CHAPTER 5

Counting the Costs of Savings Mobilization

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Much interest and debate have been generated in the microfinance industry during recent years regarding the feasibility of providing savings services to poor and low-income clients. The debate started when a few practitioners expressed reservations about the economic sense of mobilizing savings deposits to finance the burgeoning microenterprise loan portfolios of mainstream microfinance institutions (MFIs).

On the skeptics' side of the debate is the belief that savings mobilization will only elevate already high operating costs and render institutions less competitive in an increasingly crowded microfinance marketplace. Many of the leading MFIs reject the possibility of microsavings mobilization (savings deposits of less than $300) because they see no economies of scale in providing the service, despite the high demand for savings services in the microfinance market. As competitive pressures force MFIs to reduce their operating costs, savings mobilization is viewed with increasing skepticism.

The other side of the debate points out that credit unions around the world have consistently provided microsavings services to their members on a sustainable basis. By providing services to members of diverse income groups, credit unions have tapped into savings deposits as a relatively stable, low-cost source of funds to finance growing loan portfolios. In just one example, 25 credit unions in Bolivia had 380,000 member savings accounts with an average balance of $38 at year-end 2001. Despite the small savings balances, those credit unions had an average administrative expense ratio of less than 10 percent of average assets.

This chapter presents a model for determining the costs of savings mobilization. It offers evidence from 15 credit unions in four Latin American countries to demonstrate that savings mobilization is not only essential to providing the poor with a broader range of financial services, but also that it provides a cost-effective source of funds for the institution. Lastly, the chapter offers ten tips on designing and implementing cost-effective savings programs.

Methodology for Costing

There are many ways to calculate and allocate costs among different products and services. For example, *functional costing* models require precise measurement of time requirements for each step of every function. *Allocation-based* models use quantitative and qualitative measures to allocate costs to the different products offered by an institution in order to arrive at total costs. *Activity-based* costing matches costs with specific activities undertaken by the institution, such as opening a savings account or processing a loan. The methodology presented in this chapter draws from these approaches and attempts to orient readers to the most important areas that should be analyzed when determining the costs of savings mobilization. There are three main areas of outlays to consider when evaluating the total operating costs of a savings mobilization program: financial costs, direct administrative costs, and indirect administrative costs. In the final analysis, it will be up to readers to determine which specific line items are relevant for their own savings institutions.

Financial Costs

Financial costs are mainly the price an institution pays clients to persuade them to deposit their savings. These costs relate directly to the volume of savings mobilized. Financial costs include interest, insurance, taxes, and dividends.

Interest. This is the amount of interest paid to depositors. Interest costs are calculated by multiplying the average balance of the savings account by the simple interest rate for the number of days that deposits are in the account.

Insurance. This is the cost of a life insurance premium calculated on the monthly balance of deposits. Insurance is paid to the family of the deceased, depending upon the age and the savings balance of the client at the time of death. This cost is included only if it is paid by the savings institution. If insurance is subtracted from the interest payable to the depositor (or from the gross dividends paid to members in credit unions), it is not included in financial costs.

Taxes. This is the cost of sales and other taxes levied against the interest paid on savings deposits. This cost is included in the calculation only if it is paid by the savings institution. If it is deducted from the interest payable to the depositor, it is not included.

Dividends. In the case of credit unions, dividends on member shares are treated as a financial cost.

The sum of the interest, insurance, taxes, and dividends is divided by the average balance of total deposits and shares to determine the financial costs. The average balance of total deposits and shares is calculated by adding the beginning balance to the ending balance and dividing the sum by two. Depicted as a ratio, financial costs are:

$$\frac{\text{Interest + Insurance + Taxes + Dividends}}{\text{Average balance of total deposits and shares}}$$

Direct Administrative Costs

In this study, we use a definition of direct administrative costs that is different than the one used in traditional cost accounting literature. We refer to direct administrative costs are those costs that are incurred as a result of engaging in savings mobilization. Institutions that do not mobilize savings would typically not incur these costs. By using this definition, however, we do not mean that 100 percent of all direct costs must be allocated to savings-related activities. As shown in the tables that follow, a percentage of direct administrative costs is allocated to non-savings activities, such as the marketing of credit products. (Even though the marketing function may have begun as a result of savings mobilization, it was expanded to include the marketing of both savings and credit products because of the obvious economies of scale.) Our study identified three main areas of direct administrative costs: human resources, marketing, and commissions.

Table 5.1 Human Resource Costs Related to Savings Mobilization

Position	Salary	Benefits			
		Severance[1]	Christmas Bonus[2]	14th Bonus[3]	Vacation Bonus[4]
Direct Administrative Costs					
Marketing Area					
Director of Marketing	796	74	64	64	51
Marketing Technician	503	46	37	37	30
Receptionist	375	33	26	26	21
Tellers					
Head Teller	503	46	37	37	30
Teller	433	39	31	31	25
Teller	378	34	27	27	21
Security					
Security Guard	306	27	21	21	17
Security Guard	185	15	11	11	8
Indirect Administrative Costs					
Management					
General Manager	1,567	149	128	128	102
Assistant Manager	936	88	75	75	60
Regional Office Manager	0	0	0	0	0
Branch Office Manager	631	58	48	48	38
Credit and Finance					
Director of Finance	796	74	64	64	51
Director of Credit	516	47	38	38	31
Director of Collections	641	59	49	49	39
Loan Analyst	350	31	24	24	20
Loan Collector	248	21	16	16	13
Back Office Group					
Internal Auditor	841	79	67	67	54
Chief Accountant	541	50	40	40	32
Administrative Director	503	46	37	37	30
Administrative Assistant	503	46	37	37	30
Director of MIS	516	47	38	38	31
Assistant Internal Auditor	210	17	13	13	10
Auxiliary Accountant	248	21	16	16	13
Computer Technician	366	33	26	26	21
Support Services					
Janitors	293	25	20	20	16
Messengers	317	28	22	22	17
Total	**13,504**	**1,232**	**1,012**	**1,012**	**809**

All numbers are rounded to nearest whole in U.S. dollars.
See footnotes to this table on page 160.

Benefits				Monthly	
Economic Benefit[5]	Retirement Fund[6]	Social Security[7]	Benefits Subtotal	Salary & Benefits	Annual Cost
22	38	60	373	1,169	14,030
14	22	37	223	726	8,712
10	16	27	160	535	6,414
14	22	37	223	726	8,712
12	19	31	189	622	7,461
10	16	27	162	540	6,483
8	12	21	126	432	5,186
4	6	12	67	252	3,025
45	77	120	749	2,316	27,792
26	45	71	441	1,378	16,532
0	0	0	0	0	0
17	29	47	285	916	10,987
22	38	60	373	1,169	14,030
14	23	38	229	745	8,939
18	29	48	290	931	11,169
9	15	25	148	499	5,982
6	10	17	98	347	4,163
24	40	63	395	1,236	14,826
15	24	40	241	783	9,394
14	22	37	223	726	8,712
14	22	37	223	726	8,712
14	23	38	229	745	8,939
5	8	14	80	290	3,480
6	10	17	98	347	4,163
10	15	26	156	522	6,267
8	12	20	120	413	4,959
8	13	22	132	449	5,391
370	**607**	**993**	**6,034**	**19,538**	**234,460**

Table 5.1 Footnotes

[1] *Benefit paid to employees when they resign or are fired, equivalent to one pay check for every year worked plus the Christmas and 14th bonuses.*

[2] *A bonus paid to all employees at Christmas, equivalent to one paycheck.*

[3] *A bonus paid to all employees in the month of July, equivalent to one paycheck.*

[4] *A bonus paid to all employees when they take vacations, equivalent to 80 percent of one paycheck.*

[5] *This is a complement to the severance that an employee receives when leaving the organization, equivalent to 30 percent of the severance.*

[6] *This is an employer contribution to a retirement fund that all employees of credit unions share. The contribution in this credit union is 5 percent.*

[7] *Social security contribution of 7.83 percent of salary, paid by the credit union.*

Human resources. Three groups of employees have responsibilities that relate directly to savings mobilization: marketing staff, tellers, and security guards.

The monthly or bimonthly payroll is the best source of information for calculating the personnel costs for these three groups. In addition to the base level salaries, it is necessary to include all of the fringe benefits paid to the employees. Some examples of these benefits would be health insurance, retirement benefits, and incentive bonuses. These fringe benefits can represent as much as 60 percent of the base salary and so constitute a significant part of the costs. Table 5.1 shows how one credit union calculates total human resource costs, including salaries and benefits.

Marketing Activities. Three principal activities are associated with the successful marketing of savings products: publicity, promotional activities, and feasibility studies. They all incur direct administrative costs.

- **Publicity:** The most common forms of savings publicity are advertisements in newspapers, magazines, television, radio, and on billboards. This type of publicity carries significant costs.
- **Promotional activities:** The most popular promotional activities are raffles and lotteries. The costs include the prizes and printed materials.
- **Feasibility studies:** The costs of evaluating the market potential of new services and products are incurred in the process of deciding to begin or expand a savings program.

Commissions. Commissions are incentives paid to employees for bringing in new savings accounts. These costs are in addition to base salaries and benefits.

Indirect Administrative Costs

The most challenging part of the costing process is accounting for the indirect administrative costs related to savings mobilization. We define indirect administrative costs as those costs that are incurred regardless of whether an institution raises savings or borrows from external creditors. Since indirect costs are a common component of all financial products and services, the challenge is to properly allocate those costs to the products—whether credit, savings, or insurance. In any case, costs must be allocated to the correct accounts according to criteria that are objective and defensible. We group indirect administrative costs into four areas: human resources, administrative services, depreciation, and protection.

Human resources. During our research in the 15 credit unions, we were repeatedly surprised by the large number of other employees—in addition to the marketing staff, tellers, and security—who were involved in mobilizing savings. We identified up to 18 positions in four categories that were involved with savings activities. While the number of employees varied from one institution to another, we found that most credit unions expected all of their employees to bring in new savers and attract a predetermined volume of new savings. These "non-savings" personnel were employed in management, credit and finance, back office, and support services. Table 5.1 breaks out the specific positions identified as part of indirect administrative costs. The percentage of employee time invested in savings-oriented activities is calculated later in the discussion of time-based allocation.

Administrative services. The second group of costs relates to an institution's daily operations. These services support all activities of the institution, including savings mobilization:

- Electricity, gas, water, and garbage removal;
- Telecommunications;
- Office maintenance;
- MIS support;

- Materials and supplies;
- Vehicle maintenance; and
- Vehicle mileage.

Depreciation. The cost of depreciation has taken on greater importance in recent years, as the costs of technology have risen. Shorter amortization periods have also contributed to higher costs. Depreciation can be broken down into five areas:

- Buildings;
- Vehicles;
- Office furniture;
- Computerization; and
- Leasehold interests (cost of remodeling rented facilities).

Protection. The fourth group of costs relates to the activities that ensure institutional safety and soundness. These include:

- Insurance premiums (property, robbery, theft, and general liability);
- External audit and supervision fees; and
- Certification and rating quotas.

Indirect Costing Methodology

In the development of our costing methodology, we considered several ways to allocate the indirect costs to their respective activities. Of the 15 credit unions analyzed, none had developed a method for allocating indirect costs. In each case, the managers were focused on generating sufficient net income to cover operating costs. In that light, the method that we developed to allocate indirect costs is not a "best practice" of the credit unions; rather it is a way to categorize administrative costs to give readers a realistic idea of what it really costs to mobilize savings. We eliminated as many subjective criteria as possible and focused on verifiable, quantitative data. We simplified the criteria so that managers would be able to calculate their own costs without using sophisticated database management systems.

We identified three ways to allocate the indirect costs among departments: transaction-based, physical space-based, and time-based.

These methods form the framework for the data that is presented on the costs of mobilizing savings in the 15 credit unions.

Transaction-based Allocation

We used the transaction-based method to allocate costs related to the volume of savings transactions in a year. We tabulated the total number of transactions as well as the number of transactions related to savings activities (deposits and withdrawals) for each credit union. We used these numbers to calculate the percentage of savings-related transactions. We could then allocate the indirect costs appropriately. Indirect costs allocated by transactions include supplies, insurance for robbery, computer maintenance, and depreciation. Table 5.2 shows how to calculate the indirect cost factor of savings mobilization using the number of teller transactions.

Table 5.2 Total Teller Transactions—Sample Credit Union

Description	Number	Subtotal	% of Total Transactions
Savings		143,598	63.65
Deposits	64,912		
Withdrawals	57,489		
Open accounts	7,340		
Close accounts	6,032		
Transfers	4,578		
Replace passbooks and other	3,247		
Loans		71,871	31.86
Disbursements	4,286		
Payments	51,411		
Others	16,174		
Other		10,146	4.50
Debitor and creditor payments	2,211		
Insurance	7,935		
Total of transactions		**225,615**	**100.00**

Physical Space-based Allocation

We employed the physical space-based method to allocate indirect administrative costs related to physical space usage. We calculated the percentage of physical space dedicated to savings mobilization by determining the actual square footage used for savings services and dividing that by the total square footage of the credit union. Expenses such as telephone, electricity, gas, water, janitorial services, office maintenance, and depreciation were allocated in this way. Table 5.3 shows how to calculate the indirect cost factor of savings mobilization using the physical space-based method.

Table 5.3 Determination of Physical Space Dedicated to Savings Mobilization (Square Meters)

Formula:	1	2	3	**4 = (1+2+3)**	5	**6 = (4+5)**
Branch	Lobby	Tellers	Marketing	Subtotal Related to Savings	Other Areas	Total of Space
Main office	50	30	25	**105**	675	**780**
02	21	13	13	**47**	25	**72**
03	22	12	10	**44**	18	62
04	29	9	7	**45**	22	**67**
05	23	12	11	**46**	50	**96**
06	15	9	13	**37**	196	**233**
07	8	7	11	**26**	58	**84**
08	0	10	0	**10**	22	**32**
09	32	16	6	**54**	104	**158**
10	18	5	9	**31**	25	**56**
11	8	10	9	**26**	30	**56**
Physical Space by Department	**224**	**134**	**113**	**471**	**1,225**	**1,696**
Percent by Department	**13.2**	**7.9**	**6.7**	**27.8**	**72.2**	**100.0**

Time-based Allocation

We used the time-based method to allocate the personnel costs of the employees who were indirectly or partly involved in savings-related activities. We asked each employee to estimate the percentage of time that he or she spent on savings activities. Even though this method was subjective, we considered it the best way to allocate the part-time labor of such a large group of employees. Table 5.4 illustrates how one credit union identified all of the employees involved in savings mobilization, their total compensation, and the percentage of time spent on savings-related activities. This information forms the basis for allocating the human resource costs associated with savings mobilization.

We also used the time-based allocation method for certain costs in the administrative and protection services areas. Examples of time-based allocations in these areas include vehicle operating expenses, maintenance and depreciation, external audit and supervision, and rating and certification quotas.

Summary of Total Costs

The final step in this costing methodology is to total the costs in each area—financial costs, direct administrative costs, and indirect administrative costs—and relate that total to the average volume of savings deposits. In the case of credit unions, member shares are also added to the volume of savings deposits to arrive at the average total volume of funds mobilized, since similar resources are utilized in collecting shares from members.

Once we have determined each area of cost, and linked each area to the volume of funds mobilized, we can summarize the individual costs related to savings and determine the total costs of savings mobilization. Table 5.5 shows the costing methodology in use. The first column lists the cost element and the individual line items for all of the costs related to savings mobilization. The second column lists the allocation criteria used for each line item. The third column shows the total operating costs for the credit union. The fourth column shows the allocation factor percent used for each line item. The fifth column shows the operating costs associated with savings mobilization. The last column shows the cost of each line item as a percentage of the average amount of total funds mobilized.

Table 5.4 Time Dedicated to Savings Activities by Position

Formula:	1	2	3 = (2/1)
		Compensation	
Position	Number of Persons	Total Compensation	Average of Compensation
Direct administrative costs			
Marketing			
Directors of marketing	1	14,030	14,030
Marketing technicians	9	43,377	4,820
Receptionists	8	37,576	4,697
Tellers			
Head tellers	1	8,712	8,712
Tellers	22	105,041	4,775
Security			
Security guards	15	56,933	3,796
Indirect administrative costs			
Management			
General managers	1	27,792	27,792
Assistant managers	2	33,065	16,533
Regional office managers	0	0	0
Branch office managers	10	92,919	9,292
Credit and finance			
Directors of finance	1	14,030	14,030
Directors of credit	1	8,939	8,939
Directors of collections	1	11,169	11,169
Loan analysts	4	21,381	5,345
Loan collectors	2	7,870	3,935
Back office group			
Internal auditors	1	14,826	14,826
Chief accountants	1	9,394	9,394
Administrative directors	0	0	0
Administrative assistants	3	25,339	8,446
Directors of MIS	1	8,939	8,939
Assistant internal auditors	0	0	0
Auxiliary accountants	3	13,624	4,541
Computer technicians	2	12,533	6,267
Support services			
Janitors and messengers	13	43,174	3,321
Total	**102**	**610,663**	**5,987**

All costs are rounded to nearest whole in U.S. dollars.

4	5	6	7 = (2x4)	8
Time Dedicated to Savings Activities				
Weighted Average %	Minimum %	Maximum %	Cost by Position	Cost by Group
				64,786
90	90	90	12,627	
86	40	90	37,129	
40	40	40	15,030	
				85,315
75	75	75	6,534	
75	75	75	78,781	
				42,700
75	75	75	42,700	
				38,607
10	10	10	2,779	
10	10	10	3,307	
			0	
35	35	35	32,522	
				7,940
30	30	30	4,209	
5	5	5	447	
5	5	5	558	
7	5	20	1,591	
14	5	25	1,135	
				12,578
10	10	10	1,483	
25	25	25	2,349	
			0	
7	5	10	1,703	
25	25	25	2,235	
			0	
12	5	25	1,676	
25	25	25	3,133	
				4,317
10	10	10	4,317	
			256,243	**256,243**

Table 5.5 Summary of Total Operating Costs Related to Savings Mobilization

Cost Elements	Allocation Criteria
Average savings volume	
I. Financial costs	
Interest	Interest paid
Insurance	Insurance paid
Taxes on interest	Taxes paid
Shares dividends	Dividends paid
II. Direct administrative costs	
A. Human resources	
Marketing	% of time dedicated to savings activities
Tellers	% of time dedicated to savings activities
Security	% of time dedicated to savings activities
B. Marketing	
Advertising	Real costs of advertising
Promotion	Real costs of savings promotions
Studies	Real costs of market studies
C. Commissions	Commissions paid on new savings
III. Indirect administrative costs	
A. Human resources	
Management	% of time dedicated to savings activities
Back office and credit and finance	% of time dedicated to savings activities
Services support	% of time dedicated to savings activities
B. Administrative services	
Electricity, water, garbage removal	% of physical space occupied
Telecommunications	% of physical space occupied
Office maintenance	% of physical space occupied
MIS support	Transactions
Materials and supplies	Transactions
Vehicle mileage	% of time use of vehicles
Vehicle maintenance	% of time use of vehicles
Taxes	% of physical space occupied
C. Depreciation	
Buildings	% of physical space occupied
Vehicles	% of time use of vehicles
Office furniture	% of physical space occupied
Computerization	Transactions
Office rent	% of physical space occupied
D. Protection	
Robbery and general liability insurance premiums	Transactions
External audit and supervision fees	% of time of auditors and inspectors dedicated to savings
Property insurance premiums	% of physical space occupied
Provision cash shortfalls	Transactions
Total operating costs	

All costs are rounded to nearest whole in U.S. dollars.

Total Operating Costs	Allocation Factor %	Operating Costs of Savings Mobilization	%
		12,090,819	
		1,132,174	**9.36**
1,073,642	100.00	1,073,642	8.88
58,532	100.00	58,532	0.48
0	100.00	0	0.00
0	100.00	0	0.00
		249,812	**2.07**
		192,801	**1.59**
94,983	68.21	64,786	0.54
113,753	75.00	85,315	0.71
56,933	75.00	42,700	0.35
		41,553	**0.34**
18,513	100.00	18,513	0.15
23,040	100.00	23,040	0.19
0	100.00	0	0.00
15,458	100.00	**15,458**	**0.13**
		209,972	**1.74**
		63,443	**0.52**
153,776	25.11	38,607	0.32
148,044	13.86	20,519	0.17
43,174	10.00	4,317	0.04
		56,261	**0.47**
13,874	27.80	3,857	0.03
33,788	27.80	9,393	0.08
23,230	27.80	6,458	0.05
20,306	63.65	12,925	0.11
25,761	63.65	16,397	0.14
16,223	30.00	4,867	0.04
7,883	30.00	2,365	0.02
0	27.80	0	0.00
		73,285	**0.61**
22,496	27.80	6,254	0.05
8,750	30.00	2,625	0.02
47,892	27.80	13,314	0.11
73,208	63.65	46,597	0.39
16,169	27.80	4,495	0.04
		16,982	**0.14**
11,630	63.65	7,402	0.06
31,933	30.00	9,580	0.08
0	27.80	0	0.00
0	63.65	0	0.00
2,152,991		**1,591,958**	**13.17**

Table 5.6 summarizes the total operating costs calculated in Table 5.5. The percentages in the far right column of Table 5.6 are calculated by dividing the amount of each line item by the average savings volume. For example, the total financial costs of $1,132,174 divided by the average savings volume of $12,090,819 equals 9.36 percent (1,132,174 / 12,090,819 = .0936). Table 5.6 shows that the financial costs were the highest, followed by direct administrative costs, and indirect administrative costs. The total costs of savings mobilization were equal to 13.17 percent of the average savings volume.

Table 5.6 Summary of Total Operating Costs

Cost Area	Amount	%
Total Financial Costs	1,132,174	9.36
Total Direct Administrative Costs	249,812	2.07
Total Indirect Administrative Costs	209,972	1.74
Total Operating Costs	**1,591,958**	**13.17**
Average Savings Volume	12,090,819	

All costs are rounded to nearest whole in U.S. dollars.

Savings Cost Data of 15 Credit Unions

The objective of our study was to gather a representative cross sample of savings cost data from different types of credit unions throughout Latin America. We selected 15 credit unions from Bolivia, Ecuador, Guatemala, and Nicaragua. Three main criteria were used to select the sample credit unions: savings volume, experience with savings mobilization, and geographical location.

Savings volume. It was important to have a cross-section of large, medium, and small credit unions in order to see if there were significant economies of scale and cost savings for larger credit unions. *Large* was defined as having a savings volume greater than $5 million. *Medium* was defined as having a savings volume of $1 to 5 million, and *small* was defined as having a savings volume below $1 million. The study included six large credit unions, four medium credit unions, and five small credit unions.

Experience with savings mobilization. Credit unions with varying levels of experience were included in the study to see what impact, if any, experience in mobilizing savings had on costs. We found a direct correlation between experience and volume: the greater the experience, the greater the volume of savings. *Beginners* were defined as having less than three years of experience in mobilizing savings, *intermediates* had been mobilizing savings for three to ten years, and *advanced* for more than ten years. The study included four beginners, four intermediates, and seven advanced credit unions.

Geographical location. Although savings volume and years of experience were the most important criteria, we tried to include both urban and rural credit unions to see if geographical location affected costs. *Urban* was defined as an area with a population greater than 100,000 people and *rural* was defined as having less than 100,000 people. The study included four urban and 11 rural credit unions.

Results of the Study

Two seminal questions provided the foundation for the study:

1. Is savings mobilization a viable alternative to borrowing from external credit sources in order to fund loan portfolios?
2. Is microsavings mobilization feasible?

We found that the financial costs varied greatly from one country to another. Inflation, currency devaluation rates, and differing levels in the supply and demand for financial services affected financial costs. The financial costs were highest in Nicaragua at 17 percent, 16 percent in Bolivia, 9 percent in Guatemala, and 5 percent in Ecuador.

To answer the first question, we set aside the financial costs component and focused on the direct and indirect administrative costs associated with savings mobilization. This focus should enable readers to determine the financial costs in their own countries, calculate the administrative costs in their own institutions, and add them together to determine the feasibility of raising savings versus borrowing from external credit sources to fund their loan portfolios. One hidden cost of external credit not accounted for in our study, but that should be noted here and taken into account when calculating costs, was the high cost of reporting requirements imposed by donors on their beneficiaries.

We simplified the presentation of the direct and indirect administrative costs by reporting only seven main areas.

Under direct administrative costs, we studied:

- Human resources ("savings" personnel);
- Marketing; and
- Commissions.

Under indirect administrative costs, we studied:

- Human resources ("non-savings" personnel);
- Administrative services;
- Depreciation; and
- Protection.

Table 5.7 summarizes the direct and indirect administrative costs for the 15 credit unions in the study. The cost of each area is divided by the average savings volume to find the corresponding cost as a percentage. For example, when the total direct administrative cost of $1,315,651 is divided by the average savings volume of $67,974,977, the direct administrative cost is 1.94 percent of average savings volume (1,315,651 / 67,974,977 = .0194).

Table 5.8 summarizes the same information, except that it is separated by asset size for the six large credit unions, four medium credit unions, and five small credit unions.

Table 5.9 summarizes the administrative costs for each group. The consolidated direct and indirect administrative costs for the 15 credit unions were 3.65 percent. The consolidated administrative costs were 3.61 percent for large credit unions, 3.26 percent for medium credit unions, and 8.43 percent for small credit unions. Large credit unions had higher administrative costs than medium credit unions because they had invested more heavily in marketing activities. Direct and indirect administrative costs were significantly higher in the small credit unions mainly because of the lower savings volumes in those institutions.

The data clearly indicate that economies of scale take over once a credit union reaches $1 million in savings volume. While the administrative costs were higher in the small credit unions, they were still competitive with most commercial sources of credit. For the medium and large credit unions, there was a clear economic advantage in

Table 5.7 Summary of Direct and Indirect Administrative Costs in a Sample of 15 Credit Unions

Cost Areas	Administrative Costs of Savings Mobilization	%
Average savings volume	67,974,977	
Direct administrative Costs	1,315,651	1.94
a. Human resources	862,355	1.27
b. Marketing	373,002	0.55
c. Commissions	80,294	0.12
Indirect administrative costs	1,164,989	1.71
a. Human resources	350,782	0.52
b. Administrative services	321,801	0.47
c. Depreciations	415,980	0.61
d. Protection	76,426	0.11
Total administrative costs	6,649,475	
Total administrative costs related to savings mobilization	2,480,640	3.65
% of total administrative costs related to savings mobilization		**37.31**

All costs are rounded to nearest whole in U.S. dollars.

mobilizing savings over borrowing from external credit sources. Table 5.10 illustrates the advantages of mobilizing savings compared to borrowing external credit.

To answer the second question—Is microsavings mobilization feasible?—we studied four credit unions in Guatemala. The credit unions used a commercial software program to manage their accounting, lending, and teller (deposit-taking) functions. They were all large, experienced, self-sustainable institutions. Three credit unions were located in rural areas; one was located in an urban area. While four credit unions may not provide sufficient evidence to make conclusive statements about savings in d all types of institutions, they did provide a unique snapshot of the deposit-taking function. In these four credit unions we

Table 5.8 Summary of Direct and Indirect Administrative Costs According to Credit Union Size

Cost Areas	Six Large Credit Unions		Four Medium Credit Unions		Five Small Credit Unions	
	Cost	%	Cost	%	Cost	%
Average savings volume	55,255,795		11,373,026		1,346,156	
Direct administrative costs	1,120,665	2.03	138,063	1.21	56,923	4.23
A. Human resources	734,969	1.33	87,922	0.77	39,463	2.93
B. Marketing	305,646	0.55	50,141	0.44	17,215	1.28
C. Commissions	80,049	0.14	0	0.00	245	0.02
Indirect administrative costs	875,844	1.59	232,531	2.04	56,614	4.21
A. Human resources	246,268	0.45	71,800	0.63	32,714	2.43
B. Administrative Services	259,520	0.47	46,977	0.41	15,304	1.14
C. Depreciations	312,263	0.57	96,591	0.85	7,126	0.53
D. Protection	57,793	0.10	17,163	0.15	1,470	0.11
Total administrative costs	**5,150,344**		**1,249,146**		**249,985**	
Total administrative costs related to savings mobilization	**1,996,509**	**3.61**	**370,594**	**3.26**	**113,537**	**8.43**
% of total administrative costs related to savings mobilization		**38.76**		**29.67**		**45.42**

All costs are rounded to nearest whole in U.S. dollars.

Table 5.9 Summary of Administrative Costs by Group

Group	Administrative Costs %
Large Credit Unions	3.61
Medium Credit Unions	3.26
Small Credit Unions	8.43
Consolidated 15 Credit Unions	**3.65**

Table 5.10 The Total Costs of Savings Mobilization Versus Borrowing Costs of the Banking Sector[1]

	Weighted Average in Sample					
Country	Financial Costs %	Direct Administrative Costs %	Indirect Administrative Costs %	Total	Borrowing Costs in Banking Sector	Difference
Bolivia	15.54	0.79	1.31	17.64	19.50	**1.86**
Ecuador	4.54	1.62	2.16	8.32	17.71	**9.39**
Guatemala	9.12	2.33	1.64	13.09	18.80	**5.71**
Nicaragua	17.02	5.12	6.29	28.43	29.65	**1.22**

[1]*As of December 2001.*

can answer without reservation: Microsavings mobilization is feasible.

The first evidence of the feasibility of microsavings mobilization is found in the structure of the deposit base of the four credit unions, as shown in Table 5.11. The structural analysis reveals important facts:

- Eighty-nine percent of the total savings accounts had balances of less than $300.
- The small accounts (of less than $300) provided only 8 percent of the volume used to fund the loan portfolio.
- Eighty-two percent of the volume of funds came from savings accounts with balances greater than $1,000.

An administrative cost ratio analysis also revealed the feasibility of microsavings mobilization. The analysis is summarized in Table 5.12.

As outlined in Chapter 2, the PEARLS prudential standard calls for an administrative cost ratio of less than 10 percent. All of the credit unions had acceptable levels of administrative costs. If we compare these administrative cost ratios to the non-governmental organizations (NGOs) profiled in the November 2001 issue of the *MicroBanking Bulletin*, the consolidated ratio of 7.96 percent is one-third that of the NGOs, which had a consolidated ratio of 26.8 percent. The administrative cost ratio used in the *MicroBanking Bulletin* includes in-kind donations, which may not be fully expensed by the NGO on the income statement.

Table 5.11 Structure of Deposit Base in Four Guatemalan Credit Unions[1]

Range of Deposit Amount	Number of Accounts	%	Volume	%
< 300	103,112	89.0	2,966,672	8
301 – 1,000	6,285	5.4	3,567,178	10
1,001 – 6,250	5,430	4.7	13,601,235	38
6,251 – 12,500	750	0.6	6,766,009	19
12,501 – 37,500	296	0.3	5,790,712	16
> 37,501+	45	0.0	2,927,819	8
Total	**115,919**	**100.0**	**35,619,675**	**100**

All numbers are rounded to nearest whole, in U.S. dollars.

[1] *As of December 2001.*

Table 5.12 Administrative Cost Ratios in Four Guatemalan Credit Unions[1]

Credit Union	Administrative Cost Ratio[2] %
#1	10.01
#2	8.12
#3	7.79
#4	6.98
Consolidated	**7.96**

[1] *As of December 31, 2001.*

[2] *The Administrative Cost Ratio is defined as the total administrative costs (excluding financial costs and loan loss provisions) divided by the average total assets.*

This ratio is the same as the R9 ratio of PEARLS since the credit unions examined had no in-kind donations.

If we take the analysis a step further and break out the costs of savings as a percentage of average savings on deposit, we see another economic advantage of savings mobilization. When the administrative costs of savings mobilization are separated from total costs, they represent 3.94 percent of the average savings deposit base. When the administrative costs are added to the interest paid on deposits (9.10 percent), the total operating costs for the entire savings program are 13.04 percent of average savings in the four credit unions. At the time of writing, the commercial borrowing rate for MFIs in Guatemala was approximately 19 percent. In other words, the costs of mobilizing savings were about 6 percent less than the commercial borrowing rate. Even for the small credit union with the highest administrative costs, the financial costs of 9.1 percent plus the administrative costs of 8.4 percent (for a total cost of 17.5 percent) are competitive with and marginally lower than the commercial borrowing rate of 19 percent. Whether 5 percent or 0.5 percent, the economic savings goes straight to an institution's bottom line.

The transaction histories of the four Guatemalan credit unions confirm the feasibility of microsavings mobilization. Utilizing the standardized accounting software program used in the four credit unions, we established a relationship between the structure of the deposit base and the volume of transactions by deposit size. Table 5.13 summarizes the savings and withdrawal transactions for these credit unions for 2001.

The data in Table 5.13 show a direct correlation between the structure of the deposits and the size of the transactions. Of the 476,933 deposits and withdrawals that occurred in 2001, 70.1 percent (or 334,369) were for amounts less than \$100. The average transaction size of this group was \$28. This is consistent with the deposit structure, which shows that 89 percent of the savings accounts had balances of less than \$300.

The administrative cost ratios, the structures of the deposit base, and the transaction histories demonstrate three key points about savings mobilization in the credit unions analyzed:

1. Microsavings accounts are an integral part of the savings services offered.
2. Poor and low-income people frequently use the credit unions' savings services to deposit and withdraw money to meet daily liquidity needs.
3. Microsavings mobilization is feasible if balanced with larger savings accounts. The larger accounts provide the volume to fund lending activities and spread the fixed costs of offering savings services to all income groups.

Table 5.13 Consolidated Transaction Histories in Four Guatemalan Credit Unions During Calendar Year 2001

Transaction Amount	Number of Transactions	Volume	Average	%
Deposits				
< 100	191,304	4,581,353	24	71.4
100 – 400	46,315	10,086,534	218	17.3
401 – 800	11,718	7,560,175	645	4.4
> 801	18,596	72,673,943	3,908	6.9
Subtotal	267,933	94,902,004	354	100.0
Withdrawals				
< 100	143,065	4,833,288	34	68.5
100 – 400	48,938	12,212,206	250	23.4
401 – 800	8,829	6,257,594	709	4.2
> 801	8,168	32,182,280	3,940	3.9
Subtotal	209,000	55,485,369	265	100.0
Summary				
< 100	334,369	9,414,641	28	70.1
100 – 400	95,253	22,298,740	234	20.0
401 – 800	20,547	13,817,770	672	4.3
> $801	26,764	104,856,222	3,918	5.6
Total	**476,933**	**150,387,373**	**315**	**100.0**

All numbers are rounded to nearest whole, in U.S. dollars.

Of the 15 credit unions studied, there were no instances where savings mobilization failed or where external credit would have been the preferred alternative. Although the administrative costs varied, all credit union managers indicated that savings mobilization was vital to service the membership and to the self-sustainability of the institution. Furthermore, all the credit unions—large, medium, and small—had successfully engaged in microsavings mobilization. The structure of the deposit base was remarkably similar across all 15 credit unions. They all had many small accounts with balances below $300 and few large accounts with balances above $800 that accounted for most of the savings volume.

These findings should provide encouragement to managers of MFIs who are considering mobilizing savings. Notwithstanding commentaries circulating within the microfinance industry, the 15 credit unions in this study showed that (1) savings mobilization is a viable alternative to borrowing external credit, and (2) microsavings mobilization is feasible.

Ten Tips to Lower the Costs of Savings Mobilization

The following tips for designing and implementing cost-effective savings mobilization programs stem from the study findings as well as from the experience of the authors, who have designed many successful savings mobilization programs in credit unions throughout Latin America.

1. Diversify the Base of Savings Clientele

Mixed outreach is key to successful savings mobilization. A savings institution must diversify its target group beyond just the poor and extreme poor to mobilize the volume of savings needed to fund growing loan portfolios and to spread fixed costs. This study and credit union experience show that the large volume of savings resources used to fund loan portfolios comes from clients who are *net savers*. This group of people is different from the traditional *net borrowers* of most MFIs. Net savers are people who save for the sake of saving.

The success a savings mobilization program achieves will depend on the ability of the institution to reach out to different segments in the marketplace and attract net savers from varying economic strata. This concept may be unattractive to those institutions that target only poor clients; but credit unions with successful programs have found that they can reach more poor and low-income members if they also serve higher-income segments of the marketplace. In other words, a mixed outreach enables an institution to use the larger volumes of resources generated by higher-income clients to offset the higher transaction costs of serving poorer clients. This allows the institution to maintain a competitive administrative cost structure. The same principle holds for lending to the poorer borrowers.

2. Manage Two Critical Economic Variables: Volume and Cost

The entire "business" of savings mobilization hinges on high volume and low costs. As demonstrated in this chapter, once a credit union achieves $1 million in savings volume, costs as a percentage of average savings volume start to drop. Smaller savings accounts and low volumes increase the costs of providing savings services. To achieve the required volume, it is necessary to reach out to clients of varying economic levels. The high volume that higher-income clients provide is integral to sustainability.

The most significant costs associated with savings mobilization are the human resource costs. Table 5.14 shows the average compensation costs of the key credit union staff involved in savings activities. This table can be used to compare the personnel costs of credit unions to other types of MFIs. The main reason why credit unions have achieved high levels of operating efficiency is because they have been successful in controlling human resource costs in accordance with the asset size of their institutions.

Table 5.14 Average Annual Compensation for Key Personnel Grouped by Credit Union Size

Position	Six Large Credit Unions	Four Medium Credit Unions	Five Small Credit Unions
General Manager	26,110	16,459	6,594
Branch Office Manager	8,741	4,776	3,264
Director of Marketing	13,146	–	–
Marketing Technician	4,543	5,263	1,881
Head Cashier	6,827	6,669	5,348
Teller	4,707	3,527	2,754
Chief Accountant	9,724	12,204	3,860
Security Guard	3,989	2,500	1,794

All numbers are rounded to nearest whole in U.S. dollars.

3. Recover the Direct Costs First

During the initial phase of a savings program, the first priority should be to recover the direct costs of establishing the program. The direct costs are critical because they involve real outlays of funds that affect operating efficiency. Indirect costs are also important, but lending services generally cover most of the indirect costs when credit unions start aggressive savings mobilization programs.

When asked about indirect costs, none of the 15 credit unions studied had an effective way to calculate indirect costs and allocate them among savings and credit products. For those managers, their priorities were to quickly recover the direct costs, generate sufficient revenue to cover all the costs, and earn enough profit to build capital reserves. Only one of the 15 credit unions examined was not operationally sustainable (that is, it could not cover all operating costs without a subsidy). This was due to inadequate savings volume.

4. Invest in Security

Security costs are significant in savings mobilization. Creation of a safe place for people to deposit their money must be a priority in a savings-based financial institution. In addition to security guards who protect the physical facility, other important considerations are:

- Purchasing sufficient insurance to cover robbery, assaults, and employee theft;
- Maintaining minimum levels of liquidity in the vault and in cash drawers;
- Establishing alternative sites and transportation to those sites to store excess cash, securities, and legal document; and
- Creating adequate internal controls to prevent fraud or insider theft.

These security components must be included in counting the costs of a savings program.

5. Penetrate the Local Market Before Opening Branch Offices

When launching or expanding a savings mobilization program, it is most important to focus on the existing, untapped markets near the central office before opening new branch offices. The most successful credit unions emphasize marketing in the local market near the central office before expanding to other areas. The central office is best able to support the increases in savings deposits with its existing infrastructure, without incurring the additional costs associated with opening a branch office.

6. Add Value to Savings Products While Minimizing Financial Costs

One of the most cost-effective ways to attract savers is to offer highly demanded benefits; for example, free life insurance coverage on savings account balances. These benefits are less costly to the institution than raising interest rates. Promotions attract depositors without raising financial costs. Providing preauthorized lines of credit based on certain savings levels can also add significant value to savings services.

7. Use the Appropriate Marketing Strategy for Each Target Niche

Two principal marketing strategies are employed by the credit unions: mass marketing (mass media) and personal marketing (individual attention). Mass marketing strategies are most effective for reaching poor and low-income people who will maintain small balances. On the other hand, mass media alone is ineffective for reaching potential clients who have substantial resources to save. Larger savers are not easily convinced of the safety and soundness of a financial institution through mass media advertising. They tend to respond well to personal visits in which their questions can be answered immediately. Although personalized marketing is more costly than mass marketing, the potential to attract substantial volumes of savings is much greater. It is important to properly identify the clients by their potential for saving and implement the appropriate marketing strategy for each target group; for example, it would not be cost-effective to personally call on clients who lack the potential to save larger amounts.

8. Match the Advertising Costs to the Size of the Deposit Base

Once the different market niches have been identified, advertising budgets must be set in relation to the potential deposit base. In this study, the average costs for publicity and promotional activities amounted to 0.5 percent of the deposit volume. Radio, television, and newspaper advertising can be costly. Radio has proven to be the most effective advertising medium for credit unions, particularly in rural areas where people may not have easy access to newspapers or television.

9. Start Without Software if Necessary

Integrated software programs that combine accounting, lending, and teller functions are not necessary to start or expand savings programs.

Of the 15 credit unions studied, eight did not use an integrated software package to manage their savings activities. Those credit unions had not purchased software because of the high technology and maintenance costs associated with it. Of those eight, the largest credit union had more than 6,000 clients with total assets of more than $5 million.

10. Involve Everyone in Savings Mobilization

The most successful credit unions expect all of their employees to participate in savings mobilization programs. Managers recognize that employees are their best resources to publicize the benefits of savings to families, friends, and acquaintances. The study found that most of the credit union employees had some responsibility and involvement in bringing in new deposits. The most common approach is to set savings volume goals for each staff member. In addition to an employee's normal job responsibilities, he or she is also responsible for bringing in new savers to the credit union. This is an inexpensive and effective strategy for mobilizing increased savings.

Conclusion

This chapter provided readers with a practical methodology for determining the costs of savings mobilization and demonstrates its cost effectiveness. Our costing methodology divided savings-related costs into three main areas: financial costs, direct administrative costs, and indirect administrative costs.

The financial costs include the interest and dividends paid to clients on their savings and share accounts and the insurance and taxes paid by the institution on behalf of clients. The direct administrative costs are those directly related to savings mobilization; therefore, they do not need to be allocated. These direct administrative costs include human resources, marketing, and commissions. We developed a methodology for allocating indirect administrative costs. The methodology allocates indirect administrative costs using three criteria: transaction-based, physical space-based, and time-based. Table 5.5 shows how this costing methodology works in a real credit union.

The data in Table 5.8 show that the percentage of direct and indirect administrative costs of savings mobilization dropped significantly when a credit union reached the $1 million threshold of savings volume. The consolidated administrative costs for the 15 credit unions in the study were 3.65 percent of average savings deposits. Finally, Table 5.10 shows the costs of mobilizing savings compared with borrowing from external credit sources. In each country in the study, there were economic advantages that favored savings mobilization, ranging from a low of 1.22 percent to a high of 9.39 percent. Another important advantage of savings mobilization is the freedom of being economically and strategically independent of donors and other third-party financiers. These organizations tend to impose their own reporting requirements, which can interfere with the overall development and strategic direction of a financial institution and, as such, represent higher implicit operating costs.

Lastly, we shared tips for designing cost-effective savings programs that we learned over many years of experience with savings mobilization. Of all the tips presented, the most important one is to diversify the client base of savers. Perhaps the greatest misperception of those who challenge the feasibility of savings mobilization is the assumption that savers and borrowers are the same group of people; they are different groups. By targeting the market niche of net savers, a savings institution will be able to achieve the volume of resources needed to fund its loan portfolio and become self-sustainable.

The model presented in this chapter was validated by empirical data. Credit union movements around the world have consistently shown that savings mobilization is both feasible and cost effective. Highly-demanded savings services can be provided to low-income clients on a sustainable basis if the program is properly designed. The study presented here shows that a well-designed and cost-effective savings mobilization program will bring financial independence to the institutions, as well as highly demanded services to their low-income clients.