

Microenterprise

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The Microfinance Industry: Does it Measure Up?

Reliable information on the performance and condition of individual microfinance institutions is in demand, but has so far proven difficult to obtain. Capital is a scarce resource and, in order to allocate it wisely, donors, creditors and investors alike need timely, objective and reliable information on actual and potential client institutions. This article takes a first step in addressing the information gap by providing concrete and reliable reference values for several benchmark indicators relevant to the microfinance industry.

The microfinance industry is currently undergoing a gradual but fundamental transition toward mainstream finance. This transition holds the promise of increased access to commercial sources of funds that will allow the industry to continue its present expansion. However, the transition will also put new demands on the industry. In order to attract these new sources of funds, the microfinance institutions will have to provide a high degree of disclosure to potential creditors and investors.

Disclosure can pose a significant challenge to many microfinance institutions whose historic reliance on donor financing and internally generated funds has not encouraged the use of standard financial indicators nor a general culture of transparency. In the long run though, as donor resources become ever scarcer, few institutions will have the luxury of not adopting such a culture.

As donor resources become ever more scarce, few microfinance institutions will have the luxury of not adopting a culture of transparency toward private investors and creditors.

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The Value of Benchmark Indicators

A crucial problem confronting microfinance institutions in their quest to achieve and benefit from greater transparency is the lack of industry-wide benchmark indicators. Without such indicators, there are no meaningful reference values that

can be used by donors, creditors and investors in evaluating the performance and condition of individual institutions.

The existence of standardized benchmark indicators has several different benefits for the microfinance industry:

- It helps the management of microfinance institutions identify relative weaknesses, take steps to improve such weaknesses, and make more informed decisions.
- It enhances the information available to potential creditors and investors. This, in turn, serves to enhance the flow of risk capital and other forms of financing to the industry.
- It assists supervisory authorities in designing appropriate prudential norms for institutions involved in microfinance, which is key to ensuring the long-term viability of the industry.

Participating Institutions

To establish benchmark indicators for the microfinance industry in Latin America and the Caribbean, the Inter-American Development Bank financed a program that conducted systematic assessments of 17 leading microfinance institutions in the region¹. These institutions agreed to open up their books and facilitate on-site inspections by Private Sector Initiatives Corporation (PSIC), a firm

Benchmark indicators help management, creditors, investors and regulators to make better decisions.

that specializes in assessing microfinance institutions. The results of the assessments, which are the basis for this article, offer some of the most comprehensive and reliable data on the microfinance industry to date.²

The 17 participating institutions represent a wide range of countries, legal forms, asset sizes and levels of management sophistication. In general, however, they are recognized as industry leaders in their countries. The largest participating institution is BancoSol, a Bolivian commercial bank specializing in microfinance, which has 568 employees and a loan portfolio of nearly \$75 million. The smallest loan portfolio (\$935,000) belongs to FINCA in Nicaragua, which uses a village banking model. FAMA, in the same country, has the smallest portfolio in terms of outstanding loans (5,036). As for average loan size, the extremes are found in Compartamos in Mexico (\$68) and

FUCAC in Uruguay (\$1,709). FUCAC, which represents a federation of cooperatives, is also the institution in the group with the fewest employees (27).

Doing the Numbers

This article explores a total of 10 indicators that provide a good overview of an institution's financial and operational structure, performance and condition. The information presented represents an attempt to *assign reference values* to these benchmark indicators for the microfinance industry in Latin America and the Caribbean. Each indicator includes the highest, lowest, mean and median value for the 17 participating institutions.

It should be noted that several of the indicators are not measures of performance but rather illustrate certain characteristics of the institutions. In addition, the value of many indicators is dependent upon more than one factor. Consequently, judgments and normative comparisons using these reference values should be made with caution.

Asset Structure

A fundamental aspect of financial institutions relates to how they structure their assets. Financial institutions normally dedicate 60–80% of their assets to lending activities. While diversification of assets is important, a large proportion of assets dedicated to non-lending activities, particularly fixed assets, may indicate that the institution is not allocating its resources in an optimal manner or that it is facing difficult conditions in the local market.

At 96%, Genesis Empresarial in Guatemala has the highest ratio of assets dedicated to the loan portfolio of all 17 participating institutions. Genesis is thus singularly focused on

Table 1. Characteristics of 17 Participating Institutions, 1998

Indicator	Low	Median	Mean	High
Employees	27	160	187	568
Gross portfolio (US\$ million)	\$0.93	\$11.3	\$16.5	\$74.9
# Loans outstanding	5,036	18,812	25,560	81,555
Average loan size*	\$68	\$623	\$730	\$1,709

* Refers to average loan balance outstanding; mean and median are not weighted by size of loan portfolio.

¹Fundación Empreder (Argentina), BancoSol (Bolivia), Caja los Andes (Bolivia), FIE (Bolivia), Women's World Banking, Cali (Colombia), FinAmerica (Colombia), FED (Ecuador), Financiera Calpia (El Salvador), Genesis (Guatemala), FUNADEH (Honduras), Compartamos (Mexico), FAMA (Nicaragua), Finca (Nicaragua), Chispa (Nicaragua), Financiera Visión (Paraguay), Caja Municipal Arequipa (Peru), Mibanco (Peru), FUCAC (Uruguay).

²A more complete publication on these indicators will soon be published jointly by PSIC and the IDB.

Table 2. Asset Structure, 1998

Percent of Total Assets	Low	Median	Mean	High
Loan portfolio	46.1%	77.4%	86.0%	96.0%
Fixed assets	1.8%	5.5%	6.3%	14.5%
Cash & marketable securities	0.9%	14.7%	19.4%	46.2%

its main activity—lending. Other very focused institutions include Financiera Calpia in El Salvador and CHISPA in Nicaragua, which have 95.2% and 90.2% of total assets in the form of loans. The lowest ratio of fixed assets to total assets is found in FIE and Caja los Andes in Bolivia at 1.8% and 2.9% respectively. In terms of cash and marketable securities, FED stands out with a ratio of 46.2%. In the case of FED, the high ratio of cash and marketable securities is a response to a difficult economic environment and high credit risks in Ecuador during 1998.

Structure and Cost of Capital

The *debt/equity ratio* is usually the indicator of most interest in terms of the capital structure of a financial institution. The ratio illustrates the amount of borrowed funds in relation to the institution's own equity or, in case the institution is not shareholder-

based, its net worth. The use of borrowed funds allows the institution to maintain a larger loan portfolio and achieve higher returns on equity than what would otherwise be possible. However, it also increases risk. With a high debt/equity ratio, a relatively small change in the value of the loan portfolio can have a dramatic impact on the institution's net worth.

The lowest ratio of debt to equity among the participating institutions is

found in FAMA in Nicaragua and FUNADEH in Honduras, whose borrowed funds amount to less than 10% of their net worth. At the other end of the spectrum is Caja Municipal Arequipa in Peru, which has nearly 9 times as much debt as equity. Other relatively highly leveraged institutions include Caja los Andes at 7.62, FIE at 6.46 and FUCAC in Uruguay at 5.82. As these numbers indicate, regulated institutions generally rely heavily on borrowed funds while NGOs rely almost entirely on granted or internally generated funds.

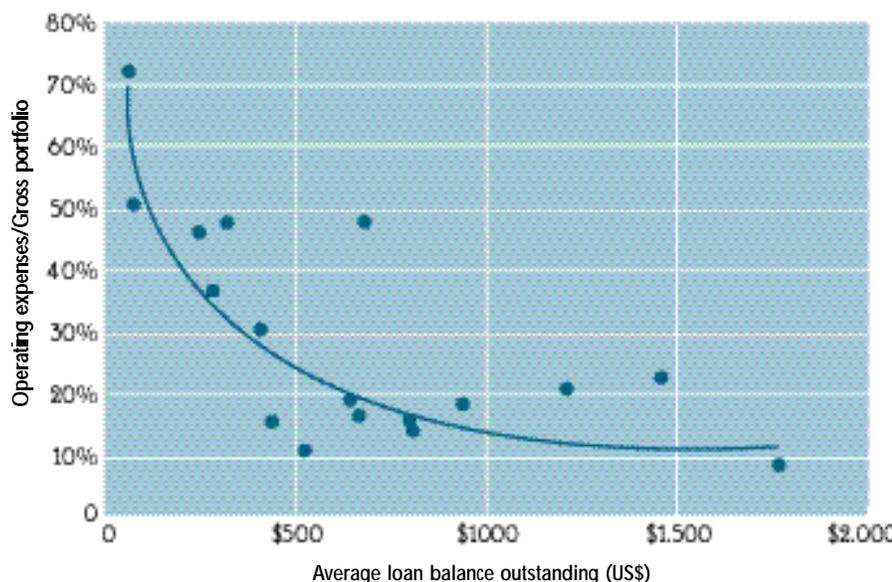
The *ratio of interest expense to average liabilities* illustrates the institution's nominal cost of borrowed funds. This cost ranges from zero at FINCA in Nicaragua to 40.5% at FED in Ecuador.

Table 3. Structure and Cost of Capital, 1998

Indicator	Low	Median	Mean	High
Debt/equity ratio	0.1	2.2	3.2	8.9
Interest expense/average liabilities (nominal)	0.0%	12.1%	14.8%	40.5%
Interest expense/average liabilities (real)*	-13.7%	2.1%	1.6%	18.8%

* Subtracting domestic inflation.

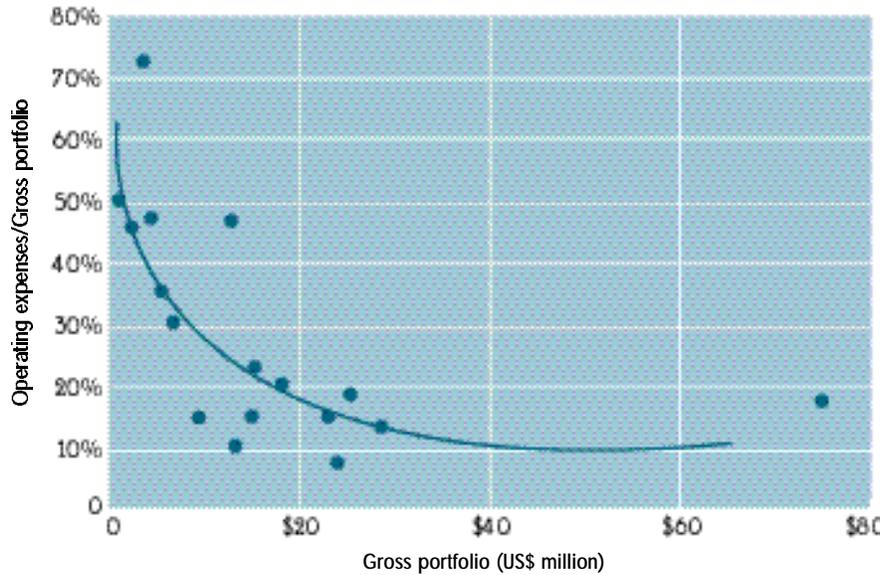
Box 1. Are Small Loans More Expensive?*



*The 17 institutions represented in the graph are the same as those described in the main article, and the data is from 1998.

A small average loan size does indeed seem to drive up operating expenses as a percentage of the gross portfolio, as shown by the graph. This effect is particularly strong for average amounts below \$500-600. Above this point, however, there seems to be no discernable relationship between average loan size and operating expenses. The data in the graph does not take into account or control for other factors that could affect the ratio of operating expenses to gross portfolio, such as the size of the loan portfolio, years of operation, etc.

Box 2. Are Institutions with Large Loan Portfolios More Efficient?*



*The 17 institutions represented in the graph are the same as those described in the main article, and the data is from 1998.

Judging from the graph, there are economies of scale in microfinance. This conclusion is perhaps not very surprising, but it is interesting to note that the effect seems particularly strong for portfolios of up to \$10 million. Beyond that point, the effect is much less pronounced. The data in the graph does not take into account or control for other factors that could affect the ratio of operating expenses to gross portfolio, such as years of operation, average loan size, etc.

FINCA's non-existent cost of funds reflects its dependence on grants or interest free loans from international donors while FED's high nominal cost reflects the high inflation rate in Ecuador during 1998. When the effects of inflation are eliminated, Financiera Visión in Paraguay and FUCAC emerge as institutions with high real funding costs at 11.1% and 11.9% respectively. Several institutions, including FINCA, Compartamos, FUNADEH and FAMA, have negative real funding costs.

4 Profitability

Return on assets and equity are two pre-eminent indicators of profitability. Return on assets is an overall measure of profitability that reflects the profit margin and efficiency of the institution. Simply put, it measures how well the institution uses all its assets. Return on equity measures the return to shareholders and reflects the favorable effects of financial leverage.

Return on assets and equity are excellent indicators of profitability

for normal profit-driven institutions. However, their use in the context of microfinance is somewhat problematic because many microfinance institutions still receive grants and concessional funding from various sources. In those cases, the return on assets and equity will not really reflect the performance of the institution, but rather an artificially low funding cost. Direct comparisons among institutions are further complicated by the fact that financial institutions are able to manage their net income by adjusting their provision expense.

When adjustments are made for subsidies and disparate provisioning policies,

the 1998 return on assets and equity for the 17 participating institutions declines significantly compared to the unadjusted numbers (see Table 4)³. This decline is primarily a result of the subsidy adjustment, by which donated capital is assigned an interest cost. It is worth mentioning that the average profitability of the 17 institutions was considerably lower in 1998 than in 1996 and 1997 due to the worsening economic climate in the region.

Among the 17 institutions, Compartamos in Mexico has the highest unadjusted return on assets at 26.3%. However, this number declines towards the median when subsidies are taken

Table 4. Profitability, 1998

Indicator	Low	Median	Mean	High
Return on assets	0.57%	4.6%	7.8%	26.3%
Return on equity	2.2%	17.5%	20.4%	48.0%
Return on assets (adjusted)	-14.8%	1.2%	-0.7%	4.7%
Return on equity (adjusted)	-78.0%	2.6%	-2.3%	21.2%

³For provisions, the following uniform policy was applied: 1-30 days: 10%; 31-60 days: 30%; 61-90 days: 60%; >90 days: 100%. Loans more than 360 days past due are considered written off. In terms of subsidies, a financial expense (based on the bank lending rate for short and medium term loans in each country, as indicated by the International Monetary Fund) has been assigned to funds granted or provided to the institution below market rates. Finally, the results are also adjusted for inflation and accrued interest in those cases where these adjustments are not carried out by the institution itself.

into account. Instead, FED turns out to have the highest return on assets at 4.7% after all adjustments have been made. High lending rates and strong investment returns from its marketable securities largely explain the high profitability of FED. Other well-performing institutions with high return on their assets include WWB Cali in Colombia and Genesis Empresarial.

As for return on equity, FED leads the group in unadjusted terms at 48% while BancoSol in Bolivia has the best performance in adjusted terms at 21.2%. Adjustments for inflation and minor subsidies bring the return of equity for FED down to a respectable 11.9%. The strong performance of BancoSol reflects its professional management, its relatively high leverage (6.8), and the pressures of being a shareholder-based institution in which return on equity is a main priority. Other strong performers in terms of return on equity include Caja los Andes and Financiera Calpia.

Table 5. Productivity and Efficiency Indicators, 1998

Indicator	Low	Median	Mean	High
Loans per credit officer	84	320	551	2615
Operating expenses* /avg. gross portfolio	8.2%	22.0%	31.5%	73.3%
Operating expenses /avg. number of loans	\$37	\$114	\$145	\$296

* Operating expenses = personnel expenses + administration expenses. Interests paid, provisions and depreciation are not part of operating expenses.

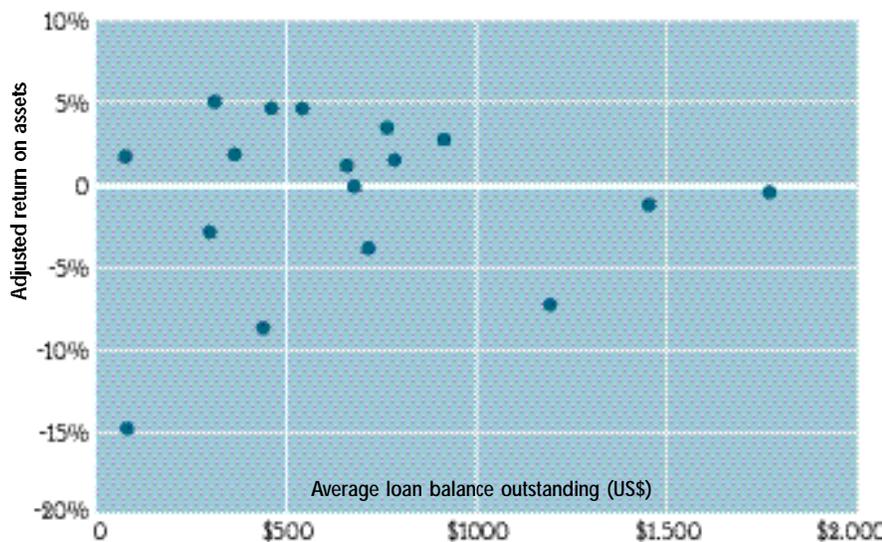
Productivity & Efficiency

The number of loans outstanding per credit officer is a classic indicator of productivity for microfinance institutions. This indicator reflects the institution's ability to streamline its lending methodology and credit operations. In this regard, FUCAC is the undisputed leader with more than 2,600 loans per credit officer. However, it is important to mention that this achievement reflects the use of physical collateral for most loans as well as Uruguay's well-developed infrastructure for communications and financial information. Among the remaining institutions, Caja Municipal Arequipa

has the highest number of loans per credit officer at 690.

The ratio of operating expenses to the average value of the gross portfolio is a commonly used indicator of institutional efficiency. This indicator takes into account not only the amount of inputs and outputs, but also their price and value. Among the 17 participating institutions, FUCAC, Genesis and Caja los Andes have the lowest ratios of operating expenses to gross portfolio at 8.2%, 11.3%, and 13.8% respectively. A weakness of the indicator as stated here is that the ratio improves as the average loan size increases, some-

Box 3. Are Institutions with High Average Loan Sizes More Profitable?*



*The 17 institutions represented in the graph are the same as those described in the main article, and the data is from 1998.

Institutions with large average loan sizes are not necessarily more profitable than institutions with smaller average loan sizes, as shown by the lack of any discernable pattern in the graph. There are quite naturally a fairly large number of other factors that could also influence the return on assets, for example the size of the loan portfolio, portfolio yield, economic conditions, provisioning policies and use of subsidized funds. The numbers in the graph have been adjusted to eliminate the effect of subsidies and different provisioning policies. This makes the numbers for return on assets reasonably comparable across institutions on a relative basis. In other words, the comparison of adjusted values enhances the ability to conclude that the direct relationship between average loan size and profitability is weak.

Box 4. The Cost of a Microenterprise Loan

It is well known that providing microenterprise loans is expensive. However, little is known about how that cost is actually distributed over the various steps of the lending cycle.

A study by the Evaluation Office of the Inter-American Development Bank examined the loan cost for 5 NGOs, 6 specialized finance companies and banks, and 3 microfinance divisions of commercial banks in Ecuador, El Salvador and Paraguay. The results of the study indicate that the distribution of costs over the lending cycle is quite different for NGOs, specialized financial institutions and, in particular, microfinance divisions of conventional banks. Furthermore, the results show that a large percentage of costs, ranging from 36.5% for NGOs to 76.6% for microfinance divisions of conventional banks, are incurred after loan approval.

Distribution of Cost Over Lending Cycle, 1998

	Promotion	Request	Screening	Approval	Disbursement	Repayment*	Total Cost
Non-Governmental Organizations	\$21 (10.5%)	\$16 (8.0%)	\$25 (12.5%)	\$22 (11.0%)	\$32 (16.0%)	\$84 (42%)	\$200 (100%)
Specialized Banks and Finance Companies	\$21 (20.2%)	\$11 (10.6%)	\$21 (20.2%)	\$13 (12.5%)	\$15 (14.4%)	\$23 (22.1%)	\$104 (100%)
Microfinance Divisions of Conventional Banks	\$80 (2.9%)	\$143 (5.3%)	\$213 (8.0%)	\$190 (7.1%)	\$490 (18.4%)	\$1,552 (58.2%)	\$2,668 (100%)

*The high repayment cost incurred by microfinance divisions of conventional banks is partly explained by longer loan terms and a larger number of installments.

The study also offers some additional interesting observations. First, there is a trade-off between resources spent on screening clients and the rate of default. Second, economies of scale start to occur when loan portfolios exceed 1,000-2,000 loans and level off at about 10,000 loans. Third, the institutions do not appear to take full advantage of potential cost savings from repeat clients. In most cases the cost savings correspond only to lower promotion expenses, not lower screening or approval costs.

Contact: William Gheen, IDB Evaluations Office (williamg@iadb.org). For a more detailed summary of the study, see the July 1999 issue of the Microbanking Bulletin published by Calmeadow.

thing that is not indicative of efficiency. However, as Box 3 and 4 show, it is not necessary to have large average loans or an enormous loan portfolio to achieve a high level of efficiency.

6

The ratio of operating expenses to the average number of loans outstanding shows the cost per loan of administering the loan portfolio. By using the number of loans instead of gross portfolio as the denominator, the effect of different average loan

sizes is eliminated. The institutions with the lowest cost per loan are FINCA in Nicaragua at \$37 and Compartamos at \$45. While FINCA's low cost per loan primarily is a result of low personnel and administrative costs, the low cost at Compartamos also reflects its relatively high productivity—297 loans per credit officer.

Loan Portfolio

Portfolio yield represents the yearly return achieved by the institution

through interests and fees on its loan portfolio. Although portfolio yield is affected by arrears, the measure is not primarily an indicator of performance but rather a function of strategic decisions and market conditions, such as competition and inflation. Portfolio yields tend to be lower in more mature and competitive markets and, perhaps somewhat surprisingly, among institutions that do not receive subsidies.

Among the 17 participating institutions, Compartamos has the highest nominal and real portfolio yields at 109.2% and 95.0% respectively. With real yields in the 50-60% range, FINCA, FAMA, Mibanco and FED are also among the highest in the group. The lowest yields are found in FIE with 26.2% in nominal terms and 17.6% in real terms. Other institutions with low real portfolio yields include Genesis Empresarial at 20.3% and Caja

Table 6. Loan Portfolio Indicators, 1998

Indicator	Low	Median	Mean	High
Nominal portfolio yield	26.2%	50.5%	59.9%	109.2%
Real portfolio yield*	17.6%	34.4%	39.9%	95.0%
Loans > 30 days past due / gross portfolio	0.6%	3.5%	5.2%	13.0%
Loan loss reserves / loans > 30 days past due	14.9%	103.6%	149.0%	492.0%

*Real portfolio yield = nominal portfolio yield – domestic inflation

los Andes at 22.5%, both of which are very competitive institutions.

The percentage of loan balances more than 30 days past due has emerged as a commonly used indicator for portfolio quality in microfinance. When a loan is more than 30 days past due, there is a significant risk that it will not be recovered, particularly in the context of microfinance where loans are short-term and uncollateralized. The leading institutions in terms of portfolio quality is FIE at 0.6%, FINCA at 0.8% and WWB Cali at 1.2%. With regards to FIE, it should be mentioned that its past due rate benefits from its recent transformation to a regulated entity through which some of the problem loans were left behind in the original NGO. In the

case of FINCA, the low delinquency is a direct result of the added guarantee offered by the internal savings accounts of the village banking model.

The ratio of loan loss reserves to loan balances more than 30 days past due shows the extent to which the institution is setting aside resources to deal with problem loans. A high ratio of loan loss reserves to past due loans usually indicates that the institution is cautious about its credit risk, although reserves can also be used as a mechanism to smooth out the institution's profits from year to year. Table 6 shows that the average level of loan loss reserves in relation to delinquent loans is very high among microfinance institutions. At the very least, this should be interpreted as a recognition

by the industry that delinquent microenterprise loans are difficult to recover. The institution with the highest reserves in relation to delinquent loans is Caja Municipal Arequipa, which has set aside reserves equal to nearly five times its loan balance more than 30 days past due.

From Benchmarking to Rating

The use of financial ratios and benchmark indicators is an important tool for assessing microfinance institutions, increasing transparency and promoting the integration of microfinance into the mainstream finance community. But this approach has its limits. While financial ratios and benchmark indicators do permit a

Box 5. Five Top Microfinance Institutions, 1998*

	FED (Ecuador)	Genesis (Guatemala)	WWB Cali (Colombia)	Financiera Calpia (El Salvador)	BancosSol (Bolivia)
GENERAL					
Institutional form	NGO	NGO	NGO	Finance company	Bank
Gross loan portfolio (US\$ million)	\$3.5	\$11.9	\$8.6	\$22.7	\$74.9
Number of loans (million)	11.6	22.4	18.8	29.1	81.6
Number of employees	122	160	72	199	568
Average loan balance	\$300	\$531	\$459	\$781	\$919
Portfolio yield (nominal)	102.8%	28.3%	54.8%	33.7%	34.9%
PROFITABILITY					
Return on assets (adjusted)	4.7%	4.2%	4.2%	3.4%	2.9%
Return on assets (unadjusted)	23.8%	6.9%	7.5%	3.4%	4.2%
Return on equity (unadjusted)	48%	23.3%	17.5%	14.6%	29.7%
PRODUCTIVITY & EFFICIENCY					
Loans per credit officer	184	320	537	346	450
Gross portfolio per credit officer	\$55,256	\$170,136	\$246,848	\$270,409	\$278,617
Operating expenses/avg. assets	17.2%	10.9%	12.8%	13.8%	14.0%
Op. expenses/avg. gross portfolio	36.0%	11.3%	15.2%	14.8%	17.0%
Op. expenses/avg. number of loans	\$90	\$64	\$70	\$114	\$146
LOAN PORTFOLIO					
Portfolio at risk > 30 Days	6.4%	2.4%	1.2%	3.5%	2.6%
Reserves/gross portfolio	7.1%	3.8%	1.2%	6.9%	4.9%
Reserves/portfolio at risk > 30 Days	111.1%	156.4%	100.0%	196.4%	189.3%

* These institutions have been selected based on their adjusted return on assets.

basic understanding of an institution, they offer only a very limited appreciation of risk.

The notion of risk is central since it, together with expected return, is ultimately what investors and creditors evaluate when pricing their resources. A risk assessment must include an in-depth analysis of several fundamental aspects of the institution and its operations, including a review of its information systems, its position in the market, internal audit and control procedures, and the competence and incentives of management and board members. The process of formally assessing the risk of an institution is known as rating and is typically carried out when an institution wants to publicly issue bonds or otherwise access resources in capital markets.

Although several Latin American and Caribbean microfinance institutions are reaching a point at which public issuance of debt instruments and stock becomes a possibility, there are

two major problems with moving from benchmarking to rating. First, established rating firms are not familiar with the microfinance industry or its products. They will therefore find it difficult and expensive to carry out ratings of microfinance institutions at first. Second, many microfinance institutions would find it prohibitively expensive to pay the fees charged by established rating firms, especially since the amount of any issuance is likely to be relatively small.

To bridge the gap between these two industries and spur the integration of microfinance into mainstream finance, rating firms will need opportunities to learn about microfinance, and microfinance institutions will need incentives and assistance to access rating services. Over time, after initial difficulties are resolved, the relationship between rating firms and microfinance institutions should become profitable to both parties. For now, the gap between them remains one of the many important challenges facing the microfinance industry. ■

In Future Issues...

What's so Special About Credit Unions?

The Importance of Credit Bureaus for Microfinance

Myths about Microfinance and Poverty

Friend or Foe?: The Role of the State in Regulating Microenterprises

Is There a Model for Sustainable Business Development Services to Microenterprises?

