Performance Indicators for Microfinance Institutions

TECHNICAL GUIDE

3rd Edition

MicroRate

&

Inter-American Development Bank
Sustainable Development Department
Micro, Small and Medium Enterprise Division

Washington, D. C.,

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Performance indicators for microfinance institutions: technical guide

3rd.
p.cm.
"prepared by Tor Jansson….[et al.]"—t.p verso.

1. Financial institutions. 2. Economic indicators. 3. Microfinance. I. Jansson, Tor. II. Inter-American Development Bank. Sustainable Development Dept. Micro, Small and Medium Enterprise Division.

332.2 P282—dc21

This publication was prepared by Damian von Stauffenberg (MicroRate), Tor Jansson (Inter-American Development Bank), Naomi Kenyon (MicroRate) and María-Cruz Barluenga-Badiola (Inter-American Development Bank). It can be downloaded electronically from the web-sites of the Inter-American Development Bank (www.iadb.org/sds/mic) and MicroRate (www.microrate.com), where it will be continuously expanded and updated. Comments regarding the listed indicators (or proposals for additional ones) can be sent to the Inter-American Development Bank (mipyme@iadb.org or sds/msm@iadb.org) or MicroRate (info@microrate.com).

The opinions expressed herein are those of the authors and do not necessarily represent the official position of the Inter-American Development Bank.

July 2003

Micro, Small and Medium Enterprise Division
TeamSustainable Development Department
Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577
USA

International Data Analysis
Rating Vice Presidency
MicroRate
2107 Wilson Bvd, Suite 450
Arlington, VA 22207
USA

E-mail: mipyme@iadb.org or sds/msm@iadb.org
Fax: 202-623-2307

FOREWORD

Recent years have seen a growing push for transparency in microfinance. An important aspect of this trend has been the increasing use of financial and institutional indicators to measure the risk and performance of microfinance institutions (MFIs). However, it is hard to achieve transparency if there is no agreement on how indicators measuring financial condition, risk and performance should be named and calculated. For example, does "return on equity" mean "return on *initial* equity" or "return on *average* equity"? And how is equity defined, particularly if long-term subsidized loans are present? Should a 20-year subsidized loan from a development bank be considered debt or equity?

The lack of universally understood indicators in microfinance led MicroRate, a rating agency specializing in microfinance, to invite the Inter-American Development Bank (IDB), the Consultative Group to Assist the Poorest (CGAP), the United States Agency for International Development (USAID) and two other rating agencies –MCRIL and PlaNet Rating– to agree on the names and definitions of a set of commonly used indicators. It was not the intention of the group to select the "best" indicators or to try to interpret them, just to discuss names and definitions. The efforts by this so-called "Roundtable Group," led to publication of a list of 20 definitions of performance indicators. SEEP, a network of institutions involved in microfinance, provided valuable assistance in coordinating the final phase of this effort.

The purpose of this technical guide is relatively narrow. It highlights 14 of the most commonly used indicators published by the Roundtable Group and illustrates how they are used. It provides some explanation and analysis of the indicators for those who are interested in understanding their application as well as weaknesses. For each indicator, the Guide presents the proposed definition, interprets its meaning, identifies potential pitfalls in its use, and provides benchmark values for 32 Latin American microfinance institutions compiled by MicroRate (the "MicroRate 32"). It should be noted, however, that these added sections are the work of MicroRate and the IDB, and do not necessarily or automatically reflect the opinion or position of the other entities participating in the Roundtable discussions.

Finally, it is important to point out what the Guide *isn't* or *doesn't* do. It isn't intended to be a complete "how-to" manual for appraising microfinance institutions. Such manuals, which describe the methodology for analyzing microfinance institutions, already exist. Further, it doesn't discuss financial adjustments, which are needed when comparing institutions with very distinct accounting practices. Finally, it doesn't represent any formal position or approval of MicroRate, MCRIL, PlaNet Rating, CGAP, USAID or the IDB regarding the included indicators.

Within its carefully defined purpose, we believe this guide will make an important contribution to the field of microfinance.

Damian von Stauffenberg, Director
MicroRate

Alvaro Ramirez, Chief
Micro, Small and Medium Enterprise Division, IDB

CONTENTS

PUTTING THE INDICATORS INTO CONTEXT
Portfolio Quality *1*
Efficiency and Productivity *2*
Financial Management *2*
Profitability *3*

PORTFOLIO QUALITY
Portfolio at Risk *6*
Provision Expense Ratio *9*
Risk Coverage Ratio *11*
Write-Off Ratio *13*

EFFICIENCY AND PRODUCTIVITY
Operating Expense Ratio *16*
Cost Per Borrower *18*
Personnel Productivity *20*
Loan Officer Productivity *22*

FINANCIAL MANAGEMENT
Funding Expense Ratio *26*
Cost of Funds Ratio *28*
Debt/Equity Ratio *30*

PROFITABILITY
Return on Equity *34*
Return on Assets *37*
Portfolio Yield *39*

ANNEX I: CALCULATING THE RATIOS 41

ANNEX II: THE MICRORATE 32 47

PUTTING THE INDICATORS INTO CONTEXT

The indicators presented in this Guide fall into one of four main categories: portfolio quality, efficiency and productivity, financial management and profitability. Of course, there are other aspects that throw light on the performance of microfinance institutions and, even within the four categories listed here, there are many different performance measures. However, the Guide does not set out to be comprehensive, it only presents the most important indicators that, taken together, provide a reasonable overview of the performance, risk and financial condition of a microfinance institution.

One area of analysis that has long suffered from a lack of indicators is management and governance, including organizational structure, performance measurement, enforcement practices, information flows, microfinance know-how and ownership structure. While absolutely critical for determining the overall risk and future potential of an institution, it is also an area that is hard to quantify. Considering that the efforts to develop meaningful indicators for management and governance conditions are somewhat recent, this area has been omitted from this version of the Guide. This omission should not in any way be interpreted as recommendation to focus less on management and governance issues when assessing a microfinance institution. In fact, given the nonprofit status or origin of many microfinance institutions, this should typically be a priority in any such assessment.

It should also be stated up front that the Guide is using mainly unadjusted numbers; that is, the financial data are taken straight from the MFIs own financial statements. There is an obvious problem with this approach since vast differences in accounting practices can make comparisons among MFIs tricky. Provisioning policies, for instance, illustrate this. Among the MicroRate 32, provision reserves to cover possible loan losses range from the extremely conservative (for example Compartamos in Mexico covers loans affected by arrears (over 30 days) nearly four times) to the inadequate. This means that comparing MFIs at both ends of this spectrum would be like comparing apples with oranges. To overcome this problem, the Guide shows the adjusted return on equity and assets, i.e. what return on equity and return on assets would have been for each of the MicroRate 32 if the numbers had been adjusted for differences in accounting policies and for subsidies. And adjustments do matter. While none of the MicroRate 32 displayed a negative return on assets or equity in their 2002 financial statements, half a dozen MFIs would in fact have showed losses had they all operated under an identical set of conservative rules and practices.

In an attempt to be as specific and concrete as possible, the Guide also provides an annex where the indicators are calculated through. These calculations are based on a sample financial statement (FIE, Bolivia) and should help anyone who wants to start using the indicators in a practical setting. A second annex shows 12 performance indicators for each of the MicroRate 32 based on unadjusted numbers. It also lists two indicators with adjusted numbers (return on equity and return on assets).

PORTFOLIO QUALITY

Portfolio quality is a crucial area of analysis, since the largest source of risk for any financial institution resides in its loan portfolio. The loan portfolio is by far an MFI's largest asset and, in addition, the quality of that asset and therefore, the risk it poses for the institution can be quite difficult to measure. For microfinance institutions, whose loans are typically not backed by bankable collateral, the quality of the portfolio is absolutely crucial. Fortunately, many microfinance institutions have learned how to maintain loan portfolios of very high quality. In fact, leading microfinance institutions typically better at maintaining a higher portfolio quality than their commercial bank peers in many countries.

The most widely used measure of portfolio quality in the microfinance industry is Portfolio at Risk (PaR), which measures the portion of the loan portfolio "contaminated" by arrears as a percentage of the total portfolio. Although various other measures are regularly used, PaR has emerged as the indicator of choice. It is easily understandable, does not understate risk, and is comparable across institutions. A microenterprise loan is typically considered to be at risk if a payment on it is more than 30 days late. This rule is much stricter than what is practiced among commercial banks, but it is justified given the lack of bankable collateral in microfinance.

In addition to the Portfolio at Risk indicator, this publication includes three other indicators related to portfolio quality and associated risks: Write-Offs, Provision Expenses and Risk Coverage.[1]

Efficiency and Productivity

Efficiency and productivity indicators are performance measures that show how well the institution is streamlining its operations. Productivity indicators reflect the amount of output per unit of input, while efficiency indicators also take into account the cost of the inputs and/or the price of outputs. Since these indicators are not easily manipulated by management decisions, they are more readily comparable across institutions than, say, profitability indicators such as return on equity and assets. On the other hand, productivity and efficiency measures are less comprehensive indicators of performance than those of profitability.

Microfinance institutions have much lower rates of efficiency than commercial banks because on a dollar per dollar basis microcredit is highly labor intensive: a hundred-dollar loan requires about as much administrative effort as a loan a thousand times larger. In an MFI, administrative costs may be $15, $20, or even $30 for each $100 in the loan portfolio, so the efficiency ratio is 15%, 20% or 30%, whereas in a commercial bank efficiency ratios of 1.5%, 2% or 3% are common. Economies of scale have much less impact on efficiency in MFIs than is usually believed because of the high variable costs of the microcredit technology. If the loan portfolio of an MFI exceeds $2 to $3 million, growth does not seem to bring significant efficiency gains and small MFIs can often be more efficient than their much larger peers.

This publication includes four indicators to measure productivity and efficiency: Operating Expenses, Cost per Borrower, Personnel Productivity and Loan Officer Productivity.

Financial Management

Financial management assures that there is enough liquidity to meet an MFI's obligations to disburse loans to its borrowers and to repay loans to its creditors. Even though financial management is a back office function, decisions in this area can directly affect the bottom line of the institution. Errors in liquidity or foreign exchange management, for example, can easily compromise an institution with efficient credit operations and otherwise sound management. The importance of adequate liquidity, and hence of financial management, grows further if the MFI is mobilizing savings from depositors. Financial management can also have a decisive impact on profitability through the skill with which liquid funds are invested. Finally, managing foreign exchange risk and matching the maturities of assets and liabilities involve financial management. Both are areas of great potential risk for an MFI and underline the importance of competent financial management.

[1] See CGAP, Occasional Paper No. 3 June 1999, "Measuring Microcredit Delinquency: Ratios Can Be Harmful to Your Health" for an excellent discussion of the various portfolio quality measures

This publication includes three indicators to gauge the financial management of a microfinance institution: Funding Expense, Cost of Funds and the Debt/Equity.

PROFITABILITY

Profitability measures, such as return on equity and return on assets, tend to summarize performance in all areas of the company. If portfolio quality is poor or efficiency is low, this will be reflected in profitability. Because they are an aggregate of so many factors, profitability indicators can be difficult to interpret. The fact that an MFI has a high return on equity says little about why that is so. All performance indicators tend to be of limited use (in fact, they can be outright misleading) if looked at in isolation and this is particularly the case for profitability indicators. To understand *how* an institution achieves its profits (or losses), the analysis also has to take into account other indicators that illuminate the operational performance of the institution, such as operational efficiency and portfolio quality. The profitability analysis is further complicated by the fact that a significant number of microfinance institutions still receive grants and subsidized loans. "Comparing apples with apples" is always a problem in microfinance, because subsidies are still widespread and accounting practices vary widely.

Creative accounting can have an astonishing impact on profits. Normally, external auditors, tax authorities and banking regulators tend to set limits on this sort of creativity, but microfinance is not yet a normal industry. External auditors have, on the whole, been slow to adapt to microfinance, few MFIs are subject to taxation, and even fewer fall under the authority of banking supervisors. This means that more than the usual amount of care is needed for the analysis of microfinance institutions. A simple example will illustrate this. Banks usually don't have much latitude in setting their loan loss provisions. Regulators and tax authorities will tell them what to do, and auditors will watch that they do it. At this point however, relatively few MFIs are regulated financial institutions and, for those who aren't, it would be easy to achieve a dramatic change in their profitability through the simple expedient of adjusting the level of loan loss provisions. An analyst who focuses exclusively on profitability would have no way of detecting this.

Finally, this guide has grouped portfolio yield among the profitability indicators, not because the cost of credit to the clients measures profitability *per se*, but because profitability is often a function of how much MFIs charge their clients. Other financial institutions are limited by competition as to how much they can charge, but microfinance is still such a new activity that many MFIs operate in a seller's market. In the absence of competition, even highly inefficient MFIs can remain profitable by simply raising their rates. On the other hand, in a fiercely competitive market like Bolivia even very efficient MFIs find it difficult to achieve high portfolio yields.

This publication includes three indicators to measure profitability: Return on Equity, Return on Assets and Portfolio Yield. As mentioned earlier, return on equity and return on assets have been adjusted for subsidies and varying accounting practices in order to make the results comparable across institutions.

PORTFOLIO QUALITY

PORTFOLIO AT RISK

(Outstanding Balance on Arrears over 30 days + Total Gross Outstanding Refinanced (restructured) Portfolio) / Total Outstanding Gross Portfolio

How to Calculate It

Portfolio at Risk (PaR) is calculated by dividing the outstanding balance of all loans with arrears over 30 days, plus all refinanced (restructured) loans,[2] by the outstanding gross portfolio as of a certain date. Since the ratio is often used to measure loans affected by arrears of more than 60, 90, 120 and 180 days, the number of days must be clearly stated (for example PaR30).

Not all MFIs are able to separate their restructured loans from their non-restructured loans. Consequently, if restructured loans do not appear to be material (less than 1%), then the total portfolio affected by arrears greater than 30 days can be accepted as a proxy of the portfolio at risk. Even if restructuring appears to be significant (but cannot be precisely determined) the portfolio at risk ratio can still be presented, but should then specify that it does not include restructured loans. Simply ignoring restructured loans would underestimate risk significantly.

What It Means

This ratio is the most widely accepted measure of portfolio quality. It shows the portion of the portfolio that is "contaminated" by arrears and therefore at risk of not being repaid. The older the delinquency, the less likely that the loan will be repaid. Generally speaking, any portfolio at risk (PaR30) exceeding 10% should be cause for concern, because unlike commercial loans, most microcredits are not backed by bankable collateral. Finaciera Visión, FinAmerica, BancoSol, Caja los Andes and FIE are the exceptions to this rule, as all have lowered their risk by backing loans with commercial assets at a greater rate than the rest of the industry. In those cases, a higher Portfolio at Risk ratio does not necessarily translate into expected losses for the institution.

The portfolio at risk measure is free from much of the subjective interpretations that plague other portfolio quality indicators, such as repayment rate. Furthermore, portfolio at risk is a more conservative measure of the institutional risk than repayment rate or arrears because both the numerator and the denominator include the outstanding balance—it measures the complete risk and not only the immediate threat.

What to Watch Out For

Some institutions will only report arrears (the actual late payment amount) as opposed to the entire outstanding balance of the delinquent loan. As mentioned before, this practice will seriously underestimate portfolio risk.

---

[2] Renegotiating a loan is a way for the borrower to work out payment difficulties and for the creditor to recover loans that would otherwise go unpaid. When an MFI *restructures* a loan, it takes the remaining balance and spreads it out over a longer term, resulting in more manageable payments for the borrower. An MFI *refinances* a loan by financing its payment with a completely new loan to the client. Please note that the inclusion of refinanced or restructured loans in the Portfolio at Risk Ratio was a point of considerable discussion and disagreement in the Roundtable. Some participants maintained that restructured and refinanced loans should not be included in the ratio since reliable data on such loans is very hard to obtain from most MFIs. It was also pointed out that refinancing can be a legitimate way to increase credit to a good and successful client.

Another crucial aspect in assessing portfolio risk is related to the practice of restructuring and refinancing loans. The Colombian MFI FinAmérica, formerly Finansol, exemplifies the danger of these practices. In 1995, Finansol nearly tripled its portfolio by concentrating all its efforts on new loans. Arrears shot up and Finansol lost control of its portfolio. For a time, Finansol was able to cover up rising arrears by restructuring delinquent loans. Eventually, however, the restructured loans fell back into arrears; by early 1996, Finansol was on the brink of bankruptcy. As the example of Finansol illustrates, restructured loans should be analyzed with care.

Loan repayment frequency is yet another relevant factor in assessing portfolio risk. Generally speaking, greater loan repayment frequency enhances the seriousness of the portfolio at risk figure. If repayments are weekly, a loan that is more than 30 days overdue will have missed at least three payments, which is certainly more serious than if only one monthly payment is late. At the other extreme, one has to watch out for loans with one balloon payment at the end of the loan period, as is the case in agricultural lending when repayments are tied to the crop cycle. Where this is the case, conventional measures of PaR (30, 60, 90) are meaningless.

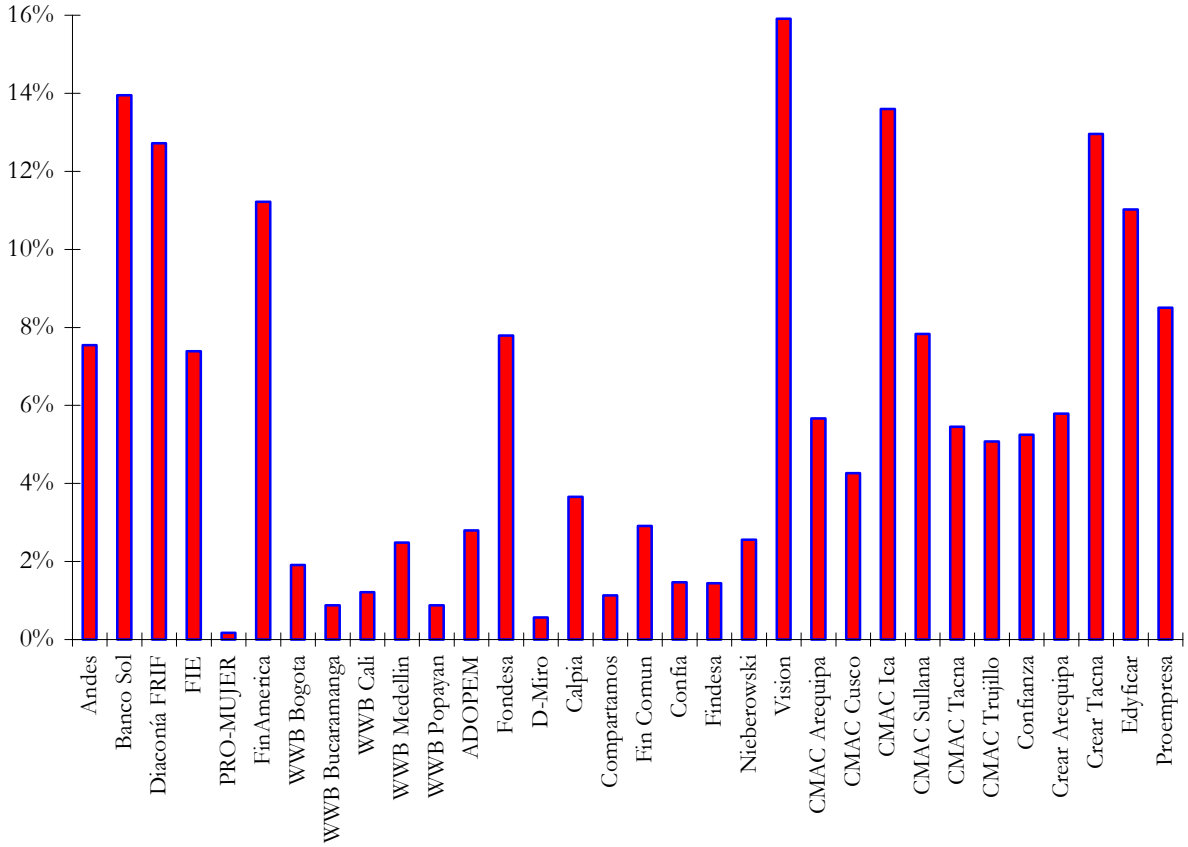
Portfolio at risk is a useful measure, but it does not tell the whole story. Like all performance measures, portfolio at risk can be manipulated. The most common form of doing this is to write off delinquent loans. Portfolio at risk must therefore always be analyzed together with the fourth measure of portfolio quality, the write off ratio. Also, portfolio's representing very different risk profiles can have the same portfolio at risk value. For example, while the portfolio at risk measure may be the same, a loan portfolio with a large concentration of seriously delinquent loans (loans affected by arrears of more than 90 or 180 days) will be much riskier than a delinquent portfolio where arrears remain in the range between 30 and 60 days.

Where the Industry Is

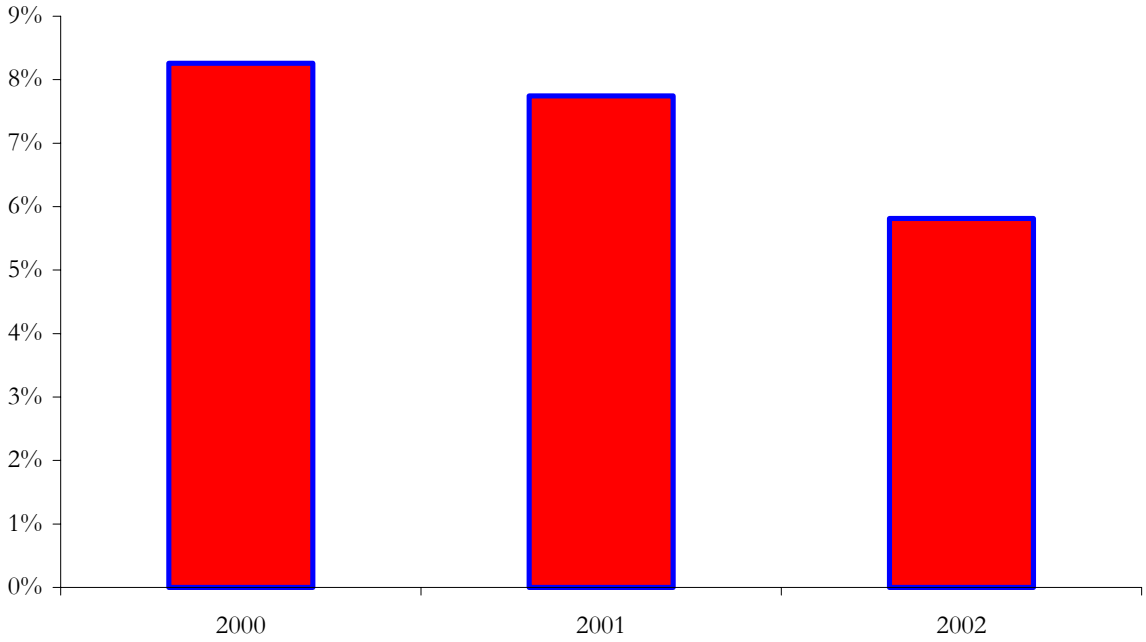
Portfolio at risk has traditionally been far lower in MFIs than in the commercial banking sector. The leading MFIs show portfolios at risk of 1-6%, with few exceeding 10%. In 2002 the average of the MicroRate 32 was 5.8% and 13 MFIs had Portfolio at Risk of less than 3%. The improvement in portfolio quality during 2002 has been remarkable and it seems to suggest that the worst effects of the economic shocks of 1999-2001 have been overcome.

FinAmérica, with its exceptionally high portfolio at risk, illustrates the risk of "mission drift." In 1998, FinAmérica, a Colombian MFI, began to drive up average loan size to reduce its operating expenses. Much of its new lending was for small business loans, which were covered by credit guarantees issued by business development institutions. These small business loans have proven to be exceptionally risky and FinAmérica reversed its policy in 1999. A similar development can be seen among MFIs in Bolivia, where increasing loan sizes have been accompanied by increasing loan delinquency. Persistent recession has also played a role in Bolivia, but the close link between increasing average loan size and deteriorating portfolio quality is nonetheless remarkable. The very high portfolio at risk of Vision in Paraguay reflects that country's dire economic situation in the wake of the Argentine economic crisis.

MicroRate 32: Portfolio at Risk, December 31, 2002



MicroRate 32: Average Portfolio at Risk, 2000 – 2002



PROVISION EXPENSE RATIO

Loan Loss Provisioning Expenses / Average Gross Portfolio

How to Calculate It

The Provision Expense Ratio is calculated by dividing the loan loss provisioning expense for the period (not to be confused with the loan loss reserve in the balance sheet) by the period's average gross portfolio.

What It Means

This measure gives an indication of the expense incurred by the institution to anticipate future loan losses. One should expect this expense to increase in step with overall portfolio growth. For formalized MFIs, local banking and tax laws will prescribe the minimum rate at which they must make provisions to allow for loan losses. NGOs on the other hand can follow a wide variety of practices, including making no provisions at all (this is rare), provisioning a certain percentage of new loans, or relating provisions to the quality of the portfolio.

The level of provision expenses has to be analyzed together with the risk coverage ratio (see below). If loan loss reserves in the balance sheet fall relative to the portfolio at risk, then provision expenses are probably too low.

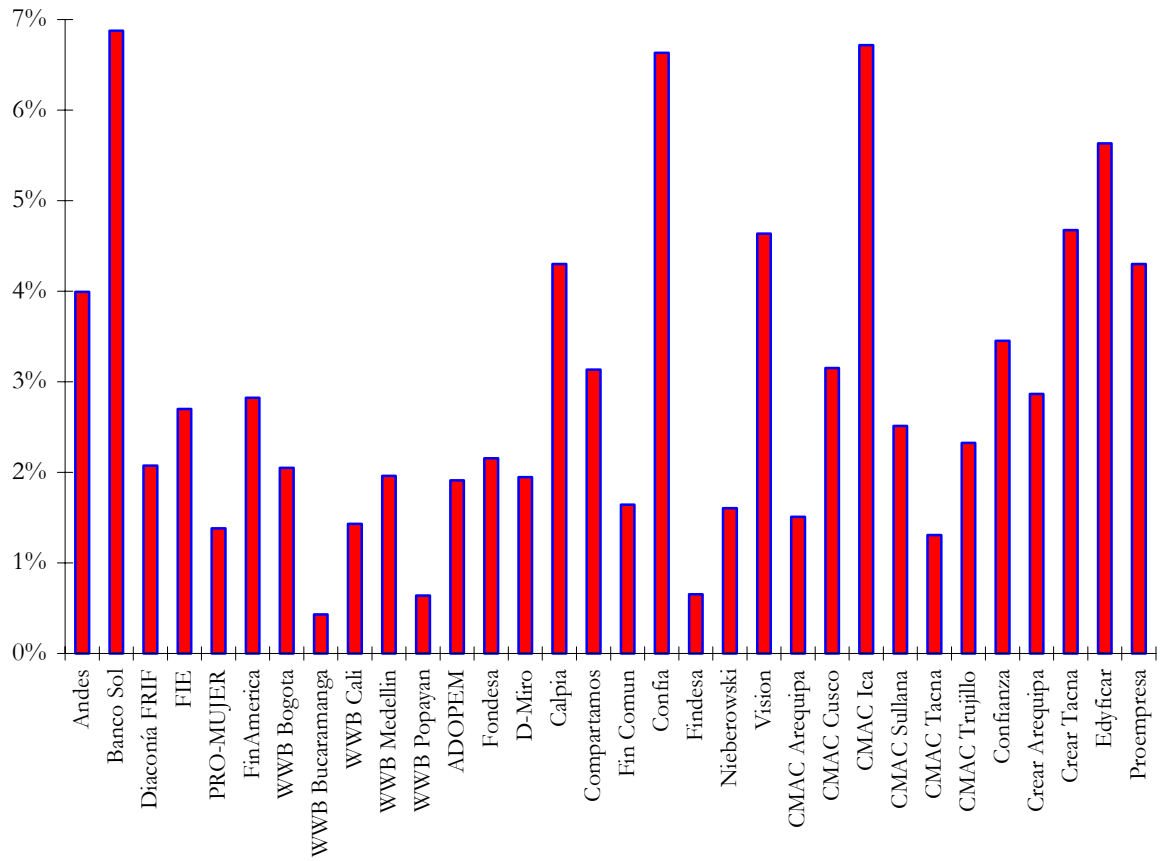
What to Watch Out For

MFIs need stricter provisioning practices than banks or finance companies because their loans are less collateralized. Banking laws usually do not take this into account and require provisioning policies and reserve levels that are inadequate for a microcredit portfolio. Regulated MFIs may therefore be in compliance with the law and yet be under-provisioned. In some cases, there may also exist incentives to over-provision, particularly among NGOs, in order to hide profits that could undermine access to donor subsidies. On the other hand, by simply scaling back on its provision expenses, an MFI can turn a looming loss into a profit for a year or two. In general, provisioning practices need to be closely watched since NGOs are tempted to (mis) use provision expenses to manage their profitability (banking laws limit this possibility for regulated MFIs).

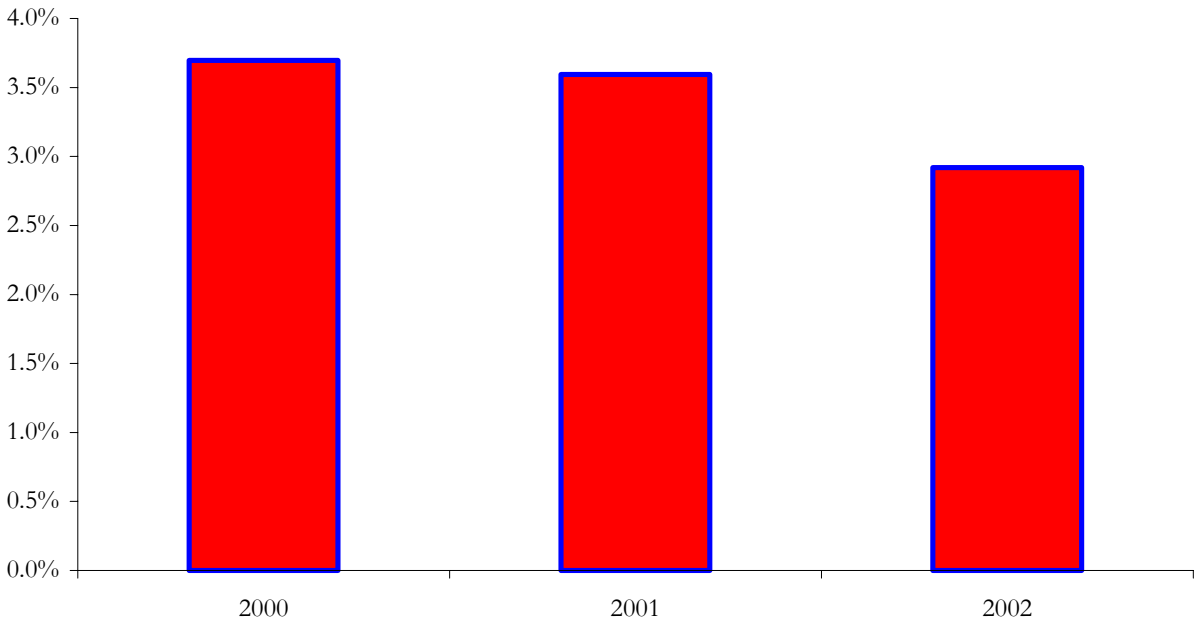
Where the Industry Is

Provision expense ratios for the MicroRate 32 vary between 0.4% and nearly 7%. The average for the group has been decreasing since 2000, reflecting the improvement in portfolio quality.

MicroRate 32: Provision Expense Ratio, December 31, 2002



MicroRate 32: Average Provision Expense Ratio, 2000 – 2002



RISK COVERAGE RATIO

Loan Loss Reserves / (Outstanding Balance on Arrears over 30 days + Refinanced Loans)

How to Calculate It

The Risk Coverage Ratio is calculated by dividing loan loss reserves by the outstanding balance in arrears over 30 days plus refinanced loans.

What It Means

This measure shows what percent of the portfolio at risk is covered by actual loan loss reserves. It gives an indication of how prepared an institution is for a worst-case scenario. For microfinance institutions, loan loss reserves usually range between 80% and 120% of portfolio at risk (the range was 24% to 405% for the MicroRate 32). These are much higher levels than maintained by commercial banks. To some extent, these high reserves reflect an attitude of "when in doubt, be conservative." Microfinance is a relatively new phenomenon and the risk profile of microfinance portfolios is still not well understood. But high loan loss reserves also take into account that microloan portfolios are often not backed by collateral.

What to Watch Out For

While a higher risk coverage should generally be preferred, there are cases that justify lower levels of coverage. For instance, where collateral-backed lending makes up the majority of the portfolio, a ratio well below 100% is common. For formalized institutions, regulators, and particularly the tax code, usually set minimum limits on provisions.

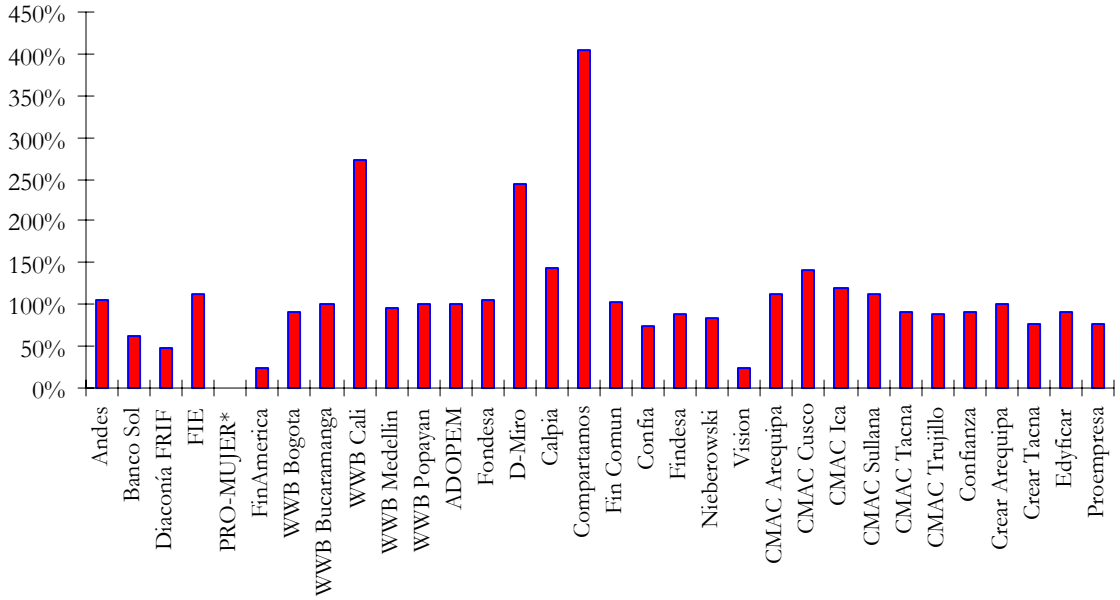
For institutions with very high coverage (>200%), these seemingly high reserves may be a prudent measure to hedge future downturns in the economy or preempt poor performance of the portfolio. WWB Cali in Colombia, one of the leaders in microfinance, has increased loan loss reserves to 273% of portfolio at risk for 2002, up from 262% in 2001 and 207% in 2000. In this case, the institution is bracing itself for economic shocks in a country in turmoil. Compartamos (Mexico), with a risk coverage ratio of 405%, is the fastest growing MFI among the MicroRate 32. A high risk coverage ratio will compensate for the fact that strong growth tends to "dilute" portfolio at risk and the company may be preparing itself for the day when growth rates decline and portfolio risk increases.

Risk coverage must be analyzed in conjunction with portfolio at risk and write-offs, since all three are interdependent. As the previous section illustrates, portfolio at risk can have different risk profiles, even if the overall number is the same. A PaR30 of 5% can be highly risky if it contains a large proportion of loans that are seriously overdue, or it can be relatively safe if loans are sure to be repaid. As for write-offs, they reduce portfolio at risk at the stroke of a pen. To understand portfolio risk, it is essential to check whether good portfolio at risk numbers–and therefore a favorable risk coverage ratio–is the result of good client screening or massive write-offs. In our sample we eliminated an outlier, Pro Mujer, a small NGO (gross portfolio $4.5 million) with an extremely high quality portfolio (PaR 30: 0.2% of gross portfolio). Loan loss reserves covered the tiny portfolio at risk of only $8,000 nearly twenty times. Pro Mujer's numbers are so extreme that the average risk coverage for all MFIs in the sample would have shot up from 112% to 170% if this outlier had been included.

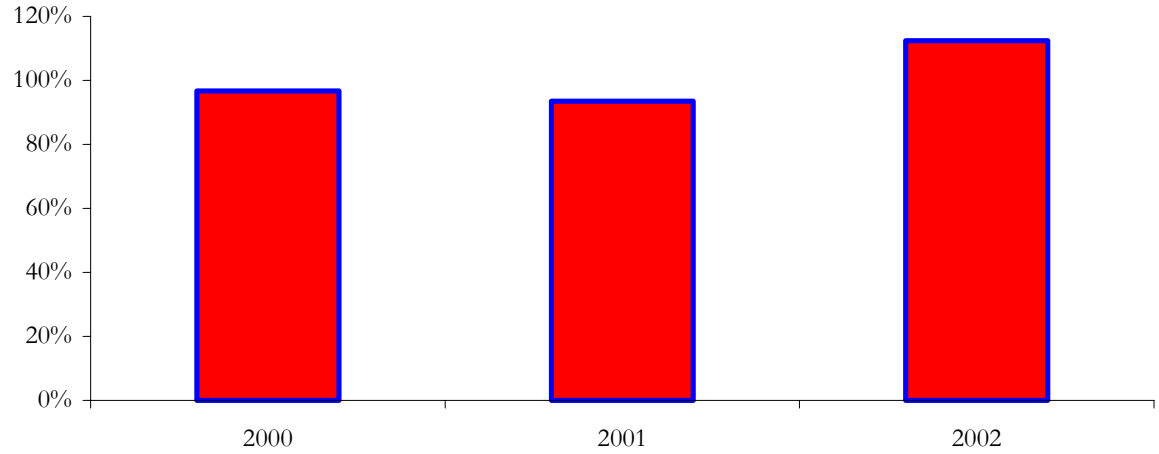
Where the Industry Is

It has generally been assumed that risk coverage ratios would gradually decline as the microfinance industry matures. The MicroRate 32 seemed to confirm this expectation in 2000 and 2001, when the average risk coverage dropped. But 2002 saw a sharp reversal of that trend. Partly, this is the result of improving portfolio quality. As portfolio at risk drops, existing loan loss reserves cover by a higher margin the part of the portfolio that remains contaminated by arrears. But it is also likely that with the portfolio problems of 1999-2001 still a recent memory, many MFIs have decided to adopt more conservative provisioning policies. Also noteworthy is that NGOs are increasing their coverage ratios to fall in line with the rest of the industry.

MicroRate 32: Risk Coverage Ratio, December 31, 2002[3]



MicroRate 32: Average Risk Coverage Ratio, 2000 – 2002



[3] Pro-Mujer was not included as its high-risk coverage ratio is not indicative of the sample, and distorts results considerably.

WRITE-OFF RATIO

Value of Loans Written-Off / Average Gross Portfolio

How to Calculate It

The Write-Off Ratio is calculated by dividing total write-offs for the period by the period's average gross portfolio.

What It Means

This indicator simply represents the loans that the institution has removed from its books because of a substantial doubt that they will be recovered. The writing off of a loan is an accounting transaction to prevent assets from being unrealistically inflated by loans that may not be recovered. The writing off of a loan affects the gross loan portfolio and loan loss reserves equally. So unless provision reserves are inadequate, the transaction will not affect total assets, net loan portfolio, expenses or net income. Write-offs have no bearing whatsoever on collection efforts or on the client's obligation to repay.

What to Watch Out For

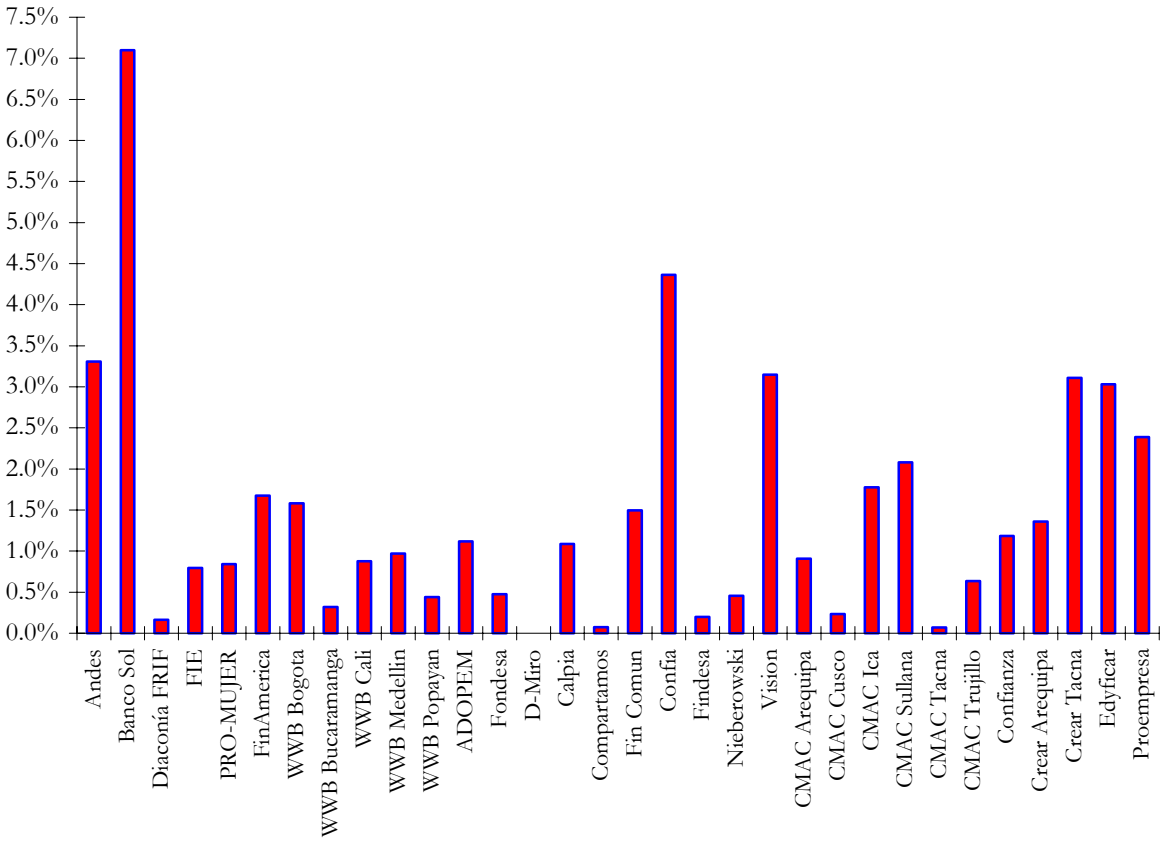
Some institutions will take aggressive write-offs to attempt to sanitize their portfolios. They will then show a low portfolio at risk, and only the write-off ratio will allow an analyst to detect that this improvement is more apparent than real. Other MFIs, particularly NGOs resist writing off their seriously delinquent loans because, they argue, "collection efforts continue."

Write-off policies vary widely among MFIs. For example, Caja los Andes writes off loans if they have been delinquent for 90 days, whereas D-Miro has not written off a loan in years. The write-off ratio is therefore better understood in the context of the portfolio at risk of an institution. In fact, its main purpose is to serve as a control indicator that will allow better understanding of portfolio at risk.

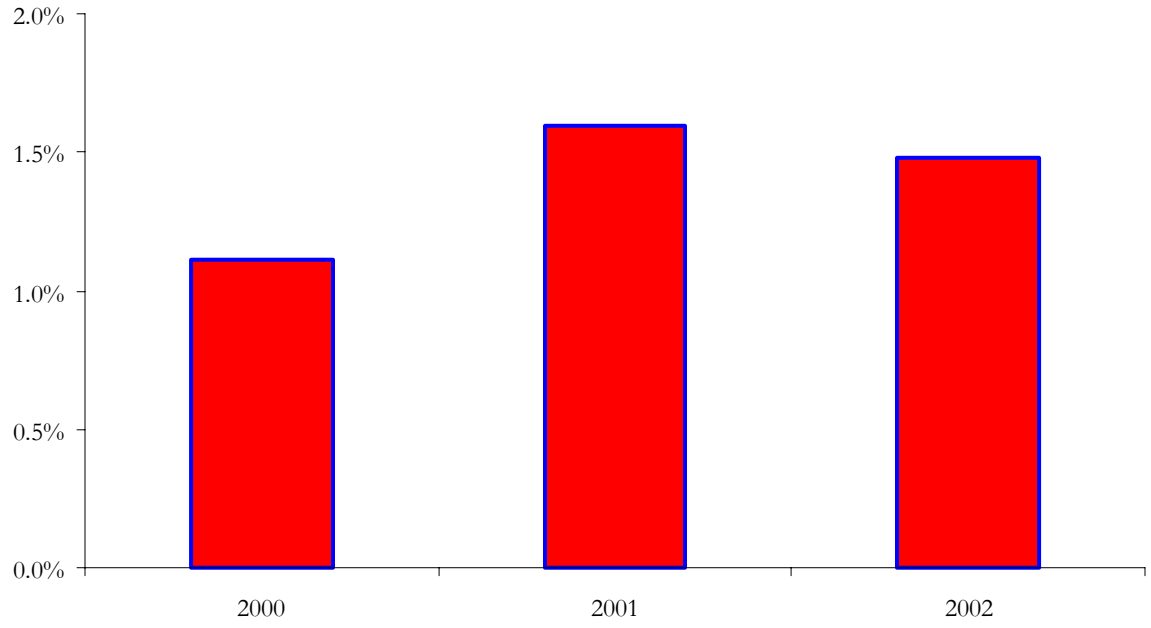
Where the Industry Is

In 2002, write-offs were considerably lower than in 2001. Nonetheless, they remained surprisingly high when compared to portfolio at risk.

MicroRate 32: Write-Off Ratio, December 31, 2002



MicroRate 32: Average Write-Off Ratio, 2000 – 2002



Efficiency and Productivity

OPERATING EXPENSE RATIO

Operating Expenses / Average Gross Portfolio

How to Calculate It

The Operating Expense Ratio is calculated by dividing all expenses related to the operation of the institution (including all the administrative and salary expenses, depreciation and board fees) by the period average gross portfolio. Interest and provision expenses, as well as extraordinary expenses are not included.

What It Means

This ratio provides the best indicator of the overall efficiency of a lending institution. For this reason, the ratio is also commonly referred to as the efficiency ratio: it measures the institutional cost of delivering loan services. The lower the operating expense ratio, the higher the efficiency.

What to Watch Out For

Portfolio size, loan size and salary incentives can help put efficiency levels into context. Portfolio size matters, but not as much as is often assumed. Small MFIs can become more efficient simply by growing. Once portfolio size exceeds about US$3 million, the importance of economies of scale diminishes rapidly and other factors become more important. This explains how FIE, the smallest of the three Bolivian MFIs in the sample, can be more efficient than its much larger competitors or how WWB Cali or WWB Popayán can outperform other MFIs many times their size.

It is often argued that savings mobilization adds substantially to operating expenses, but the MicroRate 32 do not bear that out. Many of the most efficient MFIs mobilize savings and many of the most inefficient don't. Obviously, mobilizing savings does have a cost, but it appears that this rarely adds more than 2 to 3 percentage points to operating expenses.

Loan size has a more decisive impact on efficiency than scale, particularly if average loans drop much below US$300. In village banking operations for example, where average loan size can be as low as US$130, operating expenses are usually above 40% of average gross portfolio. Comparing the 12.2% operating expense ratio of BancoSol to the 33.9% of Compartamos or the 33.1% of Pro-Mujer would be highly misleading. BancoSol has an average loan size of US$1,842 while Compartamos and ProMujer have average loan sizes of US$290 and $128 respectively. Also, it is important to distinguish between largely rural operations, like Compartamos, and urban microcredit programs. The operating expenses of rural microlenders are obviously much higher since their clients are more widely dispersed.

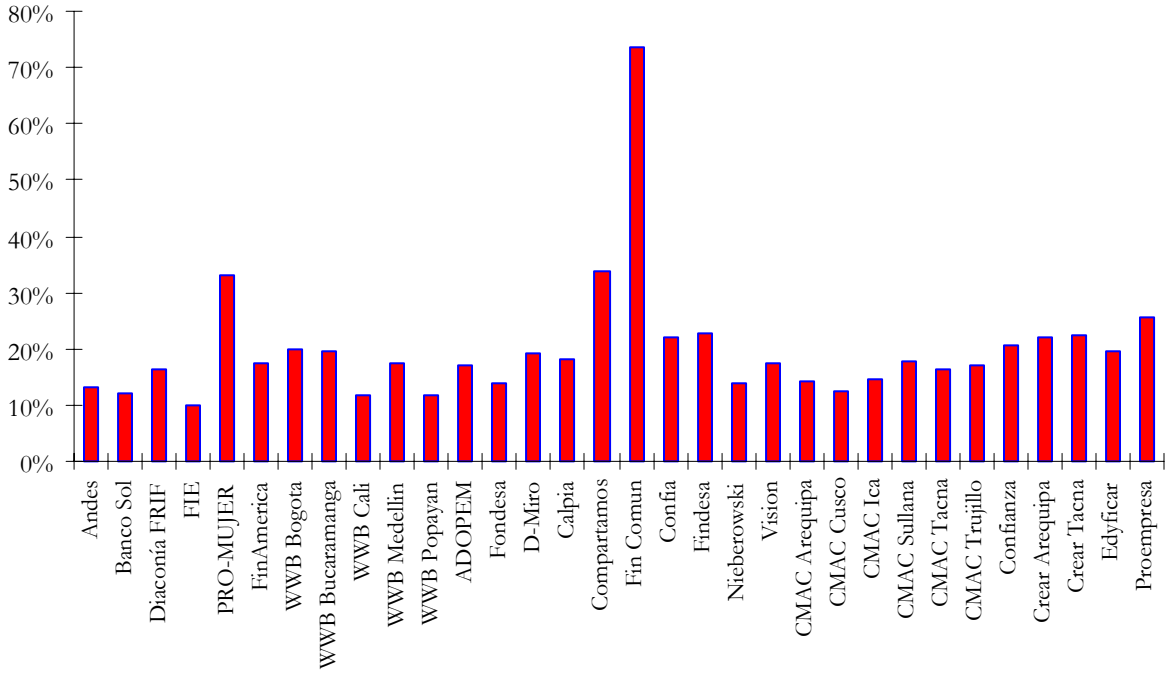
Operating costs are strongly correlated to salary levels, as is to be expected in a highly labor-intensive industry. Here it is important to distinguish between cases where an MFI underpays its staff and where it simply operates in a low cost environment. Staff attrition rates and comparison to salary levels in commercial banks help make that distinction. Contrary to popular belief, salary levels in MFIs are not much different from those of banks. Finally, analysts of MFIs have to be alert to various practices that attempt to hide operating expenses. Organizations providing microcredit as well as other services can allocate costs in such a way that their credit operations look more efficient than

they really are. Another way of hiding expenses is to allocate them to subsidiaries or to not carry them on the books at all, for instance when donors meet certain costs, such as paying for consultants.

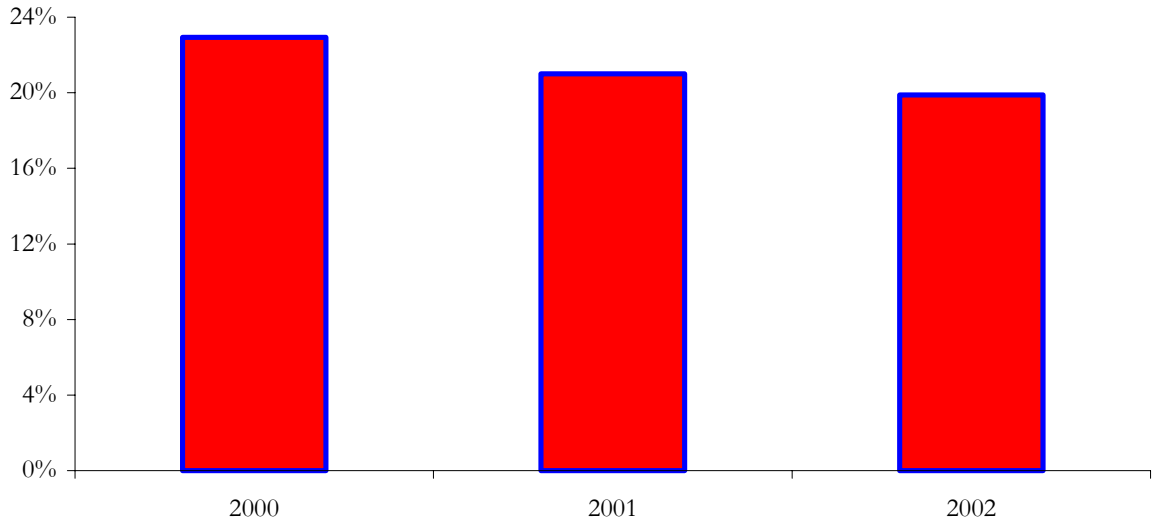
Where the Industry Is

Latin American microfinance institutions are definitely becoming more efficient. Only a few years ago an operating expense ratio of 25% was considered acceptable for an urban MFI. Today leading MFIs in Latin America easily achieve operating expense ratios below 20% and the very best are approaching 10%. In 2002 the average operating expense ratio of the MicroRate 32 was 19.9%

MicroRate 32: Operating Expense Ratio, December 31,2002



MicroRate 32: Average Operating Expense Ratio, 2000 – 2002



COST PER BORROWER

Operating Expenses / Average Number of Active Borrowers (excluding Consumer and Pawn Loans)

How to Calculate It

Cost per Borrower is calculated by dividing all expenses related to the operation of the institution (including all the administrative and salary expenses, depreciation and board fees) by the average number of active borrowers. Interest and provision expenses, as well as extraordinary expenses, are not included. Pawn loans and consumer loans are typically excluded from this calculation, as they require far less screening and analysis efforts.

What It Means

This ratio provides a meaningful measure of efficiency by showing the average cost of maintaining an active borrower. Since the size of the loans is not part of the denominator, institutions with larger loans do not automatically appear more efficient, as is the case with the operating expense ratio. The cost per borrower ratio is in this sense a "fairer" indicator than the operating expense ratio.

What to Watch Out For

This ratio complements the operating expense ratio in much the same way that the write-off ratio complements portfolio at risk. It is tempting to simply conclude that high operating expenses are a sign of inefficiency, just as it is tempting to believe that low portfolio at risk is necessarily the same as excellent portfolio quality. Both would be wrong. Companies like Compartamos (Mexico) and Pro Mujer (Bolivia) have high operating expenses, because their average loan sizes are extremely small. Yet, their cost per borrower is only a fraction of that of efficient MFIs like Fondesa in the Dominican Republic or Caja Municipal de Arequipa in Peru. What is more, Pro-Mujer, the MFI with one of the highest Operating Expense Ratios among the 32, spends far less per borrower ($41), than much more efficient MFIs with higher average loans.

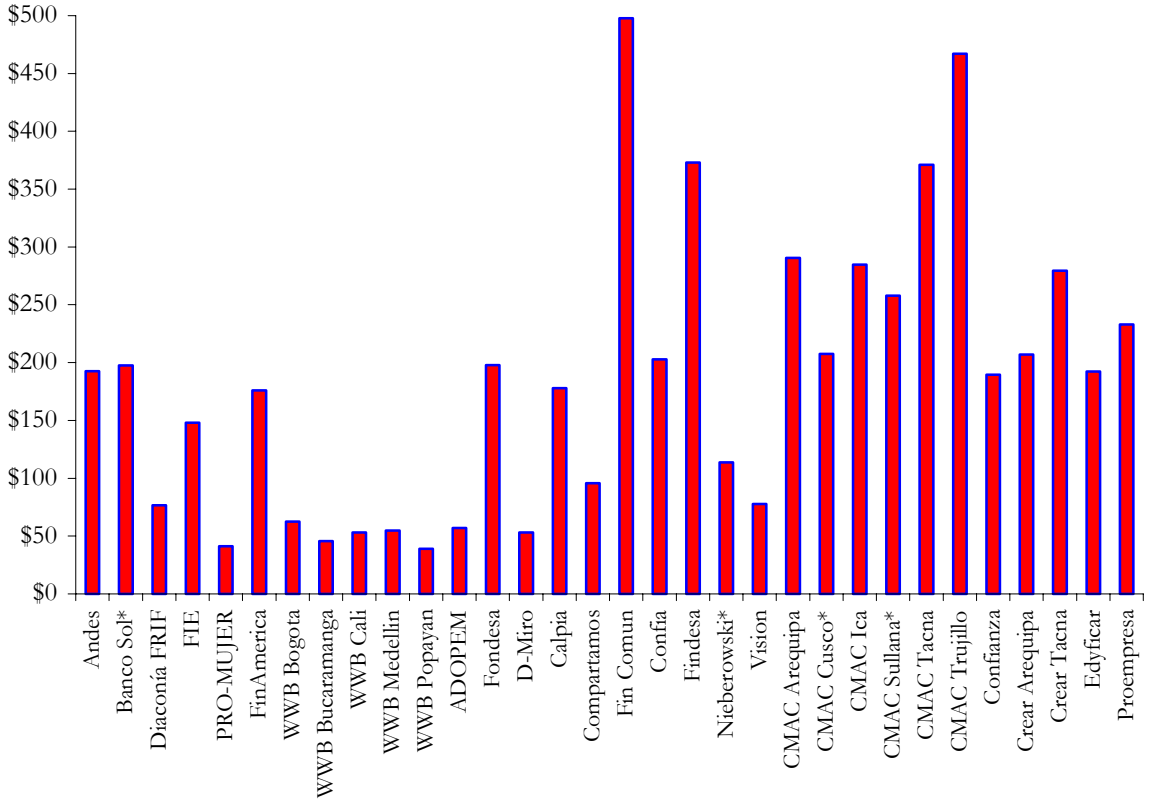
Indeed, the Operating Expense Ratio and the Cost per Borrower move in opposite directions. This is most pronounced when average loans are very small. In those cases, the Operating Expense Ratio invariably rises fast, whereas the Cost per Borrower drops equally quickly.

Where the Industry Is

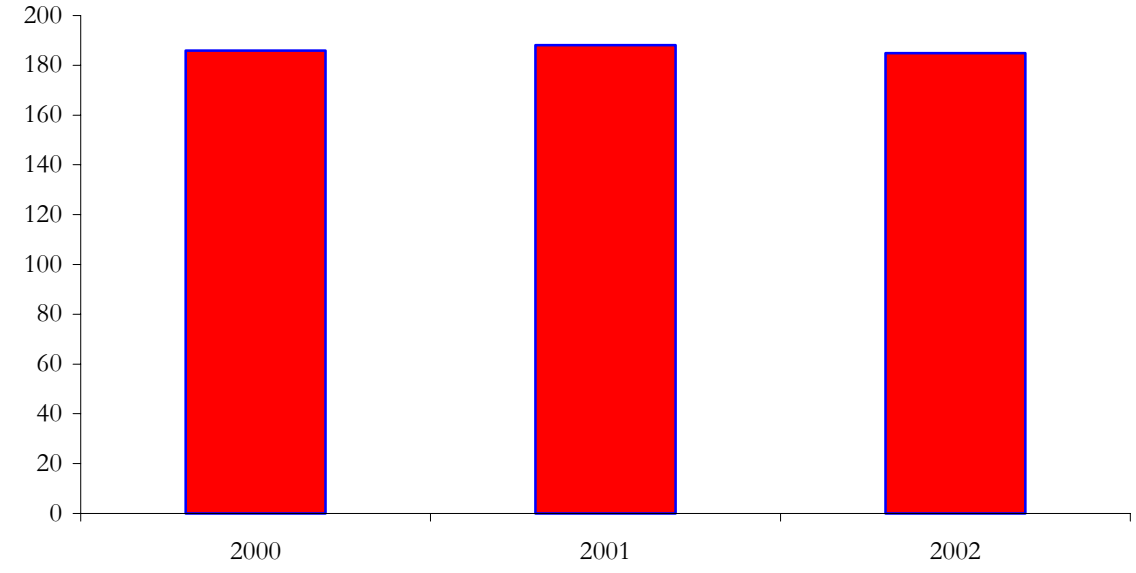
The Colombian WWB affiliates are setting the pace in terms of efficiency. Even though FIE in Bolivia had the lowest operating expense ratio among the 32, FIE's average loan size was above US$1,000 compared to US $266 for WWB Popayán. Yet both had extremely low operating expense ratios (10% vs. 11.6%). The big difference between them was, of course, the cost per borrower. Whereas FIE required on average US $148 in operating expenses for each borrower, WWB Popayán needed only US $39. MFIs specializing in very small loans must maintain their cost per borrower well below US $100 if they want to prevent an astronomically high operating expense ratio. MFIs with high average loans can, by contrast, be relatively relaxed about this measure, with many reaching US $200/borrower and some exceeding US $400.

On average, the cost per borrower has remained consistent over the years in the MicroRate 32, hovering around $186.

MicroRate 32: Cost per Borrower, December 31, 2002[4]



MicroRate 32: Average Cost per Borrower, 2000 – 2002



[4] Starred(*) companies did not have borrower information for 2001 and/or 2002, therefore number of loans were used in those cases.

PERSONNEL PRODUCTIVITY

Number of Active Borrowers (excluding Consumer and Pawn Loans) / Total Staff

How to Calculate It

Personnel productivity is calculated by dividing the number of active borrowers of an institution by the total number of staff. The number of active borrowers is defined as individually identifiable borrowers who have at least one current outstanding loan with the institution. Thus, a solidarity loan with four members is considered as four borrowers. Multiple loans to the same borrower are considered as one borrower. Borrowers are used in the numerator instead of loans since the number of people served determines workload more than the number of loans does. Two simultaneous loans to the same borrower don't require twice the effort of one loan. Pawn loans and consumer loans are typically excluded from this calculation, as they require far less screening and analysis efforts.

Total staff is defined as the total number of people that work full time in an MFI. It includes contract staff such as consultants, as long as they work full time. If there are a significant number of part-time employees, then their number is adjusted to full-time equivalents. Two persons working half time then become equivalent to one full-time employee.

What It Means

This ratio captures the productivity of the institution's staff – the higher the ratio the more productive the institution. Indirectly, the ratio says a fair amount about how well the MFI has adapted its processes and procedures to its business purpose of lending money. Low staff productivity doesn't usually mean that staff works less, but that they are tied up in excessive paperwork and procedures.

What to Watch Out For

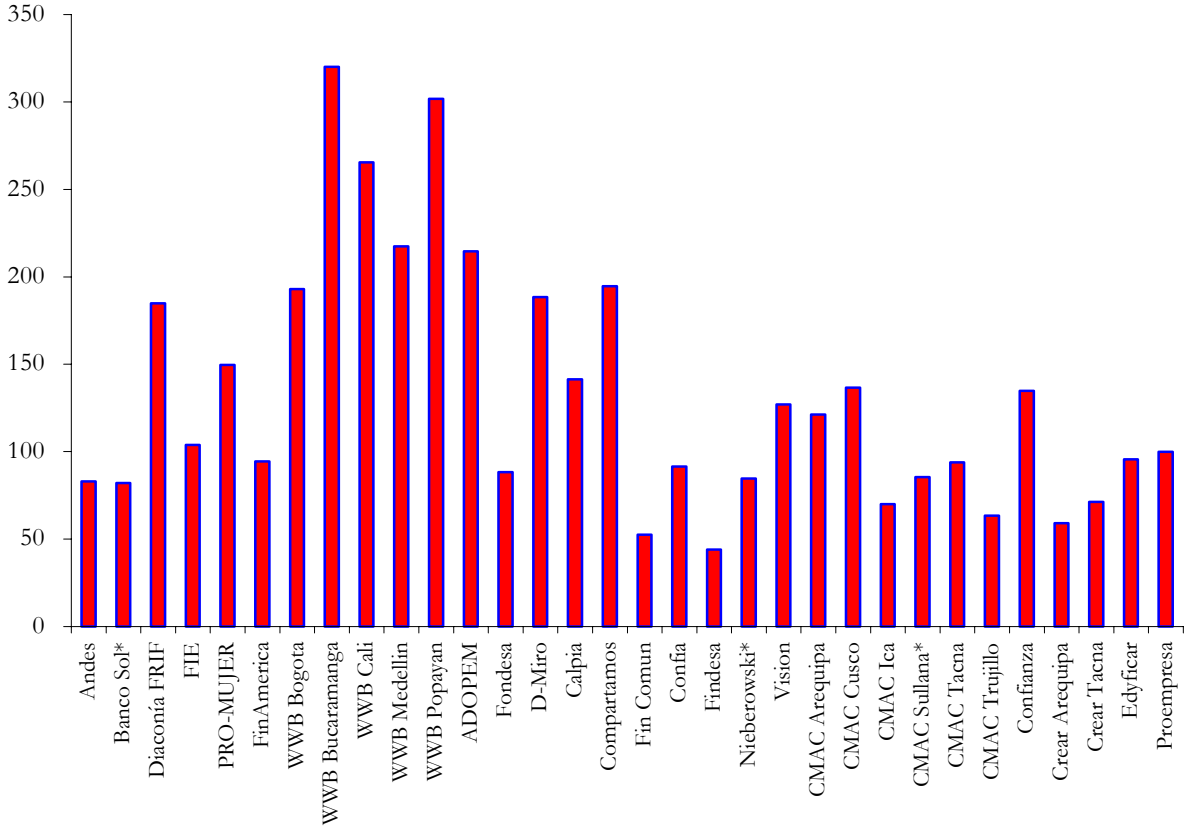
Traditionally, the microfinance community has used the ratio of clients per credit officer (or loans per credit officer) to measure productivity. However, including all staff instead of only credit officers in the denominator provides a more complete view of the institution's productivity, particularly in cases where the MFI has efficient credit officers but cumbersome and bureaucratic back office procedures (or vice versa).

The efficiency of the institution can easily be distorted by including consumer and pawn loans, which require much less screening and analysis than typical microloans. These types of loans should be excluded from the calculation. However, in some cases the MFIs themselves do not clearly distinguish among these loans, which makes the separation much harder.

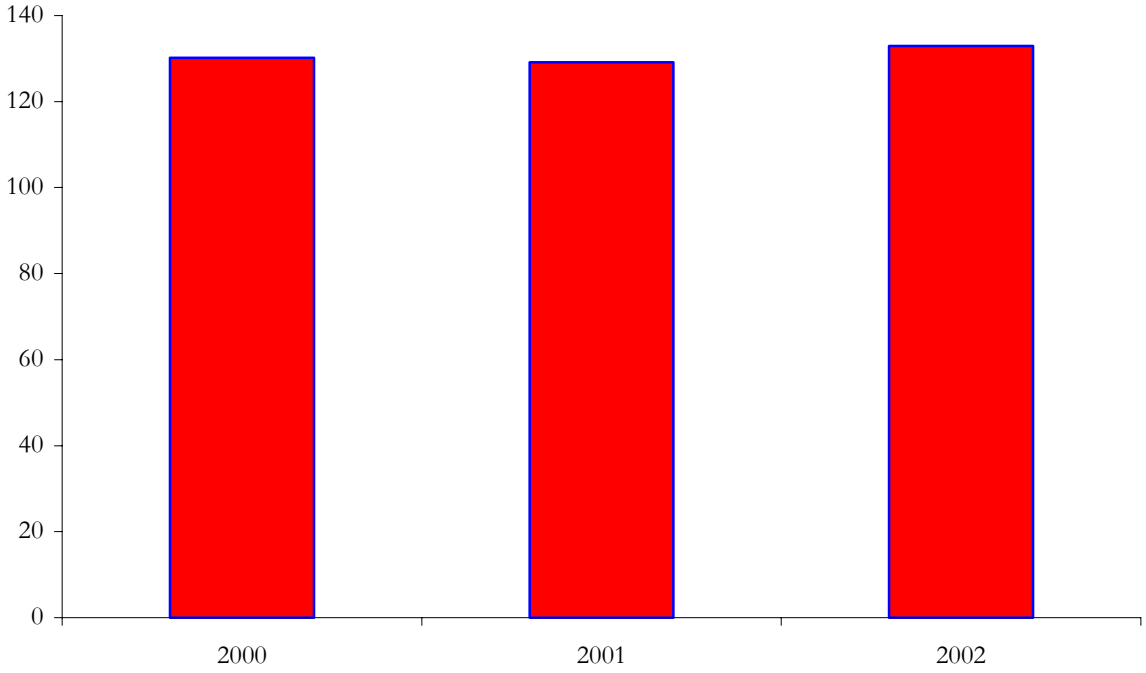
Where the Industry Is

Personnel productivity is one of the ratios that most uniquely define microfinance institutions. If they are to become financially viable, MFIs must be able to handle very large numbers of customers with a minimum of administrative effort and without allowing portfolio quality to deteriorate. Productivity among the MicroRate 32 has remained consistent over the past few years at approximately 130 borrowers per staff. 2002 shows a slight improvement in the sample to an average of 133 borrowers per staff. The most productive MFIs are the Colombian Women's World Banking affiliates in Bucaramanga and Popayán , with respectively 320 and 302 borrowers per staff.

MicroRate 32: Borrowers Per Staff, December 31, 2002



MicroRate 32: Average Borrowers per Staff, 2000 – 2002



LOAN OFFICER PRODUCTIVITY

Number of Active Borrowers / Number of Loan Officers

How to Calculate It

This ratio is calculated by dividing the number of active borrowers of an institution by the total number of loan officers. Active borrowers are defined the same way as in the personnel productivity ratio. Loan officers are defined as personnel whose main activity is direct management of a portion of the loan portfolio. It includes field personnel or line officers that interact with the client, but not administrative staff or analysts who process loans without direct client contact. Loan officers also include contract employees who may not be part of the permanent staff, but are contracted on a regular basis in the capacity of loan officer.

What It Means

This ratio captures the productivity of the institution's loan officers – the higher the ratio the more productive the institution. It is one of the most recognized performance ratios in the microfinance industry. Like the personnel productivity ratio, the loan officer productivity ratio says a fair amount about how well the MFI has adapted its processes and procedures to its business purpose of lending money.

What to Watch Out For

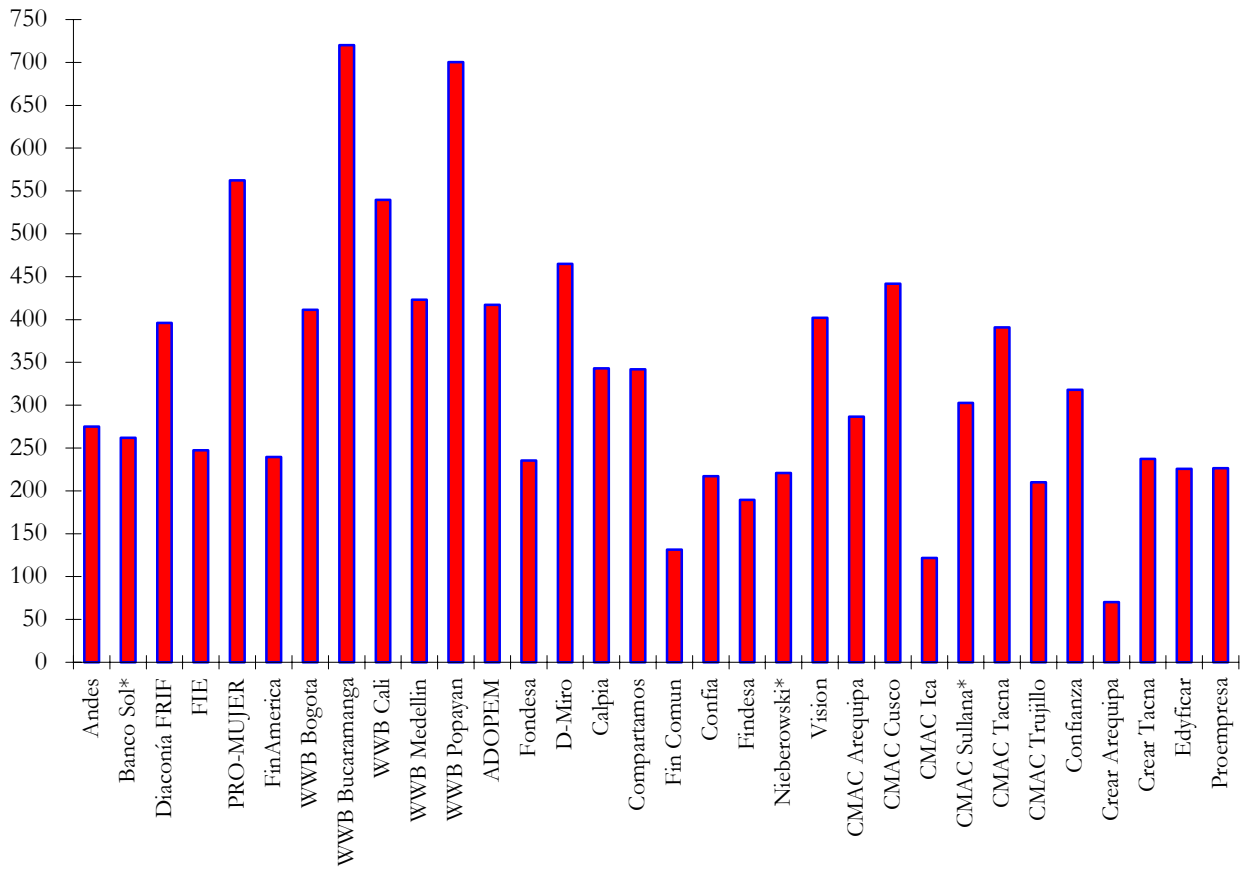
The loan officer productivity indicator, like personnel productivity, is easily distorted by consumer credit or pawn loans masquerading as microcredit. Both consumer and pawn lending rely heavily on collateral, which makes it possible to process very large numbers of loans with few staff. Consequently, consumer and pawn loans should be backed out in the calculation of the indicator.

Where the Industry Is

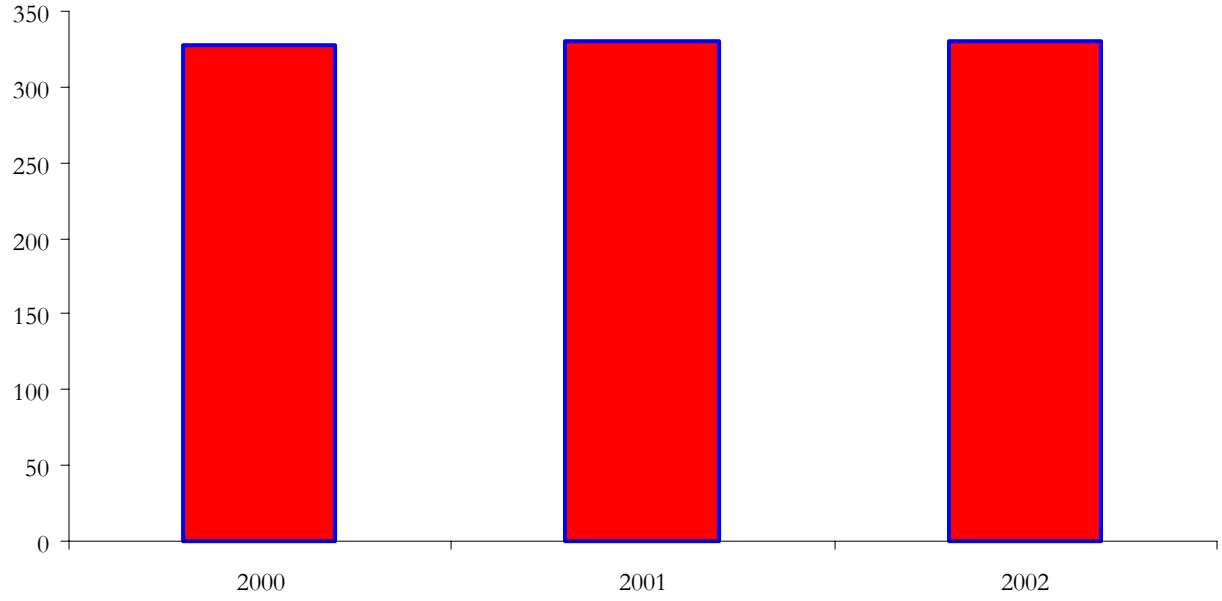
Here too, the Colombian WWBs are setting standards. Their loan officers routinely exceed 500 clients, a number which has functioned as a touchstone in the industry. Given the close relation between staff productivity and loan officer productivity, it is not surprising that WWB Bucaramanga and WWB Popayán are leaders in both indicators. They achieved a nearly incredible 720 and 700 clients per loank officer, respectively. ProMujer in Bolivia occupied third place with 562 clients per loan officer.

The top performers in terms of loan officer efficiency also demonstrate that extremely high client loads are compatible with high portfolio quality. ProMujer had the lowest portfolio at risk among the sample and the four MFIs with more than 500 clients per loan officer all had a portfolio at risk of 1.2% or less! Only a few years ago, such indicators would have been considered inconceivable. While a number of MFIs have achieved spectacular results in terms of loan officer efficiency, the average for the entire group of 32 has remained steady at around 330

MicroRate 32: Borrowers per Loan Officer, December 31, 2002



MicroRate 32: Average Number of Borrowers per Loan Officer, 2000 – 2002



FINANCIAL MANAGEMENT

FUNDING EXPENSE RATIO

Interest and Fee Expenses / Average Gross Portfolio

How to Calculate It

The Funding Expense Ratio is calculated by dividing interest and fee expenses on funding liabilities by the period average gross portfolio.

What It Means

This ratio measures the total interest expense incurred by the institution to fund its loan portfolio. The difference between the portfolio yield (the income generated by the portfolio) and the funding expense ratio (the financial cost incurred by the institution to fund itself) is the net interest margin. The funding expense ratio is *not* the institution's credit spread, nor the average interest rate at which it borrows (for that, see Cost of Funds below). Rather, this measure is used to help determine the minimum lending rate an MFI must charge in order to cover its costs. The minimum lending rate is determined by adding the provision expense ratio and the operating expense ratio to the funding expense ratio.

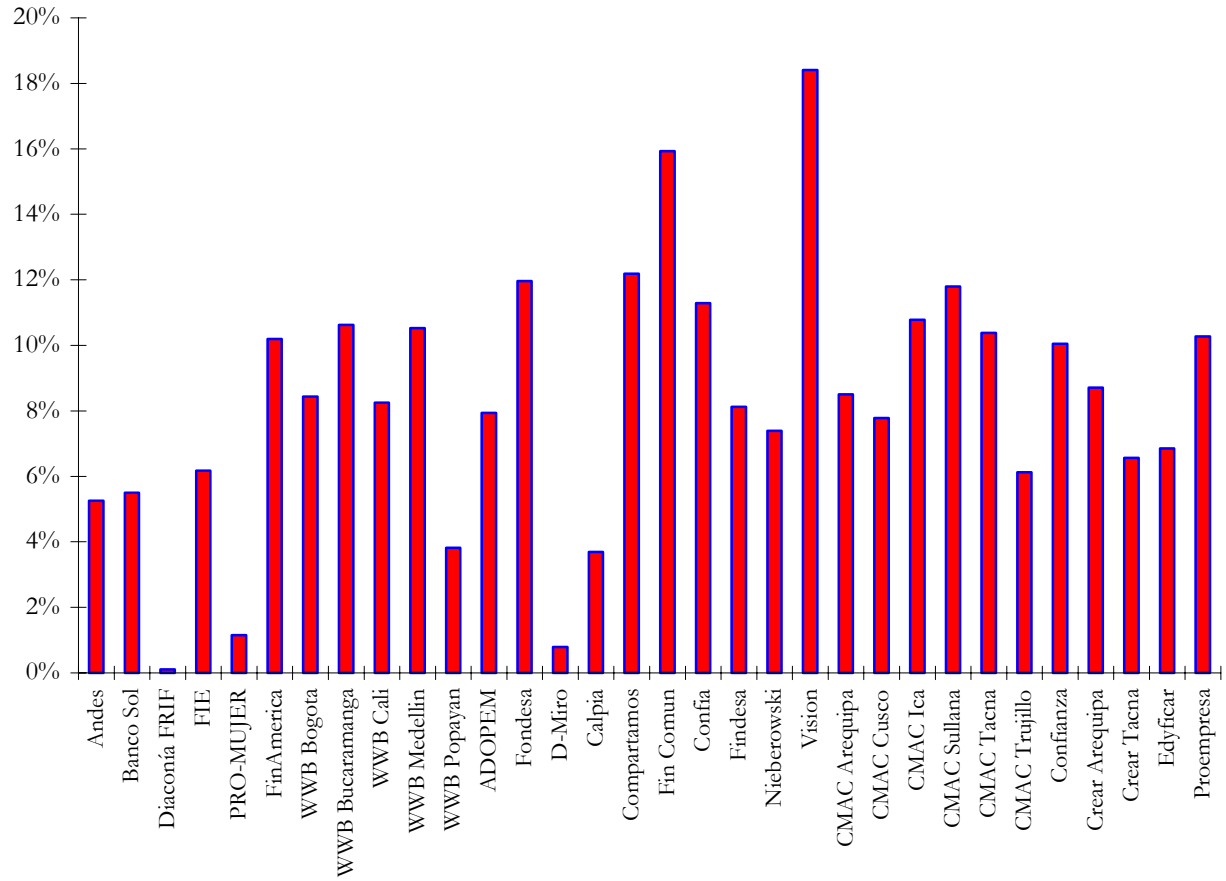
What to Watch Out For

The funding expense ratio is determined more by whether an MFI finances itself primarily through debt or through equity than by anything else. It says little about the financial condition of an MFI. An institution with a high funding expense ratio may in fact be very profitable if its leverage is high. Conversely, a low funding expense ratio may be a sign of low leverage and therefore tends to go hand in hand with a low return on equity.

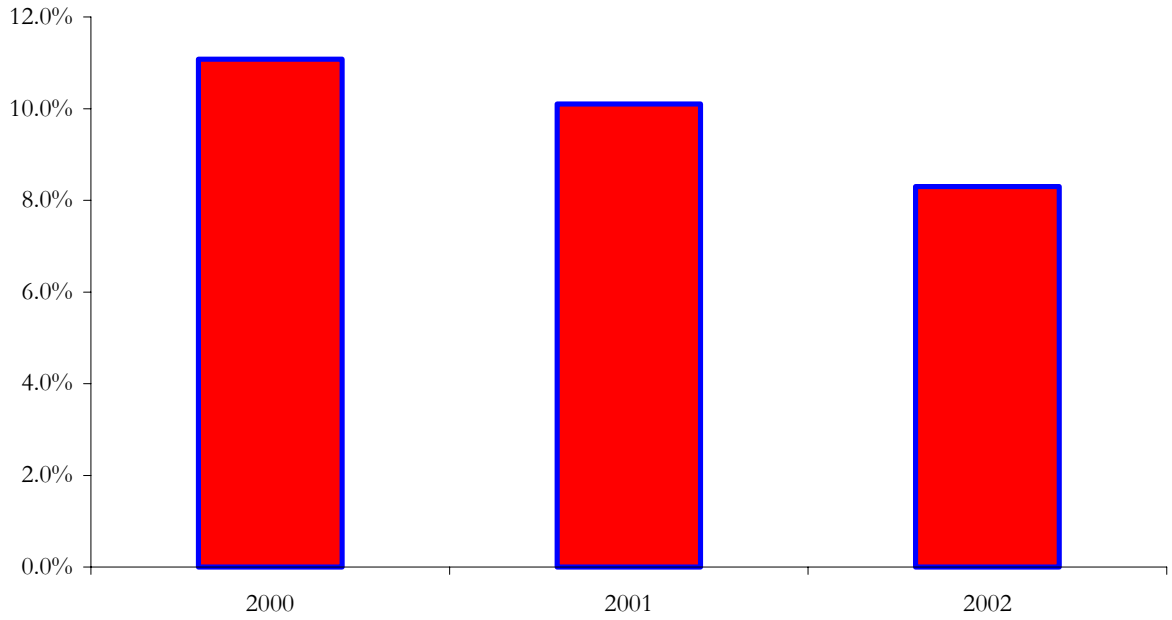
Where the Industry Is

The funding expense ratio for the MicroRate 32 has continued to drop over the past three years, from 11.1% in 2000 to 10.0% in 2001 to an average of 8.3% in 2002. But this ratio says more about the financial structure of MFIs than about its cost of borrowing. Regulated MFIs with their much higher debt/equity ratios (average leverage 6.1) had an average funding expense ratio of 9.3%, whereas for NGOs (average leverage 1.6) it was 6.5% . There are exceptions to this rule among the MicroRate 32. For example, the funding expense of Calpia in El Salvador remains low (3.7%) despite a debt/equity ratio of 5.7:1. The reason is that Calpia raises much of its funding through relatively inexpensive savings deposits. Like Calpia, the regulated Bolivian MFIs (Caja los Andes, BancoSol and FIE) enjoy low funding expenses through savings mobilization.

MicroRate 32: Funding Expense Ratio, December 31, 2002



MicroRate 32: Average Funding Expense Ratio, 2000 – 2002



COST OF FUNDS RATIO

Interest and Fee Expenses on Funding Liabilities / Average Funding Liabilities

How to Calculate It

The Cost of Funds Ratio is calculated by dividing interest and fee expenses on funding liabilities by period average funding liabilities. The denominator contains all funding liabilities of the institution, including deposits, commercial funds, subsidized funds and quasi-capital. It does not include other liabilities, such as accounts payable or a mortgage loan an MFI may have obtained to finance its offices – to name just two examples.

What It Means

As its name indicates, this ratio measures the average cost of the company's borrowed funds. In comparing MFIs, the cost of funds ratio shows whether they have gained access to low cost funding sources such as savings. MFIs that can mobilize savings tend to have relatively low cost of funds. However this advantage is offset to some extent by the higher administrative cost of mobilizing savings.

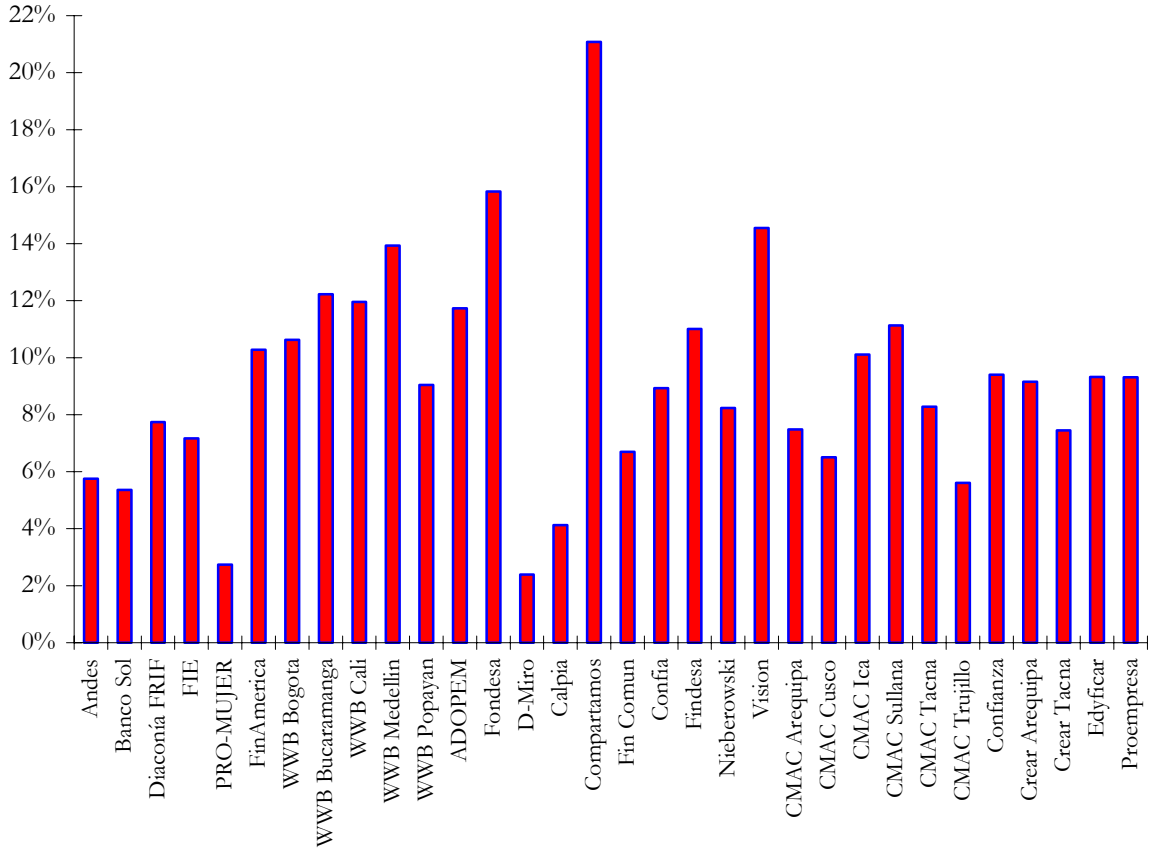
What to Watch Out For

In many cases, the funding liabilities of MFIs include subsidized funds. Such subsidies will drive the cost of funds down, when in fact the real cost of commercial borrowing for the institution is far higher. As subsidized MFIs grow, and as they increasingly resort to commercial borrowing to sustain their growth, rapidly rising cost of funds can lead to severe pressure on margins, which management must counteract by cutting other costs or raising lending rates.

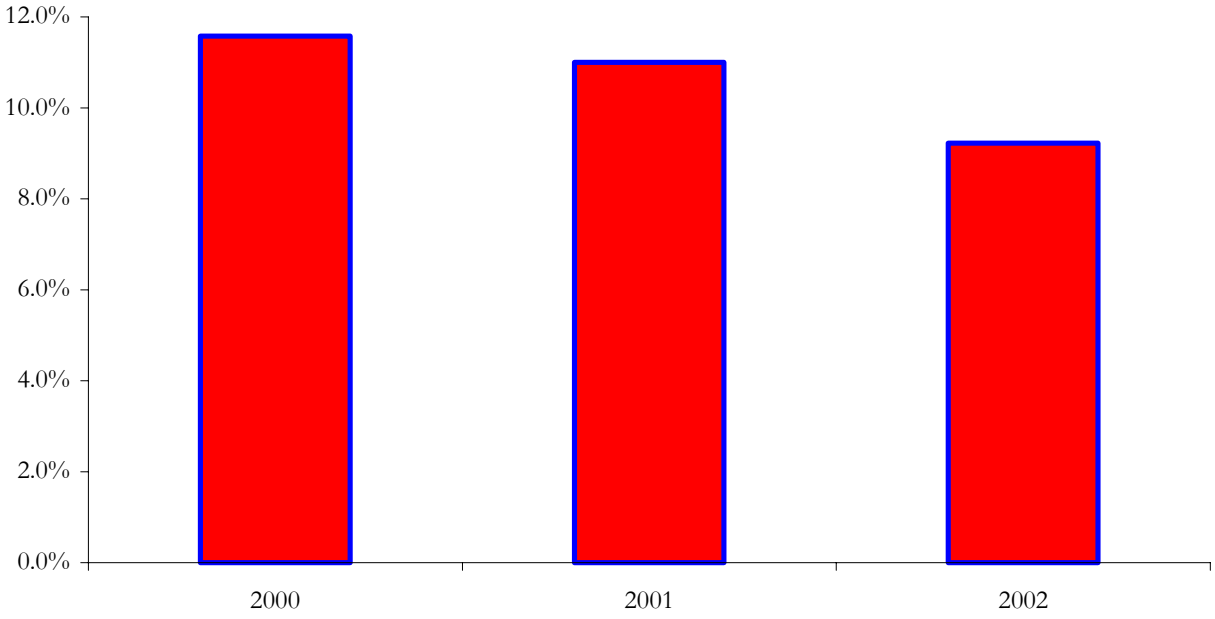
Where the Industry Is

The cost of funds ratios of the MicroRate 32 largely reflect interest rates in their respective countries. The two MFIs with the highest ratios, Compartamos in Mexico and Fondesa in the Dominican Republic, borrow at high commercial rates in their local markets. The three regulated Bolivian MFIs at the left of the graph also are largely commercially funded, but they have become remarkably efficient at tapping local markets. Deposits at BancoSol, for instance, account for 62% of capitalization. The same is true for Calpia (El Salvador), which boasts one of the lowest cost of funds ratios among the 32. The decline in the average funding expense in 2002 is due to a combination of historically low interest rates and the growing access of MFIs to savings deposits.

MicroRate 32: Cost of Funds Ratio, December 31, 2002



MicroRate 32: Average Cost of Funds Ratio, 2000 – 2002



DEBT/EQUITY RATIO

Total Liabilities / Total Equity

How to Calculate It

The Debt/Equity Ratio is calculated by dividing total liabilities by total equity. Total liabilities include everything the MFI owes to others, including deposits, borrowings, accounts payable and other liability accounts. Total equity is total assets less total liabilities.

What It Means

The debt/equity ratio is the simplest and best-known measure of capital adequacy because it measures the overall leverage of the institution. The debt/equity ratio is of particular interest to lenders because it indicates how much of a safety cushion (in the form of equity) there is in the institution to absorb losses. Traditionally, microfinance institutions have had low debt/equity ratios, because as NGOs their ability to borrow from commercial lenders has been limited. As MFIs transform into regulated intermediaries, however, debt/equity ratios typically rise rapidly. Risk and volatility of the MFI (exposure to shifts in the business environment, for instance) determine how much debt can be carried for a given amount of equity. Even the most highly leveraged MFIs still carry less debt than conventional banks because microloan portfolios are backed by less collateral and their risk profiles are still not as well understood as those of conventional banks.

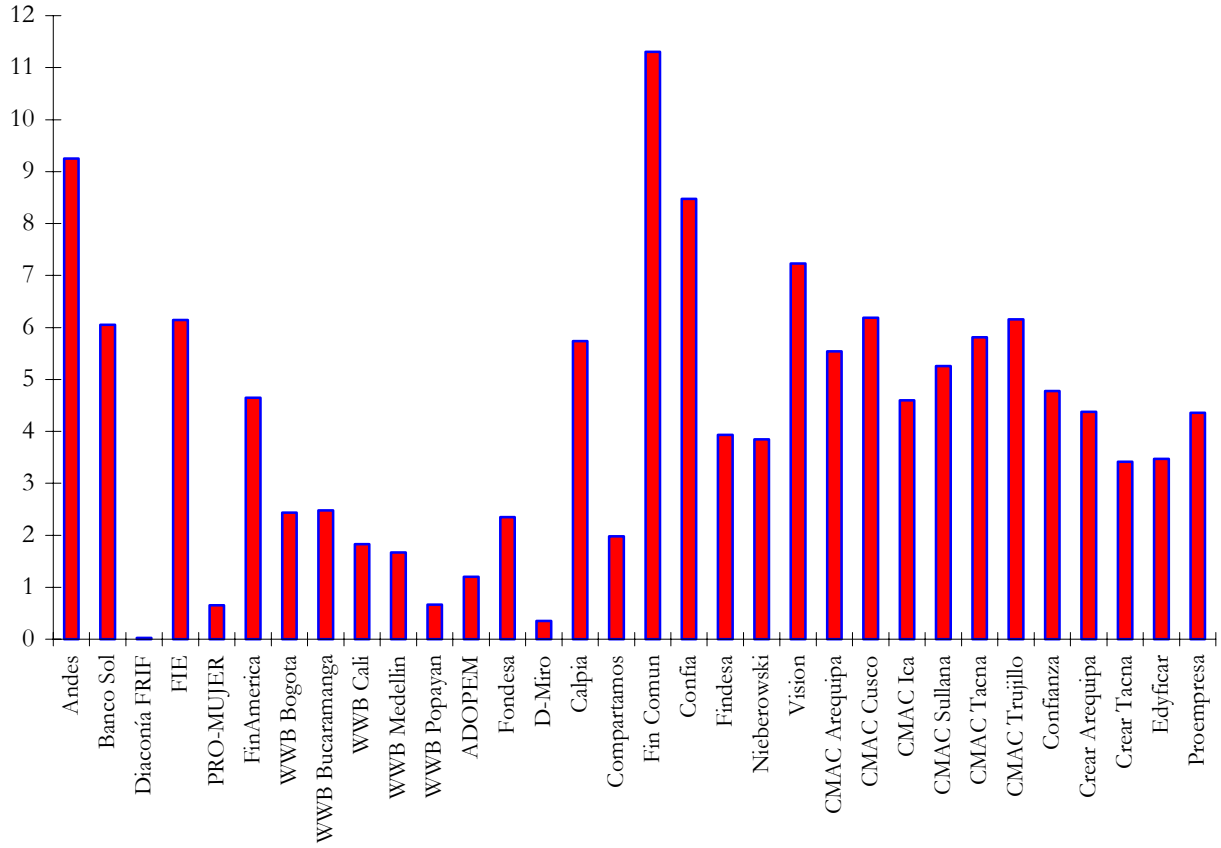
What to Watch Out For

Changes in the debt/equity ratio are often more important than the absolute level of that indicator. If the debt to equity ratio increases rapidly, the MFI may be approaching its borrowing limits, which in turn will force it to curtail growth. Also, rapid increases in debt funding are bound to put pressure on profit margins. The terms on which the MFI borrows also influence how much debt it can safely assume. If much of its liabilities consist of very long-term donor funding, a high debt to equity ratio obviously represents less of a risk than if the MFI relies on short-term lines of credit.

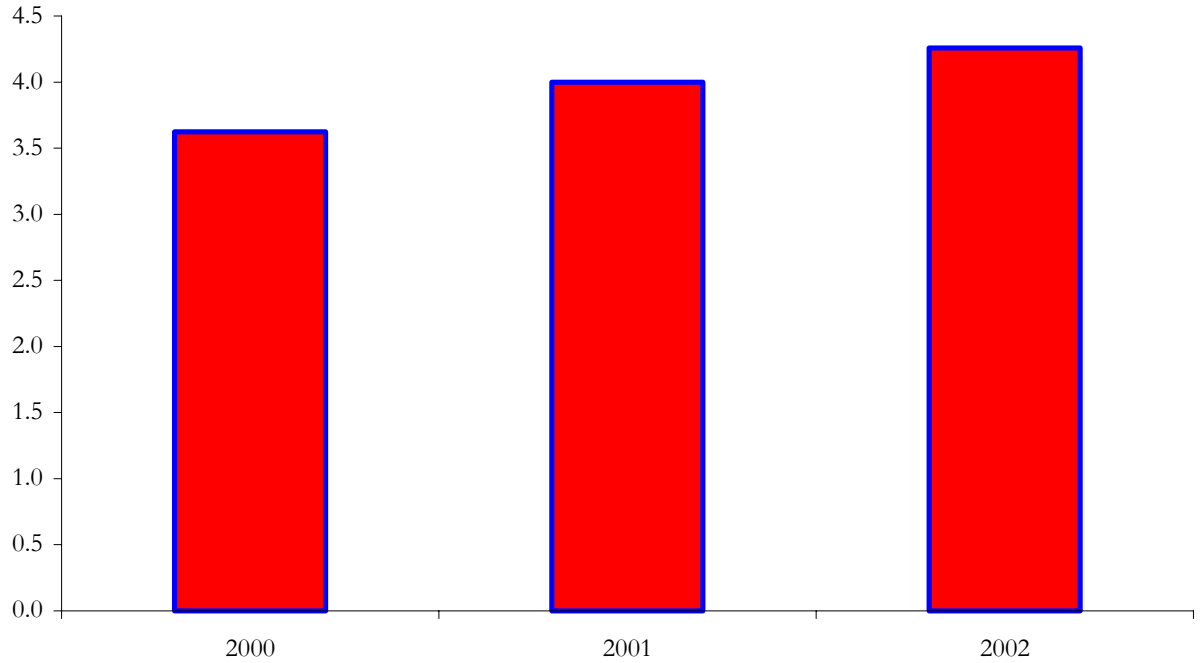
Where the Industry Is

As MFIs mature, leverage continues to increase. In fact, the average debt/equity ratio for the MicroRate 32 reached 4.3 in 2002. This figure become more meaningful when one separates regulated MFIs from NGOs. In 2002 regulated MFIs averaged debt/equity ratio of 6.1 to 1, versus 1.6 to 1 for NGOs. Regulated MFIs are better able to access commercial sources of funds and therefore achieve much higher debt/equity ratios than NGOs. In fact, once licensed and supervised, MFIs discover that commercial lenders who previously balked at a 1:1 debt/equity ratio will gladly lend three to five times the MFI's equity. This is perhaps the strongest incentive for NGOs to leave their sheltered tax-free existence and subject themselves to the discipline of banking laws. For example, both Finde in Nicaragua and Compartamos in Mexico became regulated institutions in 2001 and the debt/equity ratios of both increased rapidly. In 2001, the year it became regulated Finde's debt to equity ratio nearly doubled from 1:1 to 1.9:1, a year later (2002) it nearly doubled again to 3.93. But even among regulated MFIs, the debt/equity ratio is still significantly lower than among commercial banks.

MicroRate 32: Debt/Equity Ratio, December 31, 2002



MicroRate 32: Average Debt/Equity Ratio, 2000 – 2002



PROFITABILITY

RETURN ON EQUITY[5]

Net Income / Average Equity

How to Calculate It

Return on Equity (RoE) is calculated by dividing net income (after taxes and excluding any grants or donations) by period average equity.

What It Means

Return on equity indicates the profitability of the institution. This ratio is particularly relevant for a private for-profit entity with real flesh-and-blood owners. For them, RoE is a measure of paramount importance since it measures the return on their investment in the institution. However, given that many MFIs are not-for-profit-organizations, the RoE indicator is most often used as a proxy for commercial viability.

What to Watch Out For

A single year's RoE can at times misrepresent the institution's "true" profitability. Extraordinary income or losses, for example in the form of asset sales, can have a significant impact on the bottom line. In other circumstances the institution may severely under-provision and thus temporarily record higher net income figures. Another issue to consider is taxes. Incorporated and supervised MFIs generally pay taxes, while not-for-profit, non-supervised MFIs do not; reporting and other requirements of bank regulators also add to the costs of supervised institutions.

Finally, there still are very significant differences in portfolio yield among MFIs, as is to be expected in a young industry. In Bolivia, where competition among urban MFIs has become fierce, portfolio yields have dropped to under 30%, whereas in other less competitive markets portfolio yields can be more than twice as high. Where yields are low, MFIs are forced to be highly efficient and to maintain high portfolio quality to remain profitable, whereas high yields often lead to high returns despite a multitude of weaknesses.

Where the Industry Is

Return on equity is perhaps the single most impressive story to emerge from the MFI industry in recent years. Despite a highly unfavorable economic environment during the past few years, only six out of 32 leading MFIs in Latin America showed a loss for 2002 (based on adjusted figures). With unadjusted numbers, not a single MFI showed a loss. While recession, particularly in the Andean countries, has curtailed growth and impaired portfolio quality, return on equity has steadily increased. In a number of countries, MFIs have outperformed conventional banks by a wide margin. Surprisingly, NGOs have achieved higher returns on equity than formalized MFIs (16.0% vs. 13.4% in 2002) even though the NGOs operate with significantly lower debt/equity ratios. This is partly a result of the *provision adjustment* discussed below, which disadvantages companies with larger, well-collateralized loans. Also, regulated MFIs tend to operate in more competitive markets, where portfolio yields are lower.

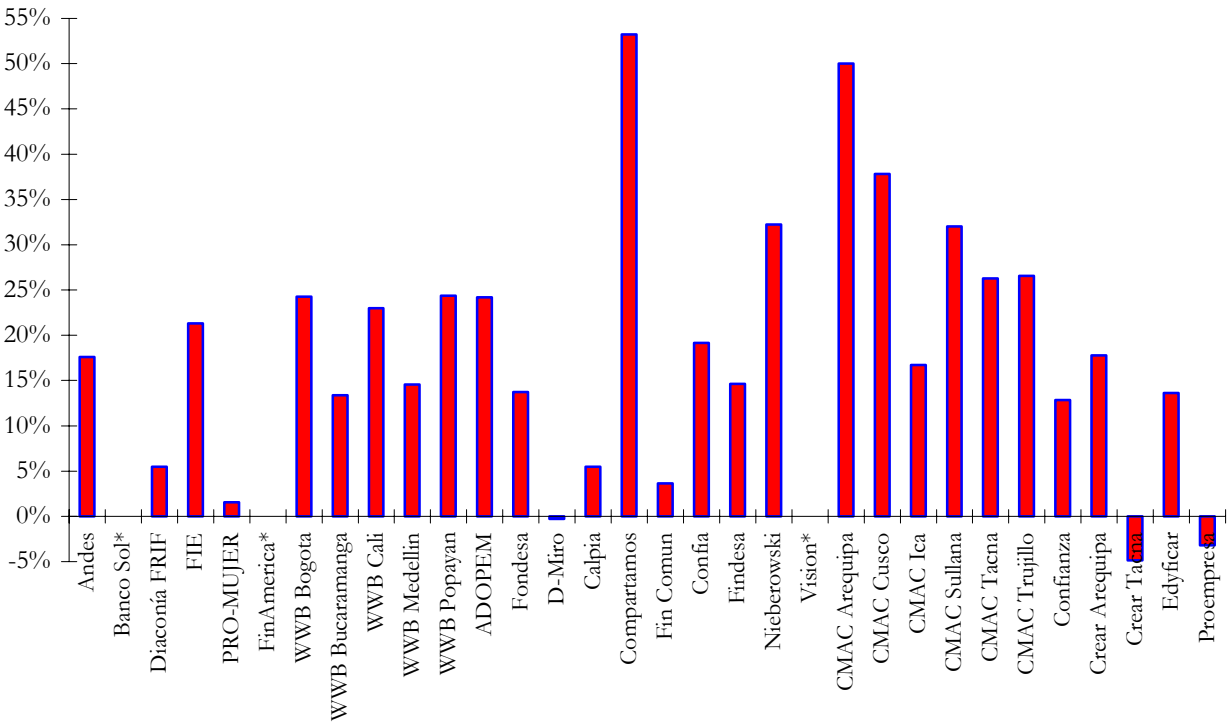
[5] The term "Return on Equity" is used whenever return on *average* equity is measured. If return as of a certain date is measured, that date should be specifically stated, for instance: "Return on Equity as of 12/01." The same applies to Return on Assets.

Among the MicroRate 32, Compartamos had the highest return on equity (53%) in 2002 thanks to very high portfolio yields (90%) and despite low leverage (Compartamos converted into a regulated MFI only in 2001) and high operating expenses (their extremely small rural loans are expensive to administer). CMAC Arequipa achieved the second-highest return on equity (50%) from a more conventional combination of excellent efficiency, high leverage and average portfolio yields.

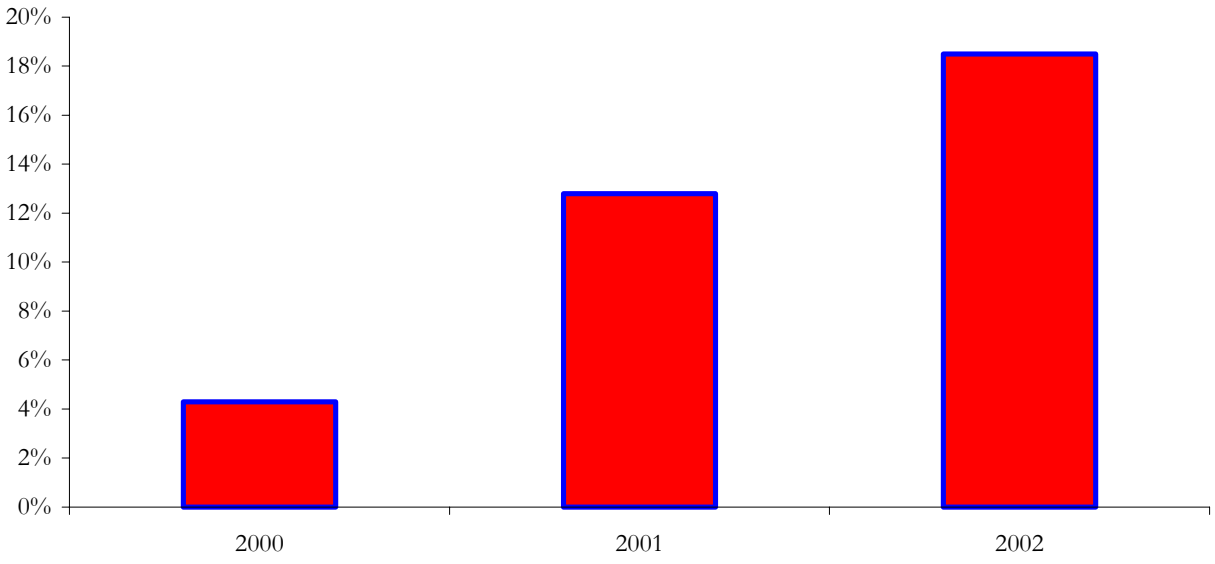
To make an apples-to-apples comparison among MFIs possible, major differences in accounting policies must be adjusted. By far the most important of these concerns provision expenses. Return on equity of an MFI that maintains provisions of 405% of portfolio at risk (Compartamos) can hardly be compared with one where provisions cover only 24% of portfolio at risk (FinAmérica). To eliminate this distortion, provision expenses were re-calculated applying the same –quite conservative – provisioning policy to all. Other adjustments, which had much less impact however, compensated for subsidies and calculated revenues on a cash basis (as opposed to "accrual").

Six MFIs recorded losses in 2002 after MicroRate's adjustments. Three MFIs, which showed losses as a result of these adjustments (BancoSol, FinAmérica, Vision), had substantial small-business and consumer loan portfolios. These portfolios were backed by formalized collateral and the institutions had followed local banking rules in establishing provisions. Arguably, applying strict microfinance provisioning rules to these loans would have been excessive. The graph therefore omits these three MFIs.

MicroRate 32: Return on Equity, December 31, 2002 (adjusted) [6]



MicroRate 32: Average Return on Equity, 2000 – 2002 (adjusted)



[6] BancoSol, FinAmérica and Visión would have shown losses if standardized microcredit provisioning policies had been applied to them. Since all three had sizeable small-business or consumer loan portfolios backed by formalized collateral, they were omitted from the comparison.

RETURN ON ASSETS[7]

Net Income / Average Assets

How to Calculate It

Return on Assets (RoA) is calculated by dividing net income (after taxes and excluding any grants or donations) by period average assets.

What It Means

Return on assets is an overall measure of profitability that reflects both the profit margin and the efficiency of the institution. Simply put, it measures how well the institution uses all its assets.

What to Watch Out For

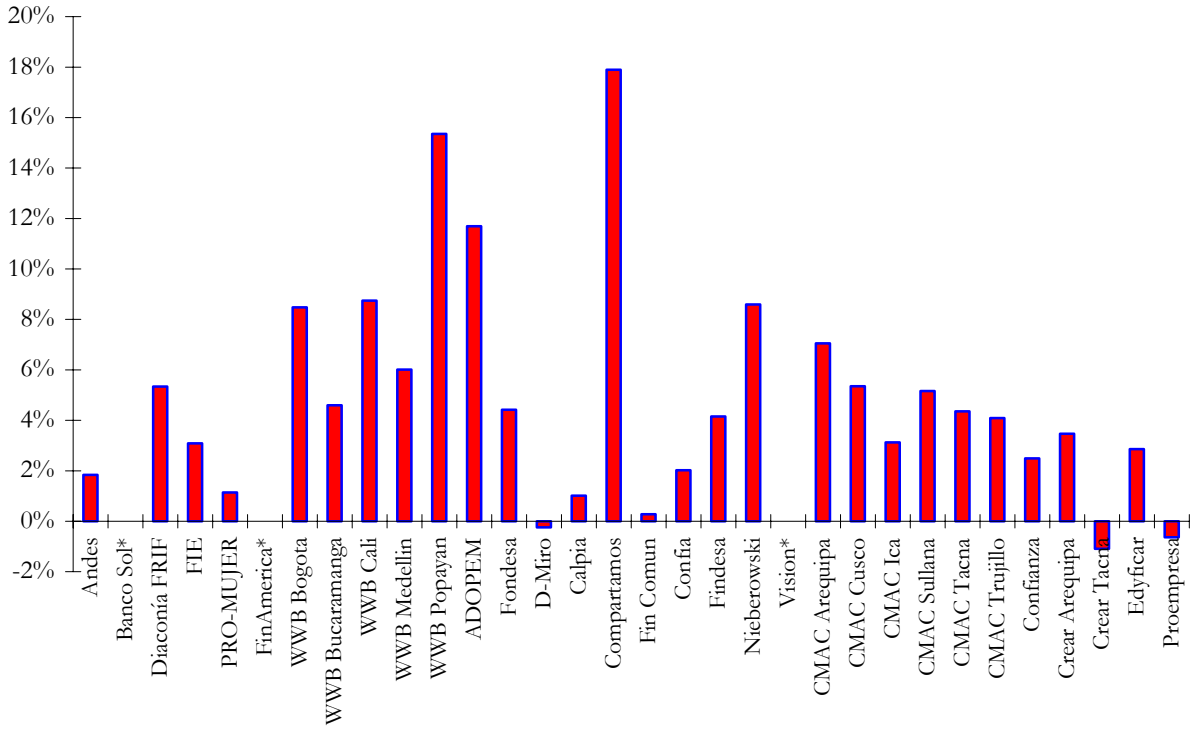
Return on assets is a fairly straightforward measure. However, as in the case of RoE, a correct assessment of RoA depends on the analysis of the components that determine net income, primarily portfolio yield, cost of funds and operational efficiency. In what seems like a paradox, NGOs generally achieve a higher Return on Assets than licensed and supervised MFIs. This state of affairs is explained by the fact that microfinance NGOs, with low Debt/Equity Ratios and limited possibilities to fund themselves in financial and capital markets, need to rely heavily on retained earnings to fund future growth.

Where the Industry Is

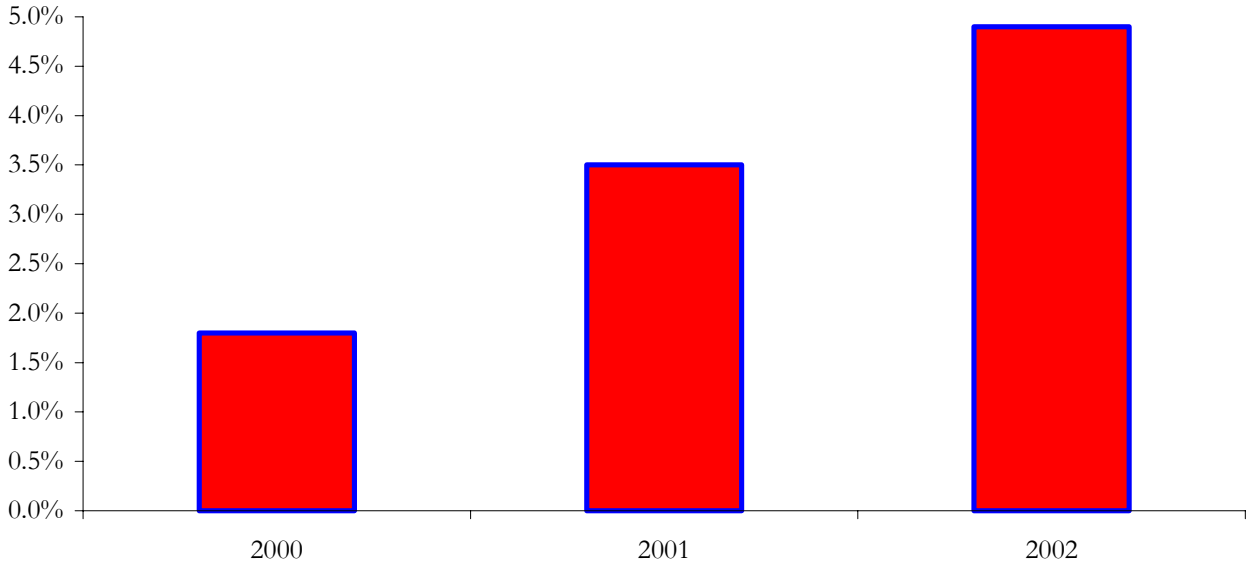
Adjusted return on assets achieved by the microfinance industry stands at 4.9% in 2002, far above the profitability typically achieved by commercial banks. NGOs in particular show very strong performance in this area, achieving almost double the return of the regulated MFIs in the sample (6.7% to 3.2%). Nevertheless, Compartamos, a regulated institution, achieved the highest ROA, 17.9%, followed by two NGOs, WWB Popayán and WWB Adopem (15.4% and 11.7%, respectively) This outstanding performance is a result of high portfolio yields and excellent portfolio quality.

[7] The graphs under this section show the adjusted return on assets. The effects of the adjustments were discussed in the previous section on return on equity; the impact on return on assets is the same.

MicroRate 32: Return on Assets, December 31, 2002 (adjusted)[9]



MicroRate 32: Average Return on Assets, 2000 – 2002 (adjusted)



[9] BancoSol, FinAmérica and Visión would have shown losses if standardized microcredit provisioning policies had been applied to them. Since all three had sizeable small-business or consumer loan portfolios backed by formalized collateral, they were omitted from the comparison.

PORTFOLIO YIELD

Cash Financial Revenue / Average Gross Portfolio

How to Calculate It

Portfolio Yield is calculated by dividing total cash financial revenue (all income generated by the loan portfolio, but not accrued interest) by the period average gross portfolio.

What It Means

Portfolio yield measures how much the MFI actually received in cash interest payments from its clients during the period. A comparison between the portfolio yield and the average effective lending rate gives an indication of the institution's efficiency in collecting from its clients. It also provides insight into portfolio quality since most MFIs use cash accounting and portfolio yield does not include the accrued income that delinquent loans should have generated, but did not.

What to Watch Out For

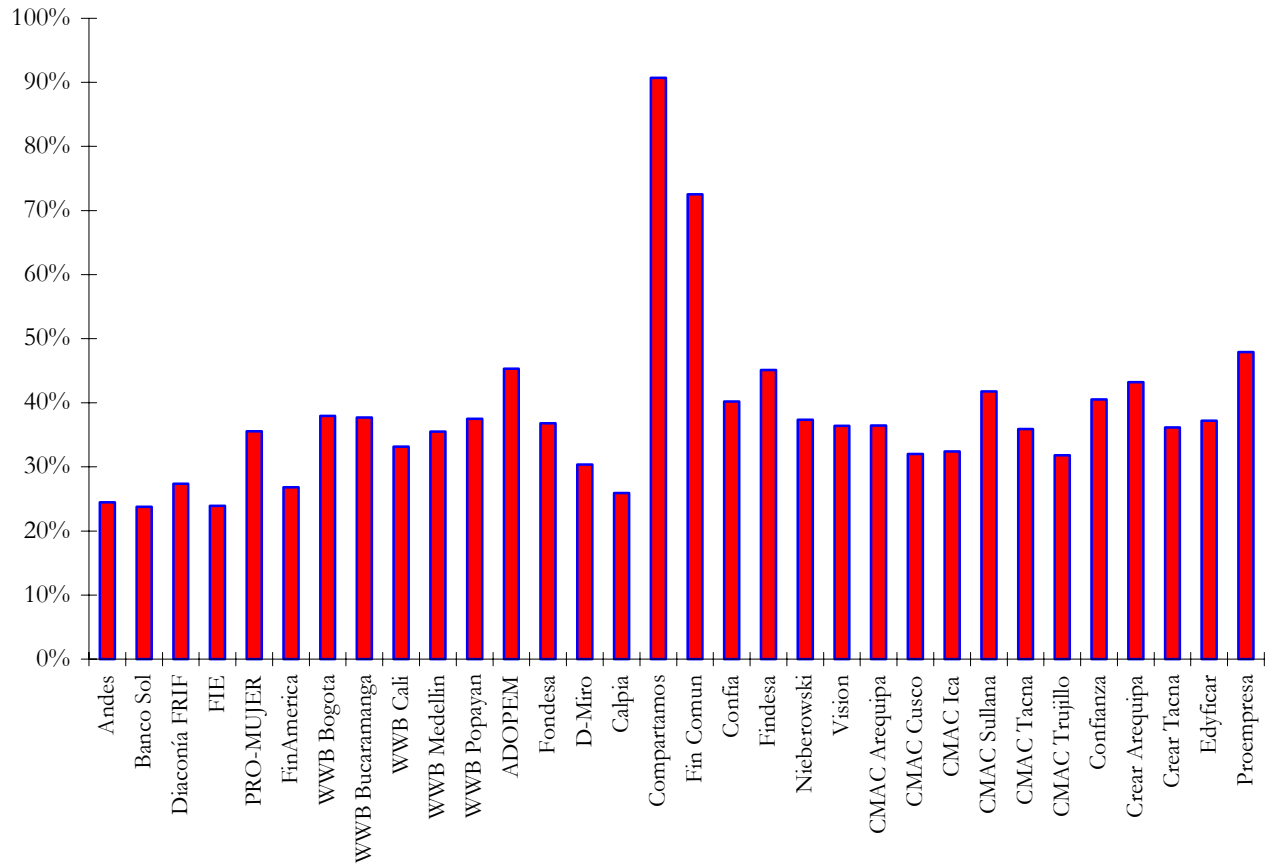
For portfolio yield to be meaningful, it must be understood in the context of the prevailing interest rate environment the MFI operates in. Generally speaking, portfolio yield is the initial indicator of an institution's ability to generate revenue with which to cover its financial and operating expenses. MFIs tend to disguise their interest rates, but portfolio yield is an easy way to calculate the actual rate obtained by an institution. Why do institutions hide their effective interest rate? Clients may be less likely to borrow, or government interest rate ceilings may prohibit the high interest rates needed for MFIs to survive. Portfolio yield cuts through the many tricks used by MFIs to disguise their lending rates such as flat rates, training fees, up front fees, discounts from disbursed amounts, etc. Portfolio yield shows how much, on average, the MFI really receives in interest payments on its loans.

Where the Industry Is

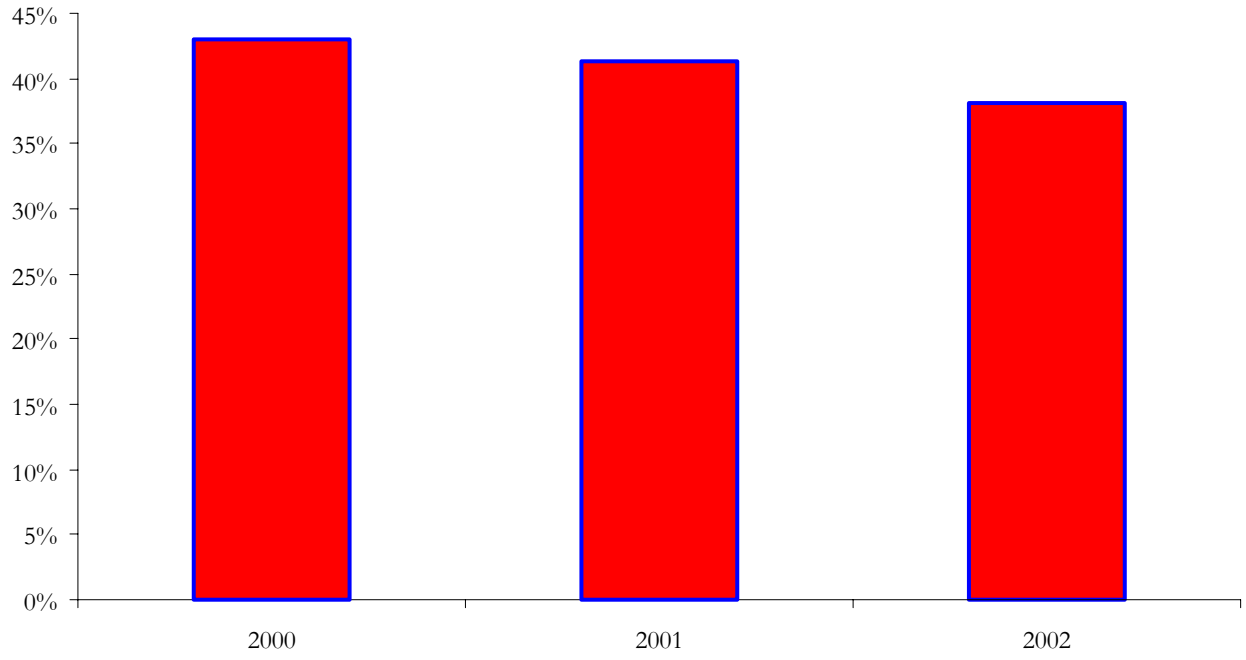
Portfolio yield continued to decrease in 2002. That is as it should be. Increased competition has led to increased efficiency, which in turn has allowed MFIs to generate increasing profits from lower yields. Average portfolio yield for the MicroRate 32 was 38.1% in 2002, down from 41.4% in 2001 and 43.0% in 2000. It is likely that this trend will continue as the microfinance industry matures.

Portfolio yield seems to be driven mainly by competition, though declining international interest rates no doubt also have an impact. The five Bolivian MFIs at the left end of the chart operate in the most competitive market and they charge the lowest rates among MFIs in the nine countries represented in the MicroRate 32, averaging 27.0% in 2002. At the other extreme, two MFIs have yields of more than 50%, Compartamos reaching to 91% (down from 111% in 2001). Remarkably, companies that receive virtually no subsidies have the lowest yields (i.e. they charge the lowest interest rates).

MicroRate 32: Portfolio Yield, December 2002



MicroRate 32: Average Portfolio Yield, 2000 – 2002



Annex I: Calculating the Ratios

Balance Sheet (US$'000)

FIE, Bolivia	31-Dec-01	31-Dec-02
ASSETS		
Cash and Banks	434	1,439
Temporary Investments	2,068	2,072
Net Loans	25,068	31,735
Gross Loans	27,443	34,604
Performing Loans	24,886	32,046
Portfolio at Risk	2,557	2,557
Loan Loss Reserve	2,374	2,868
Interest Receivables	336	437
Other Current Assets	356	343
Current Assets	**28,262**	**36,027**
Long Term Investments	37	143
Property and Equipment	918	835
Other Long Term Assets	-	-
Total Assets	**29,217**	**37,005**
LIABILITIES		
Demand Deposits	233	1,780
Short Term Time Deposits	4,640	6,099
Short Term Funding Liabilities	1,433	1,852
Other Short Term Liabilities	1,420	1,823
Current Liabilities	**7,726**	**11,554**
Long Term Time Deposits	6,152	8,735
Long Term Funding Liabilities	10,924	11,538
Quasi-Capital Accounts	-	-
Other Long Term Liabilities	-	-
Total Liabilities	**24,802**	**31,827**
EQUITY		
Capital	2,933	2,924
Earnings (Losses) Period	410	1,125
Retained Earnings	195	-
Other Capital Accounts	877	1,130
Total Equity	**4,415**	**5,179**
Total Liabilities & Equity	**29,217**	**37,005**

Income Statement (US$'000)

FIE, Bolivia	**31-Dec-01**	**31-Dec-02**
Interest and Fee Income	6,318	7,428
Cash Interest and Fee Income	5,982	6,990
Accruals (Int.. Receivables)	336	437
Interest and Fee Expense	2,009	1,913
Net Interest Income	**4,309**	**5,514**
Provision for Loan Loss	1,276	838
Net Interest Income After Provisions	**3,033**	**4,676**
Operating Expense	2,815	3,109
Personnel	1,730	1,875
Other Administrative Expense	1,085	1,234
Net Operating Income	**218**	**1,567**
Other Income	477	287
Investment Income	134	90
Other Non-Extraordinary Income	343	196
Other Expenses	116	371
MFI's Inflation Adjustment (if any)	56	123
Other Non-Extraordinary Expenses	60	248
Net Not-Operating Income	**579**	**1,482**
Extraordinary Items	(1)	-
Extraordinary Income	-	-
Extraordinary Expense	1	-
Net Income Before Taxes	**577**	**1,482**
Taxes	167	358
Net Income	**410**	**1,125**

Information Needed to Calculate the Ratios (US$'000)

Items	2002
Cash and Bank Current Account Plus Readily Marketable Investments	$ 3,511
Gross Outstanding Non-Restructured Portfolio w/Arrears > 30 days plus Total Gross Restructured Portfolio	$ 2,557
Interest and Fee Income	$ 7,428
Interest Receivables in 2001	$ 336
Interest Receivable in 2002	$ 437
Interest and Fee Expense	$ 1,913
Loan Loss Provisioning Expense	$ 838
Loan Loss Reserve	$ 2,868
Net Income Before Donations (Adjusted)	$ 1,023
Number of Borrowers (Excluding consumer and Pawn Loans) in 2002	21,781
Number of Borrowers (Excluding consumer and Pawn Loans) in 2001	20,239
Operating Expenses (Personnel Expenses + Administrative Expenses + Depreciation)	$ 3,109
Total Assets	$ 37,005
Total Equity	$ 5,179
Total Liabilities	$ 31,827
Total Outstanding Gross Portfolio	$ 34,604
Total Staff	210
Loan Officers	88
Write-Offs During the Period	$ 247
Period Average Assets	$ 33,111
Period Average Equity	$ 4,797
Period Average Funding Liabilities	$ 26,693
Period Average Gross Portfolio	$ 31,024

OPERATING EXPENSE RATIO	**Operating Expenses (Personnel Expenses + Administrative Expenses +Depreciation) / Period Average Gross Portfolio** Example: $3,109/$31,024 = 10%
COST PER BORROWER	**Operating Expenses (Personnel Expenses + Administrative Expenses +Depreciation) / Period Average Number of Borrowers** Example: $3,109/ (20,239+21,781/2) = $148
PERSONNEL PRODUCTIVITY	**Number of Borrowers (excluding Consumer and Pawn Loans) / Total Staff** Example: 21,781/210 = 104
LOAN OFFICER PRODUCTIVITY	**Number of Borrowers (excluding Consumer and Pawn Loans) / Loan Officers** Example: 21,781/88 = 248
PORTFOLIO AT RISK RATIO	**Outstanding Balance in Arrears over 30 Days plus Restructured Loans / Total Outstanding Gross Portfolio** Example: $2,557/$34,604 = 7.4%
PROVISION EXPENSE RATIO	**Loan Loss Provisioning Expenses / Period Average Gross Portfolio** Example: $838/ 31,024 = 2.7%
RISK COVERAGE RATIO	**Loan Loss Reserves / Outstanding Balance on Arrears over 30 days plus Refinanced Loans** Example: $2,868/ $2,557 = 112.2%

WRITE-OFF RATIO	**Value of Loans Written Off / Period Average Gross Portfolio** Example: $247/ 31,024 = .8%
FUNDING EXPENSE RATIO	**Interest and Fee Expenses / Period Average Gross Portfolio** Example: $1,913/31,024 = 6.2%
COSTS OF FUNDS RATIO	**Interest and Fee Expenses / Period Average Funding Liabilities** Example: $1,913/ 26,693 = 7.2%
DEBT/ EQUITY	**Total Liabilities / Total Equity** Example: $31,827/ 5,179 = 6.2
RETURN ON EQUITY	**Net Adjusted Income Before Donations/ Period Average Equity** Example = 1,023/ 4,797 = 21%
RETURN ON ASSETS	**Net Adjusted Income Before Donations / Period Average Assets** Example: $1,023/ 33,111 = 3.1%
PORTFOLIO YIELD	**Interest and Fee Income / Period Average Gross Portfolio** Example: $7,428-(437-336)/ 31,024 = 23.6%

Annex II: The MicroRate 32

As of December 31, 2002

Company	Country	Portfolio	Clients
Andes	Bolivia	$64,134,000	47741
Banco Sol	Bolivia	$80,900,000	43911
Diaconía FRIF	Bolivia	$6,543,000	13864
FIE	Bolivia	$34,603,000	25385
PRO-MUJER	Bolivia	$4,530,000	35437
FinAmerica	Colombia	$15,819,000	18203
WWB Bogota	Colombia	$4,836,000	15635
WWB Bucaramanga	Colombia	$6,216,000	30418
WWB Cali	Colombia	$22,230,000	49119
WWB Medellin	Colombia	$4,480,000	15652
WWB Popayan	Colombia	$11,945,000	48333
ADOPEM	Dominican Republic	$11,722,000	36782
Fondesa	Dominican Republic	$5,595,000	4241
D-Miro	Ecuador	$2,061,000	6971
Calpia	El Salvador	$44,754,000	42652
Compartamos	Mexico	$42,302,000	144991
Fin Comun	Mexico	$5,761,000	9340
Confia	Nicaragua	$15,079,000	17378
Findesa	Nicaragua	$10,567,000	8545
Nieberowski	Nicaragua	$5,437,000	8106*
Vision	Paraguay	$14,281,000	40615
CMAC Arequipa	Peru	$69,428,000	63543
CMAC Cusco	Peru	$29,070,000	23879
CMAC Ica	Peru	$12,875,000	12409
CMAC Sullana	Peru	$26,995,000	50323*
CMAC Tacna	Peru	$18,030,000	17073
CMAC Trujillo	Peru	$47,933,000	58338
Confianza	Peru	$4,407,000	4908
Crear Arequipa	Peru	$4,380,000	5303
Crear Tacna	Peru	$3,718,000	3671
Edyficar	Peru	$23,409,000	23688
Proempresa	Peru	$6,192,000	6793

* Number of loans was used when number of clients was not available.

	Portfolio Quality				Efficiency and Productivity			
Company	Portfolio at Risk	Provision Expense Ratio	Risk Coverage Ratio	Write-off Ratio	Operating Expense Ratio	Cost per Borrower	Personnel Productivity	Loan Officer Producttivity
Andes	7.5%	4.0%	104.6%	3.3%	13.0%	$193	83	275
Banco Sol	14.0%	6.9%	61.8%	7.1%	12.2%	$198	82	262
Diaconía FRIF	12.7%	2.1%	47.5%	0.2%	16.5%	$77	185	396
FIE	7.4%	2.7%	112.2%	0.8%	10.0%	$148	104	248
PRO-MUJER	0.2%	1.4%	1948.1%	0.8%	33.1%	$41	150	562
FinAmerica	11.2%	2.8%	23.5%	1.7%	17.4%	$176	94	240
WWB Bogota	1.9%	2.1%	91.6%	1.6%	19.7%	$62	193	411
WWB Bucaramanga	0.9%	0.4%	99.9%	0.3%	19.4%	$46	320	720
WWB Cali	1.2%	1.4%	272.6%	0.9%	11.6%	$53	266	540
WWB Medellin	2.5%	2.0%	95.3%	1.0%	17.3%	$55	217	423
WWB Popayan	0.9%	0.6%	100.0%	0.4%	11.6%	$39	302	700
ADOPEM	2.8%	1.9%	100.8%	1.1%	17.0%	$57	215	417
Fondesa	7.8%	2.2%	104.5%	0.5%	13.7%	$198	88	236
D-Miro	0.6%	1.9%	243.1%	0.0%	19.0%	$53	188	465
Calpia	3.7%	4.3%	143.7%	1.1%	18.3%	$178	141	343
Compartamos	1.1%	3.1%	405.4%	0.1%	33.9%	$96	195	342
Fin Comun	2.9%	1.6%	103.8%	1.5%	73.7%	$498	52	132
Confia	1.5%	6.6%	74.4%	4.4%	22.0%	$203	91	217
Findesa	1.4%	0.7%	89.6%	0.2%	22.8%	$373	44	189
Nieberowski	2.6%	1.6%	84.8%	0.5%	13.9%	$114	85	221
Vision	15.9%	4.6%	24.2%	3.1%	17.5%	$78	127	402
CMAC Arequipa	5.7%	1.5%	112.4%	0.9%	14.3%	$290	121	287
CMAC Cusco	4.3%	3.2%	140.4%	0.2%	12.5%	$208	137	442
CMAC Ica	13.6%	6.7%	119.8%	1.8%	14.7%	$285	70	122
CMAC Sullana	7.8%	2.5%	113.6%	2.1%	17.7%	$258	86	303
CMAC Tacna	5.5%	1.3%	91.3%	0.1%	16.3%	$371	94	391
CMAC Trujillo	5.1%	2.3%	89.8%	0.6%	16.9%	$467	63	210
Confianza	5.2%	3.5%	90.1%	1.2%	20.6%	$190	135	318
Crear Arequipa	5.8%	2.9%	101.3%	1.4%	22.0%	$207	59	70
Crear Tacna	13.0%	4.7%	77.3%	3.1%	22.2%	$279	71	237
Edyficar	11.0%	5.6%	90.6%	3.0%	19.5%	$192	96	226
Proempresa	8.5%	4.3%	76.0%	2.4%	25.6%	$233	100	226

	Financial Management			Profitability		
Company	Funding Expense Ratio	Cost of Funds Ratio	Debt / Equity Ratio	Adjusted Return on Equity	Adjusted Return on Assets	Portfolio Yield
Andes	5.3%	5.8%	9.25	17.6%	1.8%	24.5%
Banco Sol	5.5%	5.4%	6.05	na	na	23.8%
Diaconía FRIF	0.1%	7.7%	0.03	5.5%	5.3%	27.4%
FIE	6.2%	7.2%	6.15	21.3%	3.1%	23.9%
PRO-MUJER	1.2%	2.7%	0.66	1.5%	1.1%	35.6%
FinAmerica	10.2%	10.3%	4.65	na	na	26.8%
WWB Bogota	8.4%	10.6%	2.44	24.3%	8.5%	37.9%
WWB Bucaramanga	10.6%	12.2%	2.48	13.4%	4.6%	37.7%
WWB Cali	8.2%	12.0%	1.83	23.0%	8.7%	33.2%
WWB Medellin	10.5%	13.9%	1.67	14.5%	6.0%	35.5%
WWB Popayan	3.8%	9.0%	0.67	24.4%	15.4%	37.5%
ADOPEM	7.9%	11.7%	1.2	24.2%	11.7%	45.3%
Fondesa	12.0%	15.8%	2.35	13.7%	4.4%	36.8%
D-Miro	0.8%	2.4%	0.35	-0.3%	-0.2%	30.4%
Calpia	3.7%	4.1%	5.74	5.5%	1.0%	25.9%
Compartamos	12.2%	21.1%	1.98	53.2%	17.9%	90.7%
Fin Comun	15.9%	6.7%	11.31	3.6%	0.3%	72.5%
Confia	11.3%	8.9%	8.48	19.2%	2.0%	40.2%
Findesa	8.1%	11.0%	3.93	14.6%	4.1%	45.1%
Nieberowski	7.4%	8.2%	3.84	32.2%	8.6%	37.3%
Vision	18.4%	14.6%	7.23	na	na	36.4%
CMAC Arequipa	8.5%	7.5%	5.54	50.0%	7.1%	36.5%
CMAC Cusco	7.8%	6.5%	6.19	37.8%	5.4%	32.0%
CMAC Ica	10.8%	10.1%	4.6	16.7%	3.1%	32.4%
CMAC Sullana	11.8%	11.1%	5.26	32.0%	5.2%	41.8%
CMAC Tacna	10.4%	8.3%	5.81	26.3%	4.4%	35.9%
CMAC Trujillo	6.1%	5.6%	6.16	26.5%	4.1%	31.8%
Confianza	10.1%	9.4%	4.77	12.9%	2.5%	40.5%
Crear Arequipa	8.7%	9.2%	4.38	17.8%	3.5%	43.2%
Crear Tacna	6.6%	7.5%	3.41	-4.8%	-1.1%	36.2%
Edyficar	6.9%	9.3%	3.47	13.6%	2.9%	37.2%
Proempresa	10.3%	9.3%	4.36	-3.2%	-0.6%	47.9%