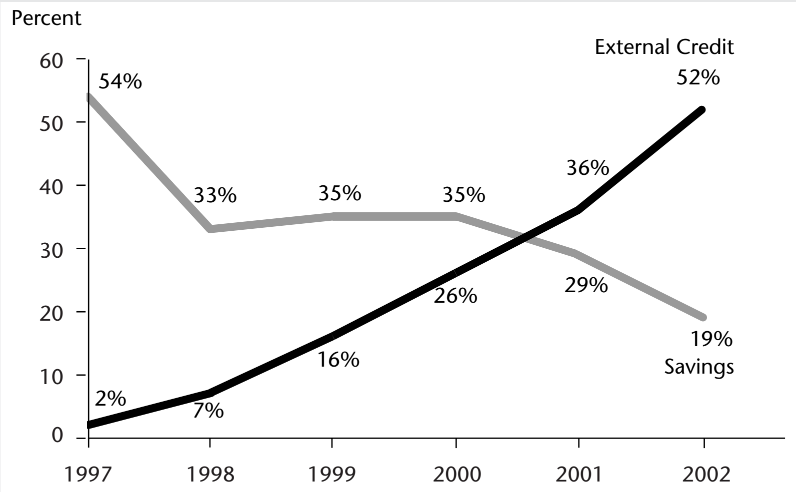
Table 2.3 indicates that in 1997, the 14 credit unions had mobilized savings equal to only 2 percent of total assets. By 1999, these same institutions met the preconditions to mobilize savings and began to market savings products. As a result, savings increased to 16 percent of total assets. By June 2002, the credit unions funded 52 percent of their total assets with savings.

At the beginning of the project, dependence on external funds was significant; external funds financed 54 percent of total assets. From 1997 to the present, the credit unions did not seek new external funds. By June 2002, external funds had decreased to 19 percent of total assets. Meanwhile, net institutional capital over total assets grew from negative 4 percent to positive 19 percent. This high level of institutional capital promotes confidence in the institutions.

Delinquency in the 14 credit unions dropped dramatically—from 41 percent in June 1997 to 10 percent in June 2002. The increase in delinquency after 1998 was due largely to the destruction wrought by Hurricane Mitch. Delinquency has been on the decline since 2000. As total assets have grown through the project, net loans have been maintained around the recommended 70 percent of total assets. This means that a larger amount of loanable funds have been distributed to the membership.

Figure 2.4 shows how the 14 credit unions funded their assets from 1997 through the first half of 2002. Figure 2.4 demonstrates two things. First, in 1997 external funds plus deposits financed 56 percent of total assets. At that time, dependence on external funding was high, at 54 percent of total assets. Deposits were insufficient to fund assets. By 2002, external funds plus savings deposits financed more than 71 percent of total assets, and savings alone financed 52 percent of total assets. By June 2002, these credit unions had cut their dependence on external funding to less than 19 percent and voluntary savings provided the primary source of funds. Second, it took these institutions about three years to match the level of savings to external funds. In other words, it took time for the credit unions to institute the financial disciplines, begin monitoring financial performance, and then build the confidence necessary to mobilize savings.

Figure 2.4 Asset Financing in 14 Nicaraguan Credit Unions



Professional Capacity

Institutions that plan to mobilize savings must have the vision, commitment, and disposition to attract voluntary savings. For a credit-only institution, mobilizing savings will require a reorientation of all staff. Institutions must develop the professional capacity of both managers and staff to administer savings products. In most cases, institutions will have to increase their staffing levels to handle the increased client traffic that comes with savings mobilization. Personnel policies are formalized to specify salary structure, employee benefits, job descriptions, rotation of personnel and recruitment, promotion, and release procedures.

Professional and Sound Management

Professional management is required to administer savings efficiently and preserve the value of deposits. Managers in a savings institution are not only responsible for implementation of human resource policies, but must also be qualified to manage financial intermediation. At a minimum, they must be able to:

- Understand a balance sheet and income statement;
- Implement PEARLS (or another monitoring system) and financial disciplines;
- Review policies and procedures annually;
- Manage finances according to a business plan; and
- Administer growth based on a marketing plan.

Staff Training

Many microcredit institutions begin savings mobilization in an effort to overcome liquidity shortages and dependence on external funding. Managers of these institutions should not assume that staff experienced in providing credit services will be able to provide savings services without training. Savers will demand higher levels of customer service than borrowers. Savers will also want to see safe handling and cautious management of their deposits. Financial institutions that are mobilizing savings for the first time or expanding through savings mobilization should train staff in customer service, cash management, marketing, interest rate management, and liquidity management. Employees should handle cash with strong ethical and professional standards, while maintaining a warm and personal approach with clients.

Convenience of Service

Convenience is a key factor in mobilizing savings. If the transaction costs of making deposits or withdrawals in an institution are high, then savers will be less likely to keep their savings in that institution.

Since the physical proximity of the savings institution determines the major cost and time required for savers to make deposits or withdrawals, institutions should try to locate their offices in high-traffic markets or town centers. Many credit unions open branches to serve high-traffic centers or outlying communities. Where financial institutions find themselves in poor locations or in little-trafficked sections of town, managers should consider moving to a section of town with greater market potential.

Savings institutions should provide competitive service hours compatible with the schedules of current and prospective clients in the local market. Many credit unions offer extended evening hours with window service after the lobby is closed and provide service on weekends.

Convenient access requires a well-planned physical layout to control public access. It also requires simple, streamlined procedures to provide savers with fast and cost-effective service. Time-consuming procedures will increase the costs of savings for clients. Borrowers will wait in lines to get loans, but depositors will be deterred by long lines and they will look for institutions with more convenient savings services.

The Importance of Image

In order to operate as a full financial intermediary between savers and borrowers, a former microcredit institution needs to expand its client

Microentrepreneurs engaged in trade often travel to various communities. As they travel, they need access to financial services, particularly savings services. For many, it is risky to carry cash. Credit unions establish national networks in which savers can deposit or withdraw funds from institutions in various towns. Credit union networks, such as the network established in Guatemala, offer a national network with more than one hundred points of service where savers from any one credit union can transact business at any credit union in the network. As discussed in Chapter 3, this type of network requires constant commitment to financial disciplines, policies, and performance standards, as well as mechanisms for the central clearing of transactions.

base to mobilize the volume of savings necessary to (1) develop a cost-effective savings program and (2) use savings to fund the loan portfolio. Institutions will have to reach out to a more diverse client base to attract net savers. As an institution achieves the sound financial management practices presented earlier in this chapter, it can market its ability to protect savings—or the image of safety—to prospective savers.

Improving the physical image of an institution can accelerate savings mobilization dramatically. Savings growth is highly correlated with the perceived soundness, professionalism, and attractiveness of an institution. An image of professionalism and security can improve public confidence in the institution and attract new clients. A mediocre physical image undermines public confidence in a financial institution. Improving the institutional image must be a top priority, as well as a key component of the marketing program.

Secure infrastructure requirements include locked drawers at teller stations, safes or vaults for holding cash, and grill or glass partitions between teller stations and the public. Grills and bars should be installed over doors, windows, and air conditioners. A trained guard should be present. Although secure in its structure, a savings institution must continue to present a pleasant, friendly, and inviting image. Marketers and managers must ask, is the institution sufficiently attractive to draw net savers? Does the image portray a sense of security? The photos in Figures 2.5 and 2.6 show the before and after images of a financial institution in Nicaragua that remodeled itself before mobilizing savings.

External infrastructure improvements in these institutions included painting and minor repairs, securing windows and doors, and

Figure 2.5 Improvements in the External Appearance of a Nicaraguan Credit Union

BEFORE AFTER

Figure 2.6 Improvements in the Internal Appearance of a Nicaraguan Credit Union

BEFORE AFTER

creating billboards. Internal improvements included upgrading offices, teller windows, and reception areas.

Determining Feasibility

Before attempting to mobilize savings or directing resources toward expanding savings services, an institution's managers should determine the feasibility of offering these services in the local market. Market studies can identify the savings potential in a community, the growth potential, and the characteristics of competing savings services. Client and non-client surveys identify financial service demands, as well as perceptions of the institution in comparison to competing institutions. Feasibility studies enable an institution to:

- Define the market;
- Evaluate the competition;
- Analyze the existing service structure;
- Define a strategy for market penetration;
- Implement targeted marketing programs;
- Develop new products and financial services; and
- Promote savings programs.

Devising a Marketing Plan

Managers should develop a marketing plan for savings that sets clear goals and identifies specific strategies for accomplishing those goals. A plan might include:

GOAL: Increase clientele by x percent

- Produce and distribute brochures.
- Raffle small appliances to attract new clients.
- Offer fixed-term deposit of x-amount to the client who brings in the largest number of new clients.
- Promote the institution with the mayor and local community organizations.
- Sponsor community events.
- Sponsor a festival for the community at the end of the year.
- Arrange for the manager to be interviewed on radio and television.

GOAL: Mobilize growth in passbook savings by x percent

- Raffle valued appliances for new savings and high account balances.
- Increase interest rates on new deposits.

GOAL: Improve the physical image of facilities

- Paint the facility, repair all deterioration.
- Restructure the lobby, counters, and offices to maximize service.

The details of marketing plans will differ among institutions; however, all marketing plans should set out goals and provide specific steps for reaching them.

Once a savings institution has implemented the critical elements to mobilize savings, managers shift their attention to facilitate growth, through business planning.

Business Planning

Business planning is key to managing the growth of a savings institution. An effective business plan logically details how an institution can achieve its targets in client growth, capitalization, savings growth, loan and investment activity, and capitalization. The business plan becomes a key tool for managers to achieve policy reforms and financial goals. The plan specifies marketing activities, policy changes, and service adjustments to be made during the year.

The annual planning process focuses on balance sheet improvements and sets specific financial performance goals. The plan should include development of *pro forma* balance sheet and income projections. With these projections, detailed work plans can be created to map out how the savings institution will achieve its goals, put savings protection provisions in place, and change its financial structure as it increases savings. Business planning projects costs and tells managers how much income must be generated to cover financial costs and operating expenses. Managers should develop business plans annually to set new growth targets, budgets, and progress indicators.

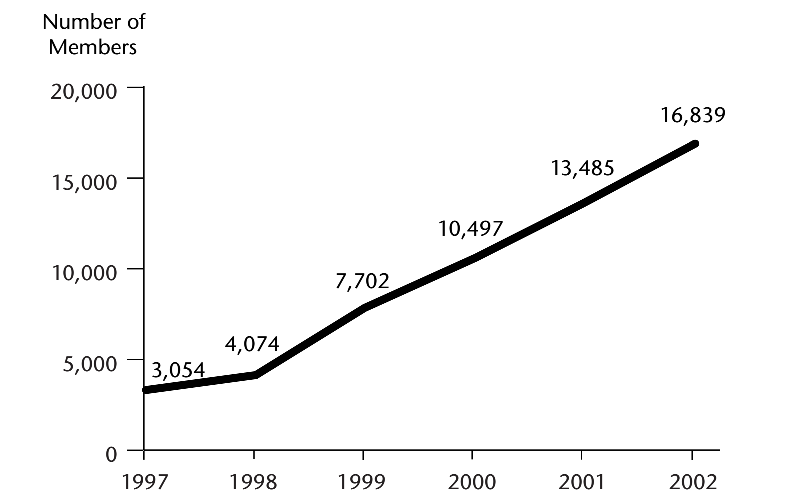
Managers and the board of directors supervise implementation of the business plan by comparing indicators against goals on a monthly basis. This supervision can be done quarterly as a savings institution becomes more experienced in plan implementation.

Conclusion

Mobilizing savings, particularly the savings of the poor, requires commitment and discipline. In offering savings products, an institution

Looking again at Nicaragua, Figure 2.7 shows that the volume of savings and the client base grew. Membership grew from 3,054 in 1997 to 16,839 in 2002. The growth was due to the increased public confidence in the credit unions and to the new services that these institutions could offer.

Figure 2.7 Growth in Membership in 14 Nicaraguan Credit Unions



takes on the responsibility of protecting the deposits of savers. If it does not put the critical elements of financial management in place, the institution puts the deposits of savers at risk. This can be particularly damaging to the poor.

Most of the critical elements laid out in this chapter are implemented and achieved through the process of savings mobilization. The seven minimum preconditions that an institution must have in place *before* mobilizing savings are: legal authority, use of an up-to-date accounting system, accounting books that are closed monthly, full provisions for all loans delinquent more than 12 months or where the term is past due, use of a delinquency tracking tool, liquidity reserve of 10 percent of total deposits, and internal control policies and procedures. If an institution meets these preconditions from the outset, it should be able to protect the value of deposits, while working toward achieving the other critical elements of savings mobilization.

An institution must be in an enabling environment to launch and maintain a successful savings mobilization program. Three key environmental elements are: manageable inflation, legal authority, and effective supervision. Relative macroeconomic and political stability are also necessary for financial intermediation to be successful.

At the institution level, an effective governance structure must exist in order to control conflicts of interest and to manage the institution within a prudential framework. A transparent accounting nomenclature and reporting system, which follows generally accepted accounting principles, promotes accuracy and increases efficiency. Accurate and transparent accounting records are prerequisites to using a monitoring system that tracks financial performance. Formalized policies and procedures set the foundation for quality financial management.

Sound financial management enables institutions to raise deposits from savers and use the deposits to finance growing loan portfolios. Credit and collection management tools are necessary to maintain quality loan portfolios and reduce the level of risk to savers. High levels of delinquency can quickly erode the value of the savings deposited in an institution. Three lines of defense protect the value of deposits: provisions, institutional capital, and paid-in shares. Cash flow analysis, liquidity management, and asset-liability management are essential to managing savings and loans.

Institutions must implement monitoring systems to track financial performance. The PEARLS financial performance monitoring system is a quantitative system that enables managers to monitor protection, effective financial structure, asset quality, rates of return and cost, liquidity, and signs of growth. ACCION's CAMEL model is another monitoring system option for MFIs. When an institution has a system in place to monitor current and past performance, managers and the board are better equipped to plan for the future.

Assessing and increasing the capacity of an institution's human resources is important in starting savings programs. In many cases, institutions will need to increase their staffing levels to handle the increase in clients and transactions. Savings mobilization will require a reorientation of all staff in formerly credit-only institutions. Staff will need training in customer service, cash management, marketing, interest rate management, and liquidity management.

Savings growth is highly correlated with the perceived soundness, professionalism, and attractiveness of an institution. Before engaging in savings mobilization, managers should ask themselves whether their institution projects an image of safety and soundness. Secure physical infrastructure can create the image of security that savers seek. As the client base grows and demands for service increase, the institution must adapt to the changing environment and provide convenient services to savers.

Managers should determine the feasibility of offering savings services in the local market before implementing or expanding a program. Market studies identify savings potential, growth potential, and competing services. A marketing plan sets out goals and identifies specific strategies for achieving those goals. Business planning is an important tool for managers and the board of directors to use in charting the course to safety, soundness, and growth.

This chapter provided the basic information that managers need (1) to assess whether their own institutions are ready to mobilize savings responsibly and (2) to prepare their institutions to mobilize savings successfully. Readers are encouraged to consult other resources, such as accounting manuals, credit guides, or financial management texts, for more detailed information on the critical elements for safe and sound savings mobilization.

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