Performance Indicators for Microfinance Institutions

Technical Guide

MicroRate

Inter-American Development Bank

Performance Indicators for Microfinance Institutions

TECHNICAL GUIDE

2nd Edition

MicroRate

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

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This publication can be downloaded electronically from the web-sites of the Inter-American Development Bank (www.iadb.org/sds/msm) 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 (torj@iadb.org) or MicroRate (frank@microrate.com).

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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 definition 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 "Round Table Group", led to publication of a list of 20 definitions of performance indicators. SEEP, a network of institutions involved in microfinance, provided invaluable assistance in coordinating the final phase of this effort.

The purpose of this Technical Guide is relatively narrow. It highlights 15 of the most commonly used definitions published by the Round Table Group and illustrates how thy are used. The Guide 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 29 Latin American microfinance institutions compiled by MicroRate (the "MicroRate 29"). 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 Round Table discussions.

Finally, it is important to clarify 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 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

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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 more 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 de-emphasizing the importance of analyzing management and governance issues when assessing a microfinance institution. In fact, given the non-profit status or origin of many microfinance institutions, this should typically be a priority in any such assessment.[2]

It should also be stated upfront that the Guide is using adjusted numbers throughout; that is, the financial data have been adjusted for subsidies, inflation and different practices for recognizing non-performing loans and foreign exchange losses. These adjustments impact items both on the income statement and the balance sheet of the MFIs. Consequently, the numbers in this publication are not identical to those that can be derived from the financial statements presented by the MFIs themselves (though in most cases the difference is not very large). However, the great advantage of using adjusted numbers is that it makes it possible to see how MFIs would compare with each other if they *were to operate under a single set of rules and practices*. Since the ability to compare MFIs is crucial to this publication, the numbers in it reflect the above-mentioned adjustments.[3]

In an attempt to be as specific and concrete as possible, the Guide also provides an annex where are the numbers are calculated. 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.

Portfolio Quality

The largest source of risk for any financial institution resides in its loan portfolio. Not only is the loan portfolio by far the largest asset of an MFI but, to make matters worse, 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 outperform 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

2 For details on the exact nature of the adjustments, contact Frank Abate at MicroRate (frank@microrate.com).

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 four other indicators related to portfolio quality and associated risks: Write-Off Ratio, Provision Expense Ratio and Risk Coverage Ratio.[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 indicators 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 as large. In an MFI the 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 / Average Gross Portfolio (Operating Expense Ratio), Operating Expenses / Average Number of Borrowers (Cost per Borrower Ratio), Borrowers / Total Staff (Personnel Productivity), and Borrowers / Loan Officers (Loan Officer Productivity Ratio).

Financial Management

Financial management assures that there is enough liquidity to meet an MFIs 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 has mobilized savings from depositors. Financial management can 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.

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[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: Financial Expense Ratio, Cost of Funds Ratio and the Debt/Equity Ratio.

PROFITABILITY

Profitability indicators 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 to 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 reserves. 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 reserves. 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.

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,[4] 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 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. Financiera Visión, 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.

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[4] 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.

Finally, 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 always tell the whole story. Take FIE and Caja los Andes in Bolivia. In December 2000 FIE's PaR 30 was 9%, that of Andes 7.5%. On the face of it, Andes had the better portfolio. Not necessarily so, because Andes had a much higher balance of seriously delinquent loans than did FIE. Of Andes' PaR 30 2.2% were loans with arrears over 180 days, whereas FIE had written off all seriously delinquent loans. Andes tacitly acknowledged the fact that its delinquent loans represented a greater risk, by maintaining a higher loan loss reserve ratio than FIE. By December 2001, these differences had largely disappeared and both institutions had virtually identical PaR 30 indicators and similar amounts of seriously delinquent loans.

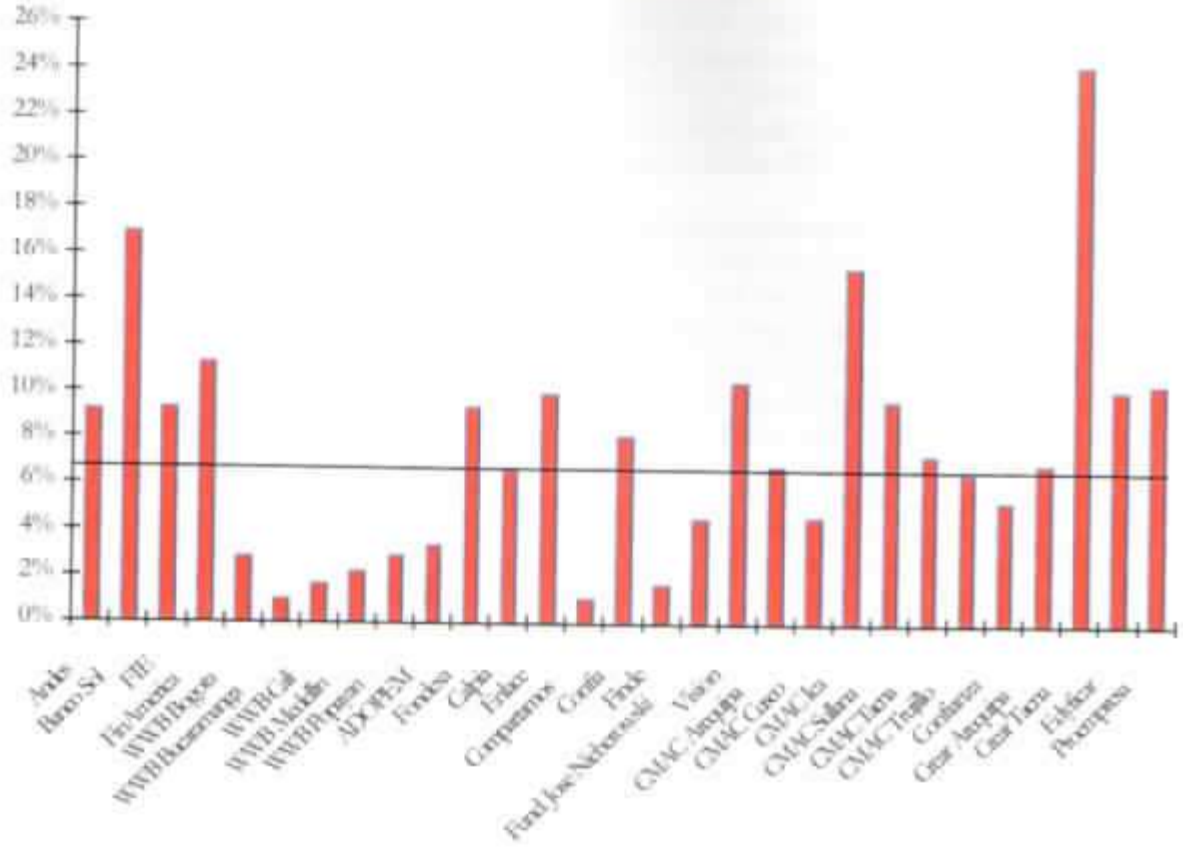
Where the Industry Is

Portfolio at Risk has traditionally been far lower in MFIs than in the commercial banking sector. The leading MFIs show portfolios at risk of 3-6%, with few exceeding 10%. In 2001 the average of the MicroRate 29 was 7.6% and 10 MFIs had Portfolio at Risk of less than 5%[5]

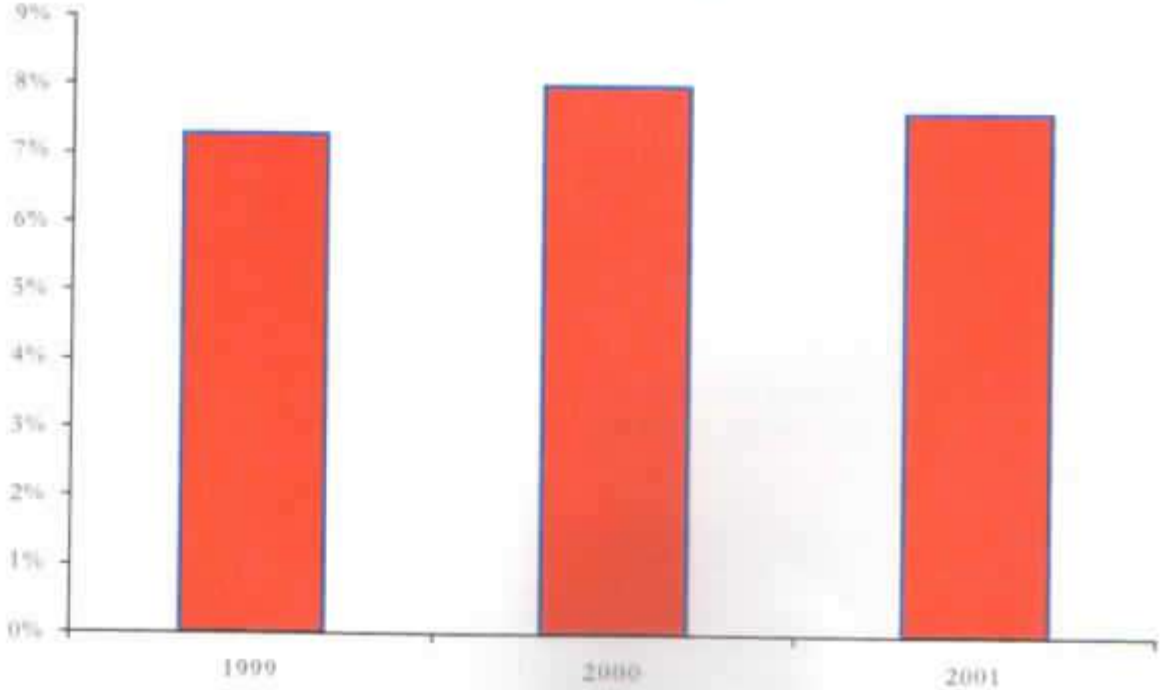
FinAmérica, with its exceptionally high Portfolio at Risk Ratio, illustrates the risk of "mission drift." In 1998, FinAmérica began to drive up average loan size to reduce its Operating Expense Ratio. Much of its new lending was for small business loans, which were covered by credit guarantees issued 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. The impact of economic recession and strong competition are also explanatory factor in this development, but mission drift has played an important role in and of itself.

[5] The horizontal line in the graph on the MicroRate 29 represents the median value of the included MFIs.

MicroRate 29: Portfolio at Risk, December 31, 2001



MicroRate 29: Average Portfolio at Risk, 1999 - 2001



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.

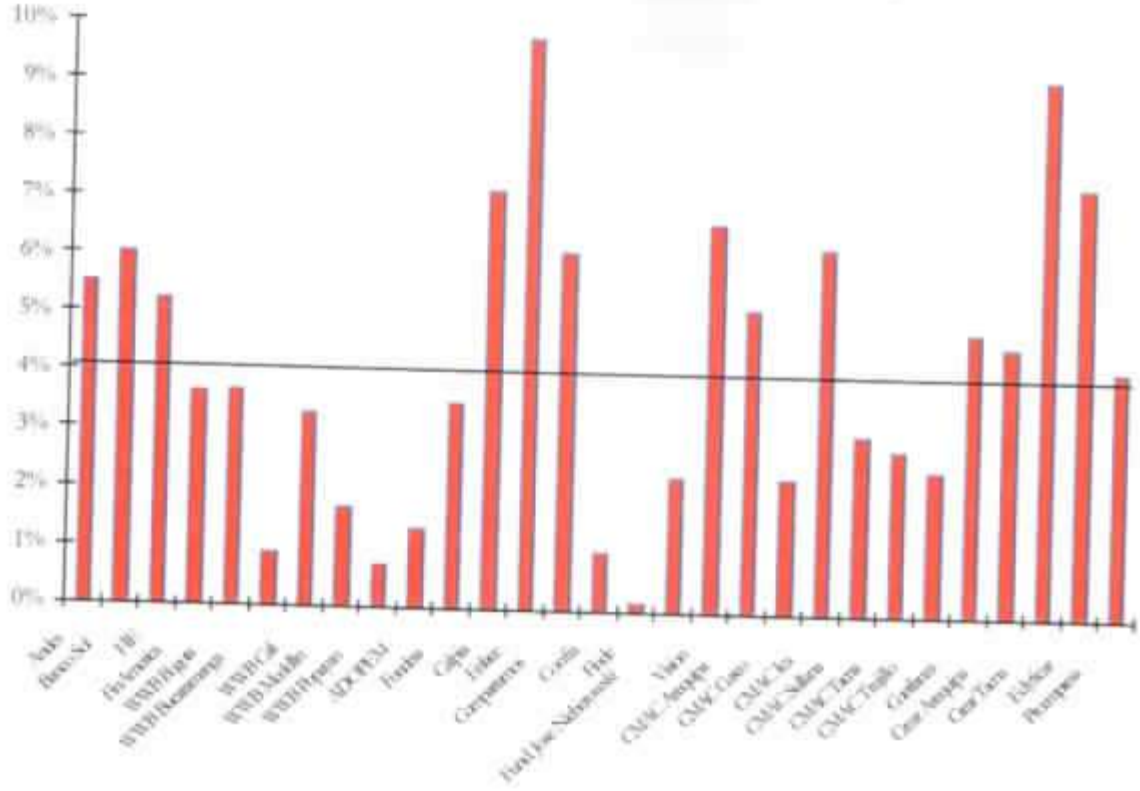
What to Watch Out For

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. Licensed and supervised 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, to hide profits that could undermine access to donor subsidies. On the other hand, by simply scaling back on its provision expenses, a 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 licensed and supervised MFIs).

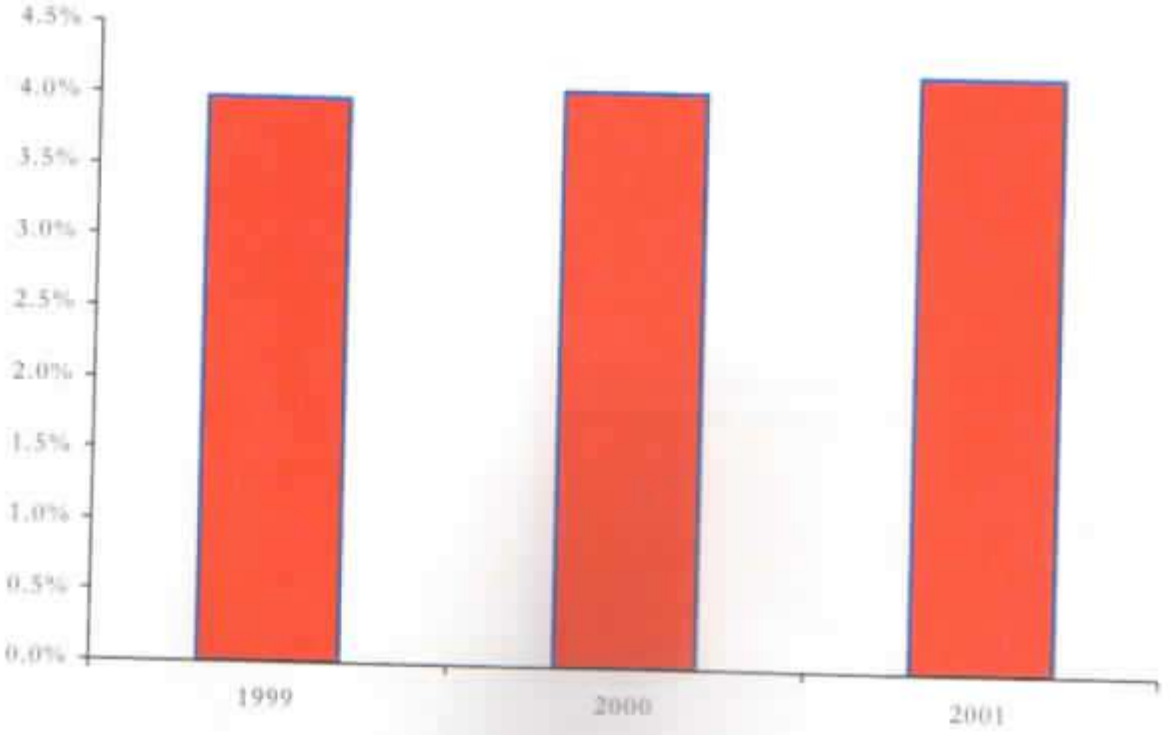
Where the Industry Is

Provision Expense Ratios for the MicroRate 29 vary between 1% and 10%. The average for the group has consistently remained at about 4% since 1999.

MicroRate 29: Provision Expense Ratio, December 31, 2001



MicroRate 29: Average Provision Expense Ratio, 1999 - 2001



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 are usually equal to 80% - 120% of Portfolio at Risk (the range was 23% – 366% for the MicroRate 29). These are much higher levels than maintained by most commercial banks. To some extent, these high reserves reflect an attitude of "when in doubt, be conservative". Microfinance still 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 Ratio 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 limits on provisions.

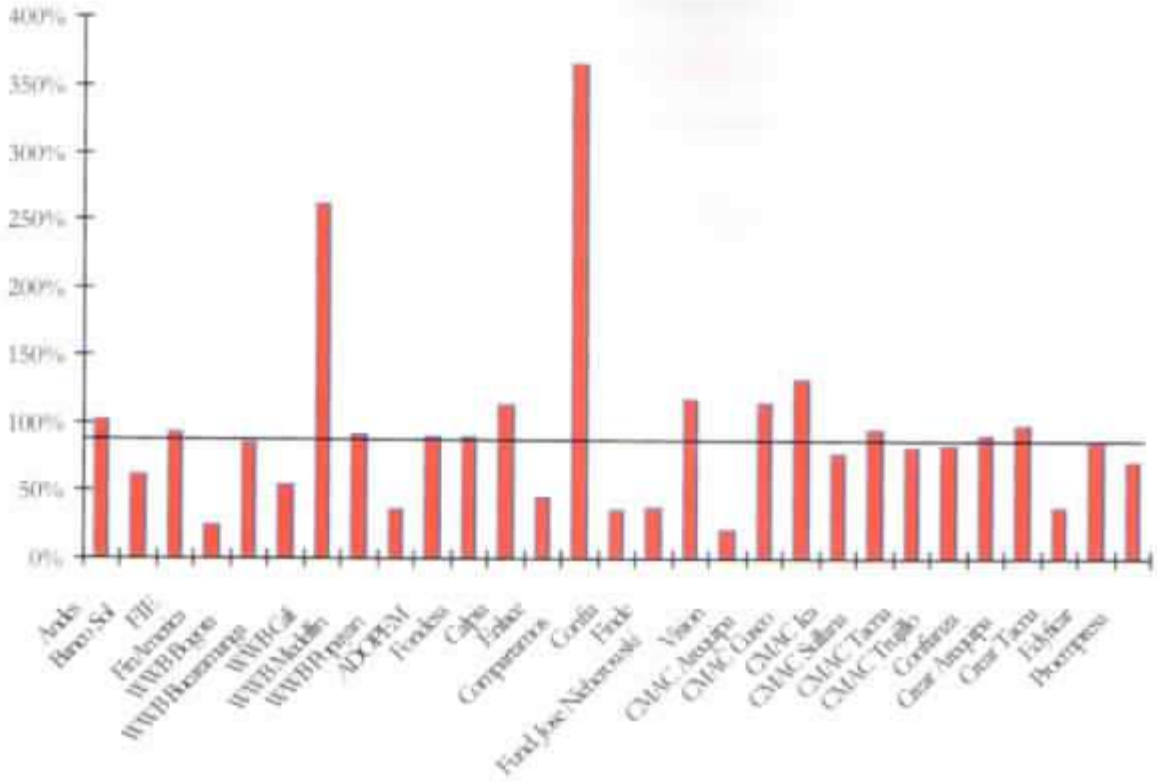
For institutions with very high coverage (>200%), these seemingly high reserves may be a prudent measure to combat future downturns in the economy or preempt poor performance of the portfolio. WWB Cali in Colombia, one of the leaders in microfinance, has increased loan loss reserves to 262% of Portfolio at Risk for 2001, up from 207% in 2000, and 104% in 1999. In this case, the institution is bracing itself for possible economic shocks in a country in turmoil.

The Risk Coverage Ratio 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.

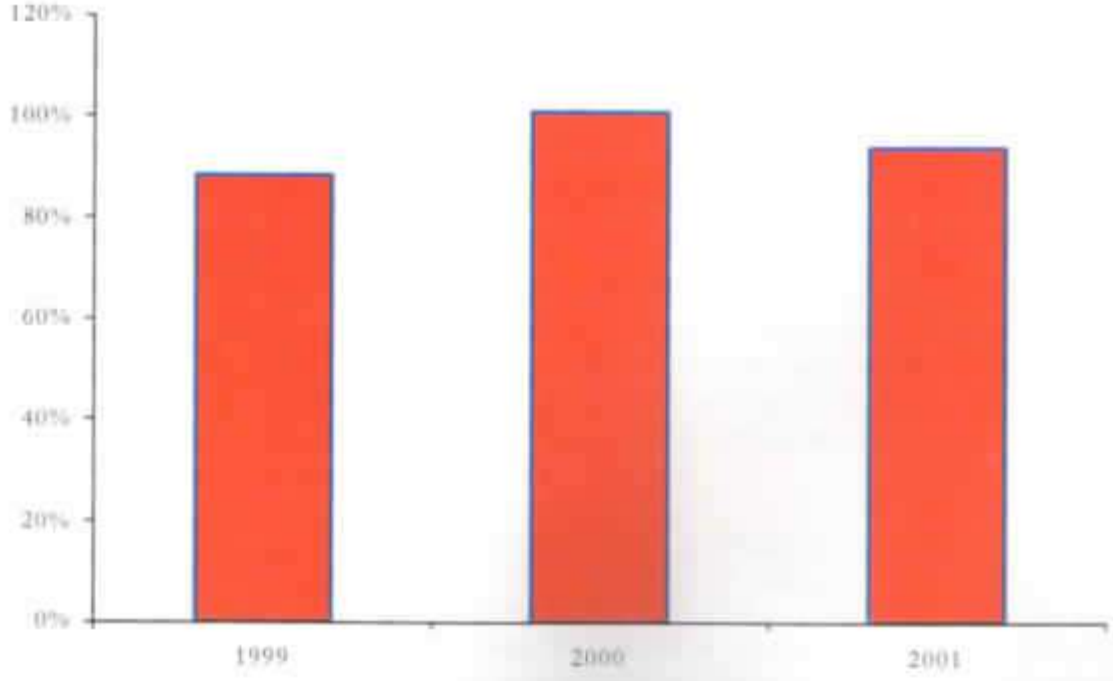
Where the Industry Is

It has generally been assumed that Risk Coverage Ratios would gradually decline as the microfinance industry matures. The MicroRate 29 seemed to confirm that expectation in 1999, when the average Risk Coverage Ratio dropped to 88%. But it has since been oscillating at higher levels, reaching 94% at the end of 2001. This could be in response to persistent economic difficulties in countries like Bolivia, Peru and Colombia, which carry a heavy weight in the sample. Also noteworthy is that NGOs are increasing their coverage ratios to fall in line with the rest of the industry.

MicroRate 29: Risk Coverage Ratio, December 31, 2001



MicroRate 29: Average Risk Coverage Ratio, 1999 - 2001



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 that assets are 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

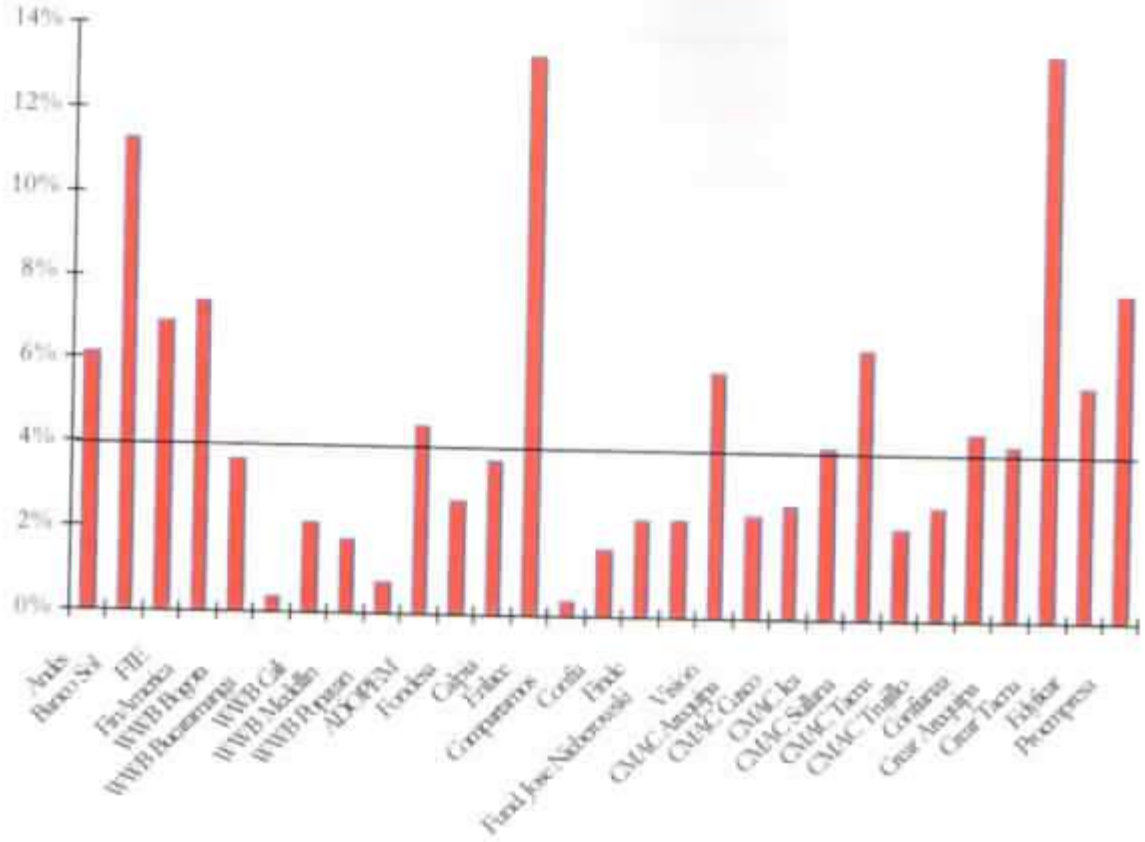
Some institutions will take aggressive write-offs to attempt to sanitize their portfolios. They will then show a low Portfolio at Risk, and only the Write-Off Ratio will allow an analyst to detect that this improvement is more apparent than real. Other MFIs, particularly NGOs resist writing off their 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 ADOPEM 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. For instance, the slight dip of average Portfolio at Risk in 2001 is less a sign of improving portfolio quality than a result of higher write-offs.

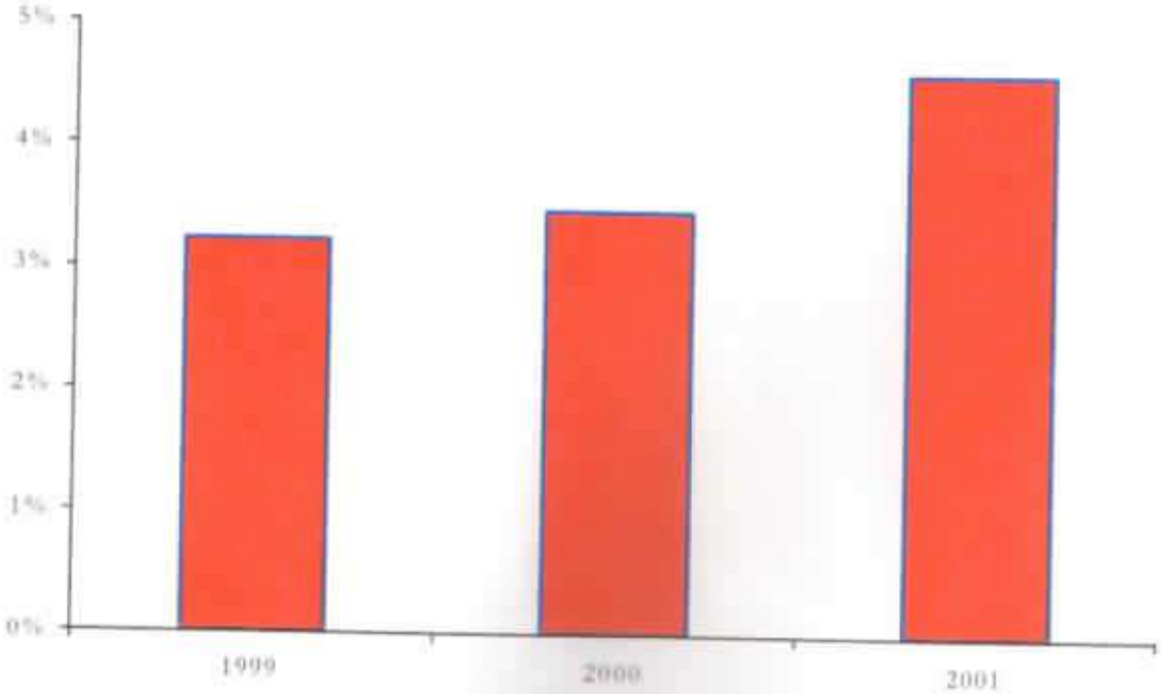
Where the Industry Is

Write-offs have been rising steadily among the 29, and that trend accelerated in 2001 as the large Bolivian institutions faced growing portfolio problems. Nevertheless, write-offs remained surprisingly low considering that many of the MFIs in the sample operate in countries battling with economic problems.

MicroRate 29: Write-Off Ratio, December 31, 2001



MicroRate 29: Average Write-Off Ratio, 1999 - 2001



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 of the institution.

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 29 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 – 3 percentage points to the Operating Expense Ratio.

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 loan size is often US$100 or less, operating expenses are usually above 40% of average gross portfolio. Comparing the 14.8% operating expense ratio of BancoSol to the 54.3% or the 41% of Compartamos would be highly misleading. BancoSol has an average loan size of US$1,213 while Enlace and Compartamos have average loan sizes of US$160 and US$268 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.

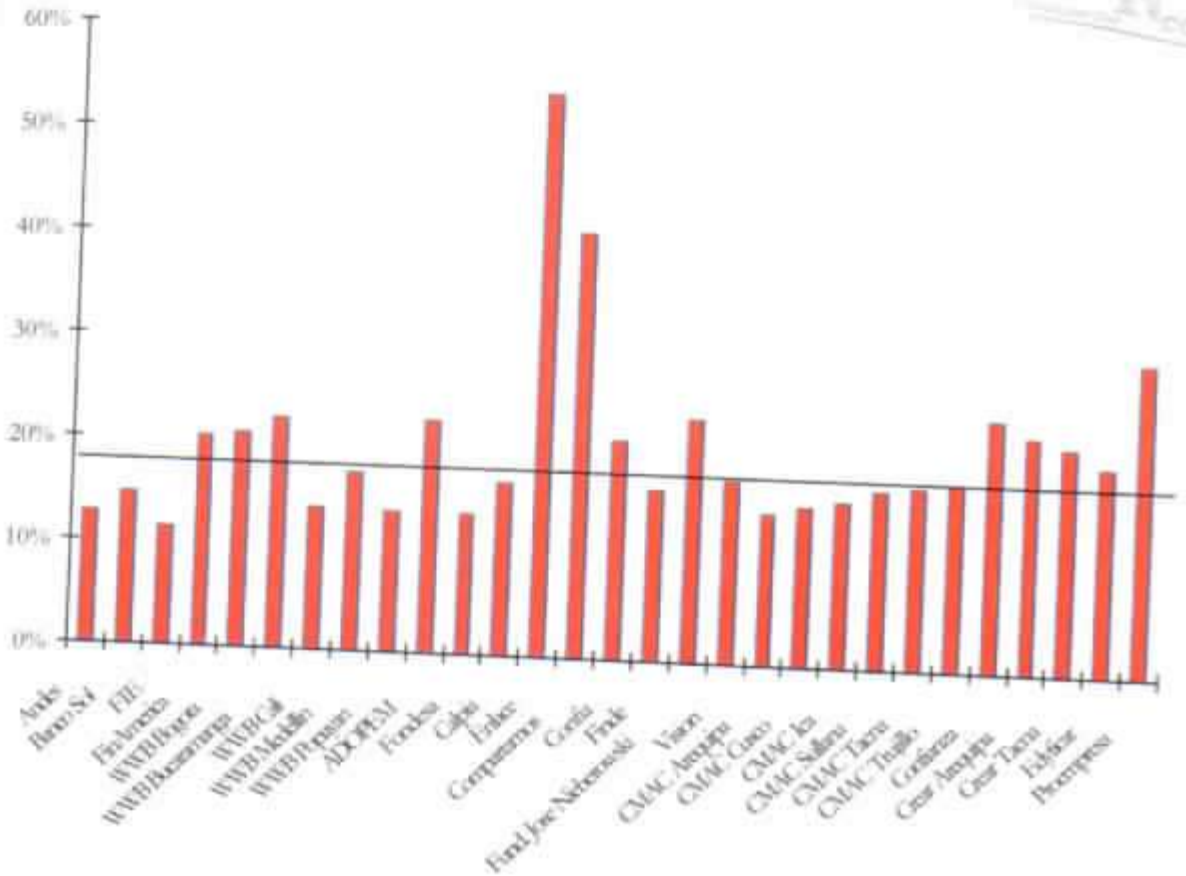
Operating costs are strongly correlated to salary levels, as is to be expected in a highly labor-intensive industry. Here it is important to distinguish between cases where an MFI underpays its staff and where it simply operates in a low cost environment. Staff attrition rates and comparison to salary 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.

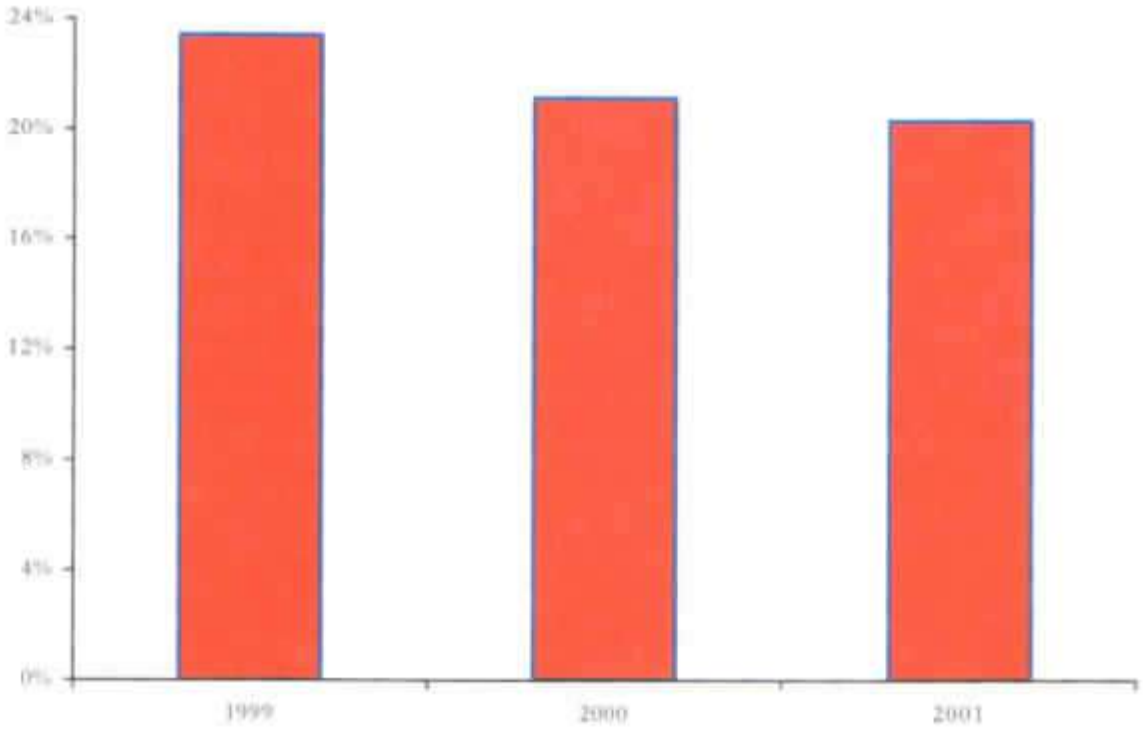
Where the Industry Is

Microfinance institutions are 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 typically achieve Operating Expense Ratios below 20% and the very best are approaching 10%. In 2001 the average Operating Expense Ratio of the MicroRate 29 was 20.4%

MicroRate 29: Operating Expense Ratio, December 31,2001



MicroRate 29: Average Operating Expense Ratio, 1999 – 2001



COST PER BORROWER

Operating Expenses / Average Number of Active Borrowers

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.

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 the Write-off Ratio complements Portfolio at Risk. It is tempting to simply conclude that a high Operating Expense Ratio is a sign of an inefficient MFI 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 Enlace (El Salvador) have high Operating Expense Ratios, because their average loan sizes are extremely small. Yet, Compartamos' and Enlaces Cost per Borrower is only a fraction of that of such efficient MFIs like Fondesa in the Dominican Republic or Caja Municipal de Arequipa in Peru. What is more, Enlace, the MFI with the highest Operating Expense Ratio among the 29, spends far less per borrower, than the most efficient MFI in the sample, FIE in Bolivia.

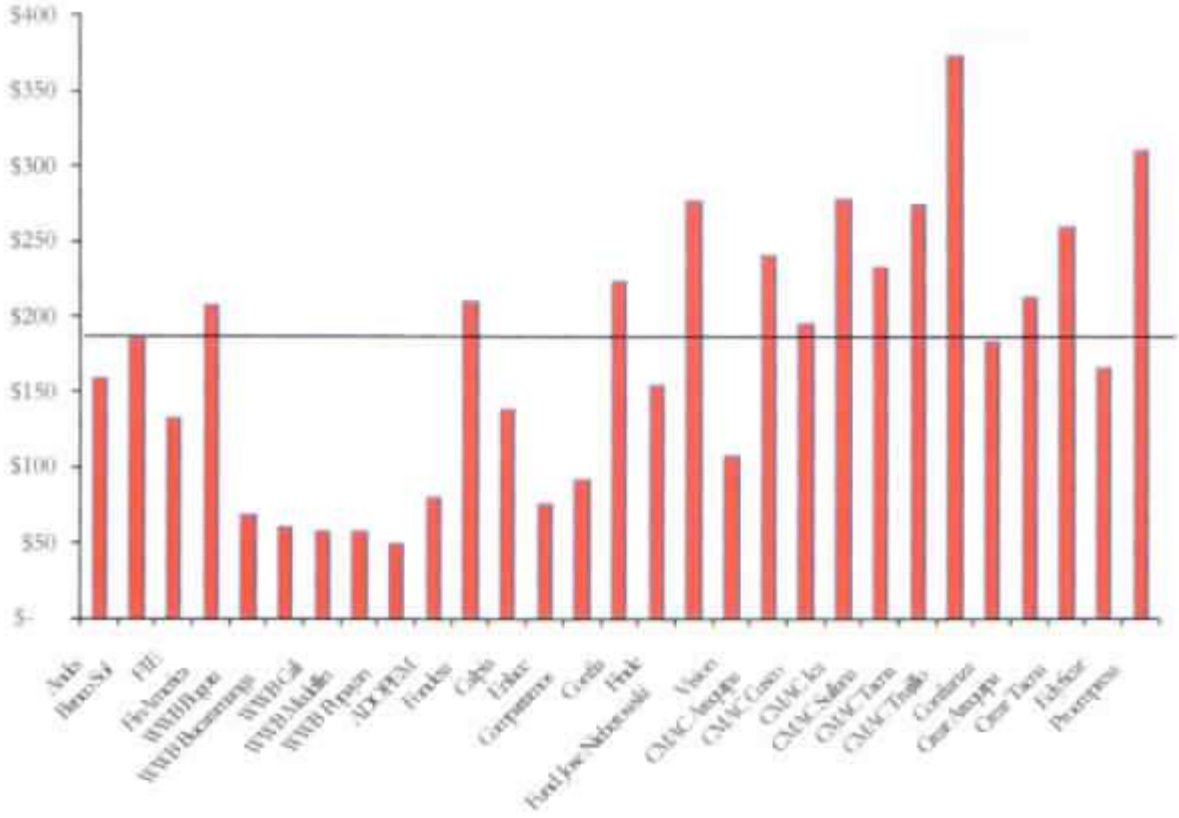
Given that the numerator for the Cost per Borrower Ratio is the same as for the Operating Expense Ratio, both indicators are subject to the same limitations and considerations.

Where the Industry Is

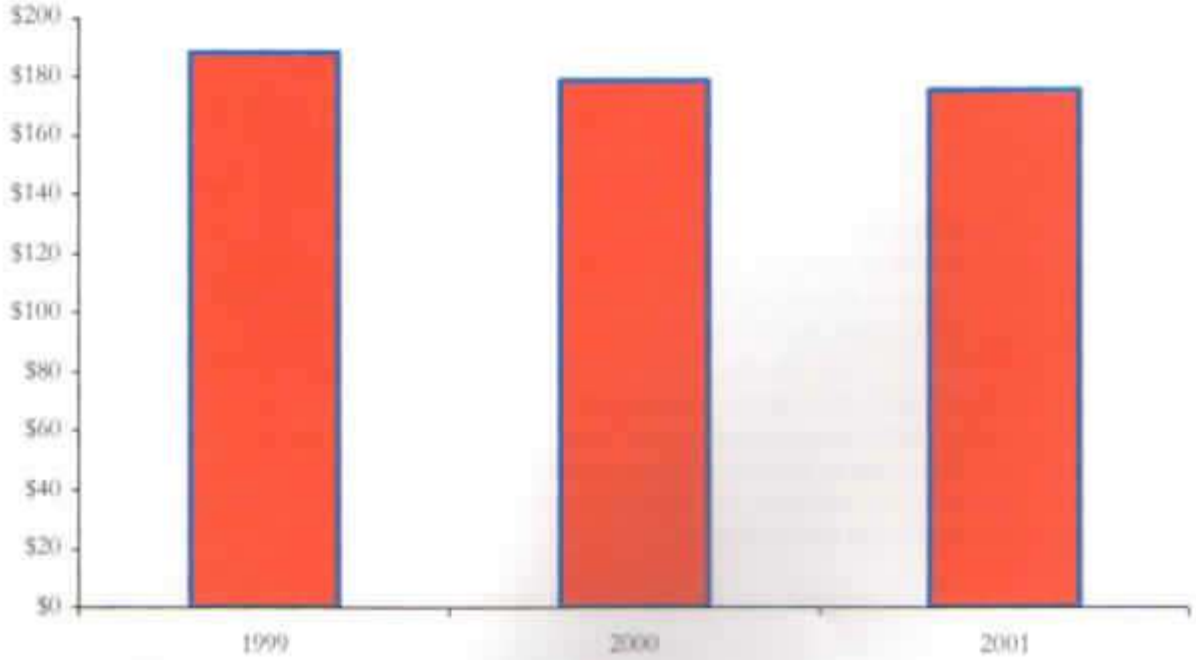
The Colombian WWB affiliates are setting the pace in terms of efficiency. Even though FIE in Bolivia had the lowest Operating Expense Ratio among the 29, FIE's average loan size was above $1,000 compared to $266 for WWB Popayan. Yet both had roughly comparable Operating Expense Ratios (11.6% vs. 13.7%). The big difference between them was, of course, the Cost per Borrower. Whereas FIE required on average $133 in operating expenses for each borrower, WWB Popayan needed only $50. MFIs specializing in very small loans must maintain their Cost per Borrower well below $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 exceeding $200/borrower and some reaching $300.

On average, the Cost per Borrower declined 5% in 2000 and 2% in 2001 among the MicroRate 29.

MicroRate 29: Cost per Borrower, December 31, 2001



MicroRate 29: Average Cost per Borrower, December 31, 2001



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

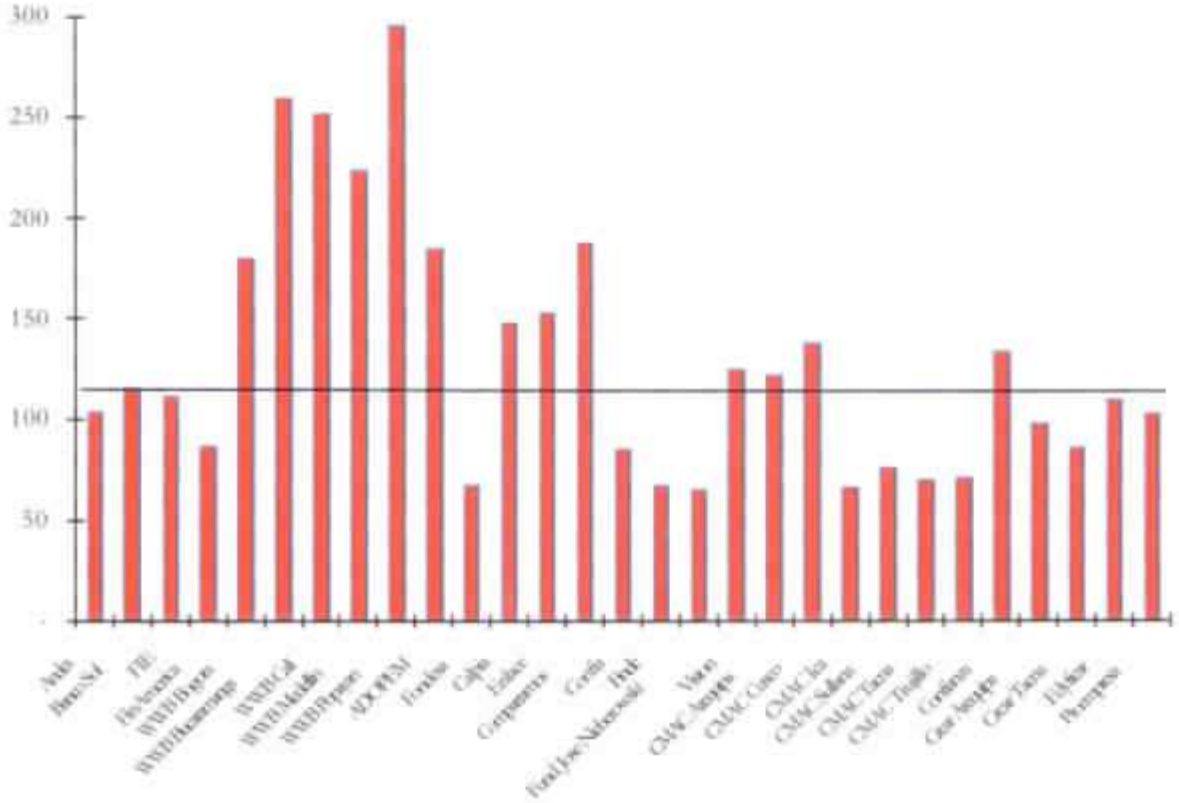
Traditionally, the microfinance community has used the ratio of Clients per Credit Officer (or Loans per Credit Officer) to measure productivity. However, including all staff instead of only credit officers in the denominator provides a more complete view of the institution's productivity, particularly 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.

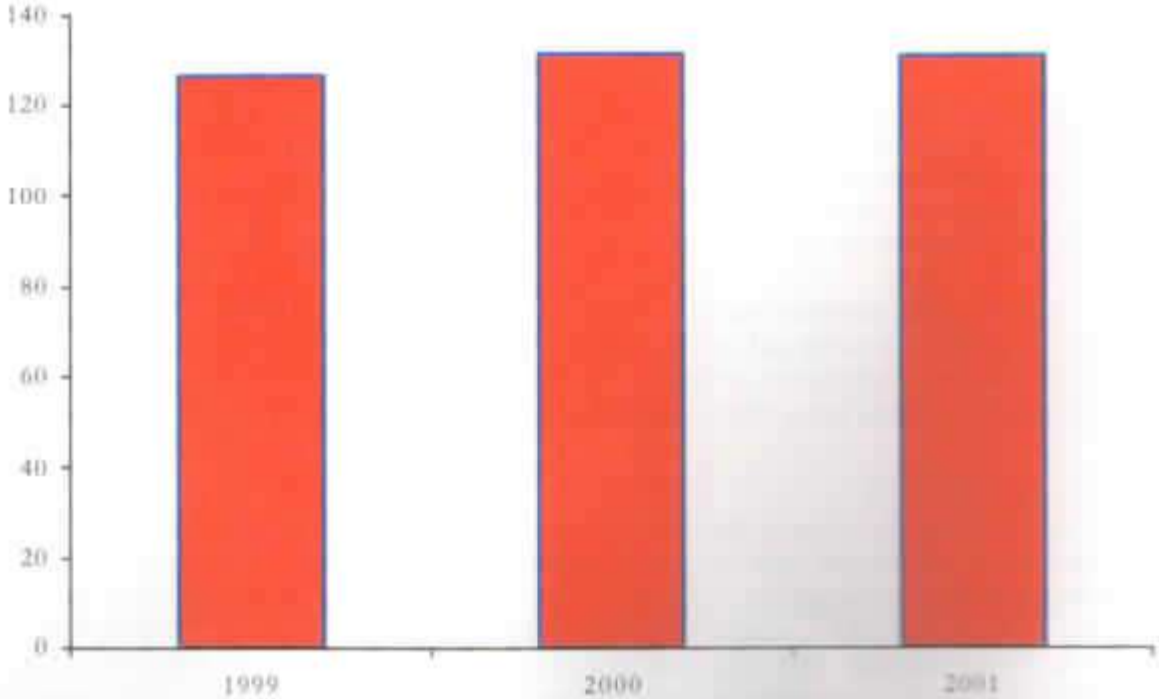
Where the Industry Is

Personnel Productivity is one of the ratios that most uniquely define microfinance institutions. MFIs must be able to handle very large numbers of customers with a minimum of administrative effort and without allowing portfolio quality to deteriorate if they are to become financially viable. Productivity among the MicroRate 29 has steadily increased during the past few years, from 127 borrowers/staff in 1999 to 131 in 2000 and 2001. The most productive MFIs are Colombian Women's World Banking affiliates in Popayán, Bucaramanga, Cali, and Medellín, which have more than 220 borrowers per staff.

MicroRate 29: Borrowers Per Staff, December 31, 2001



MicroRate 29: Average Borrowers per Staff, 1999 - 2001



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 exactly 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 to administrative staff or analysts who process loans without direct client contact. Loan officers also include contract employees who may not be part of 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

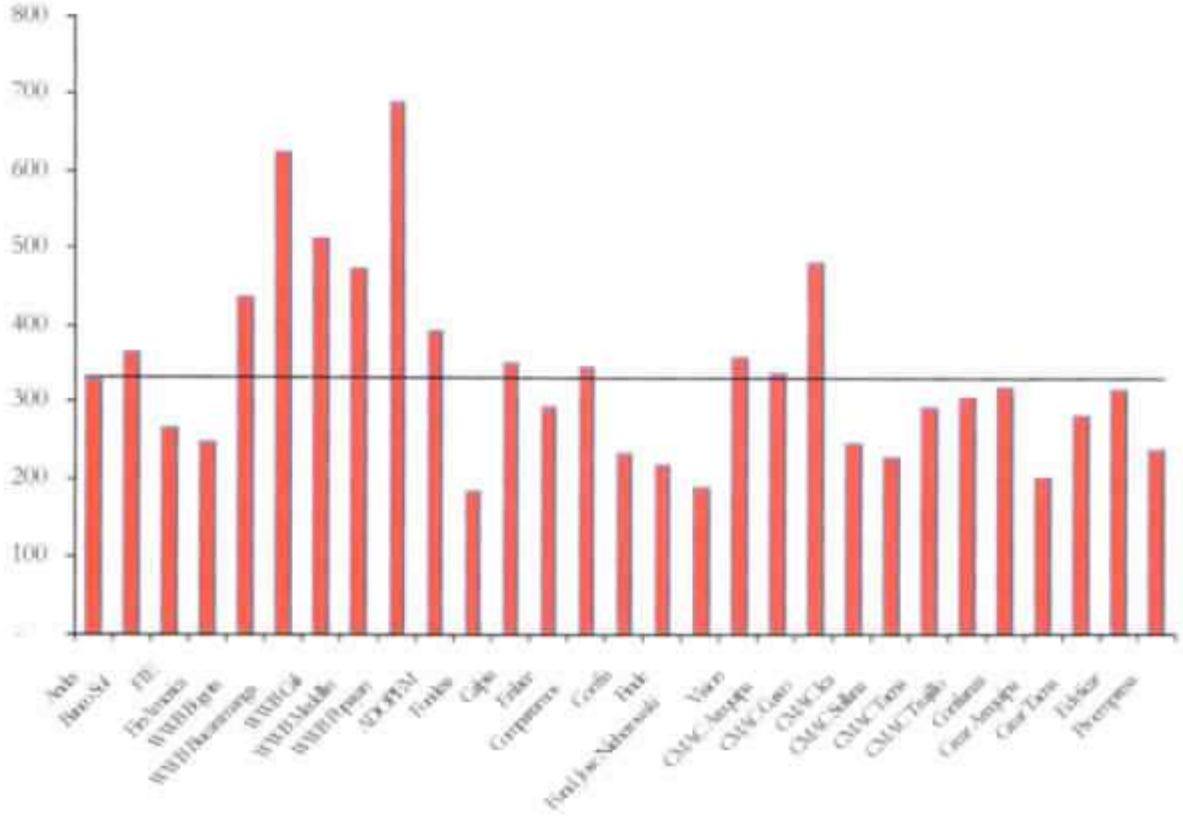
The Loan Officer indicator is, like Personnel Productivity, is easily distorted by consumer credit or pawn loans masquerading as microcredit. Both consumer and pawn lending rely heavily on collateral, which makes it possible to process very large numbers of loans with few staff. Consequently, consumer and pawn loans have been backed out in the calculation of the indicator.

Where the Industry Is

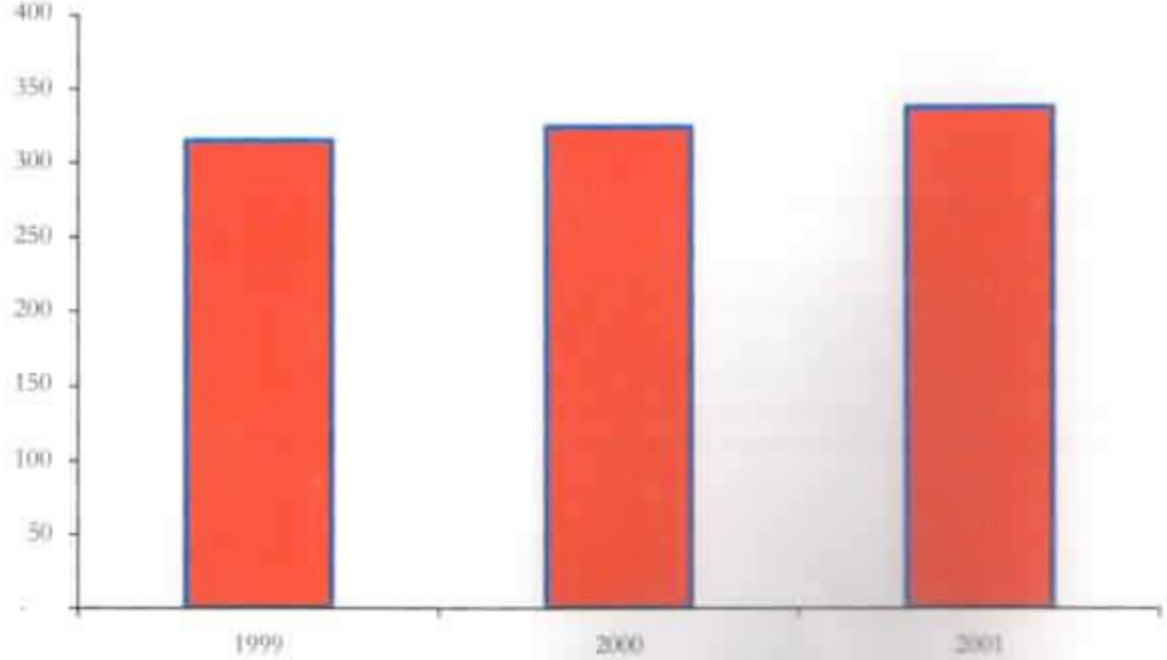
The Colombian WWBs are setting standards in terms of Loan Officer Productivity. Their loan officers routinely exceed 500 clients, a number which has functioned as a sound-barrier in the industry. Meanwhile, MFIs in Nicaragua, which have Loan Officer Productivity of 200 to 250, are struggling to keep up with the rest of the group.

Loan Officer Productivity is a function of a number of factors internal and external to MFIs, including incentive structure, lending methodology, population density, transportation infrastructure, etc. It is therefore difficult to identify exactly why some MFIs are more efficient than others. As a group, however, the Loan Officer Productivity of the MicroRate 29 has steadily improved over the past three years. It is expected that this trend will continue and accelerate as competition increasingly makes itself felt and pushes MFIs to strive for greater efficiency in their operations.

MicroRate 29: Borrowers per Loan Officer, December 31, 2001



MicroRate 29: Average Number of Borrowers per Loan Officer, 1999 - 2001



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.

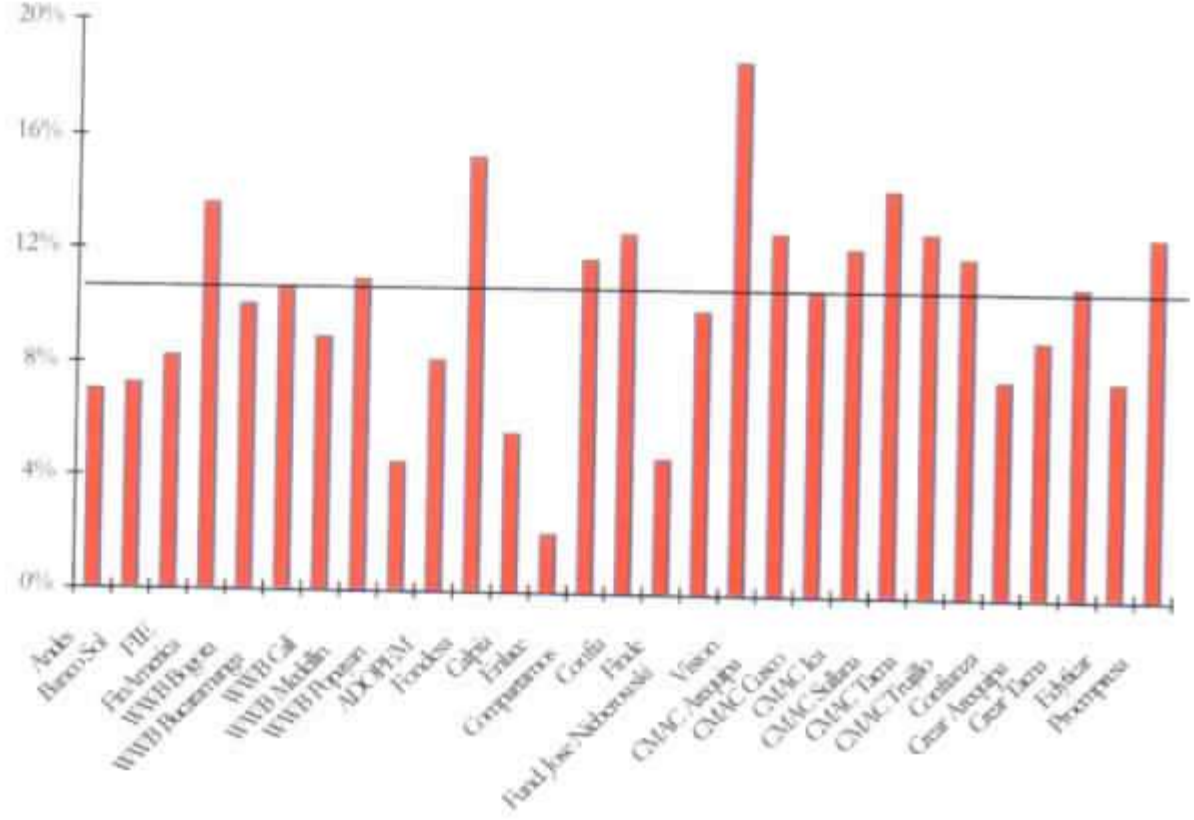
What to Watch Out For

The Funding Expense Ratio is determined more than by anything else by whether an MFI finances itself primarily through debt or through equity. 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.

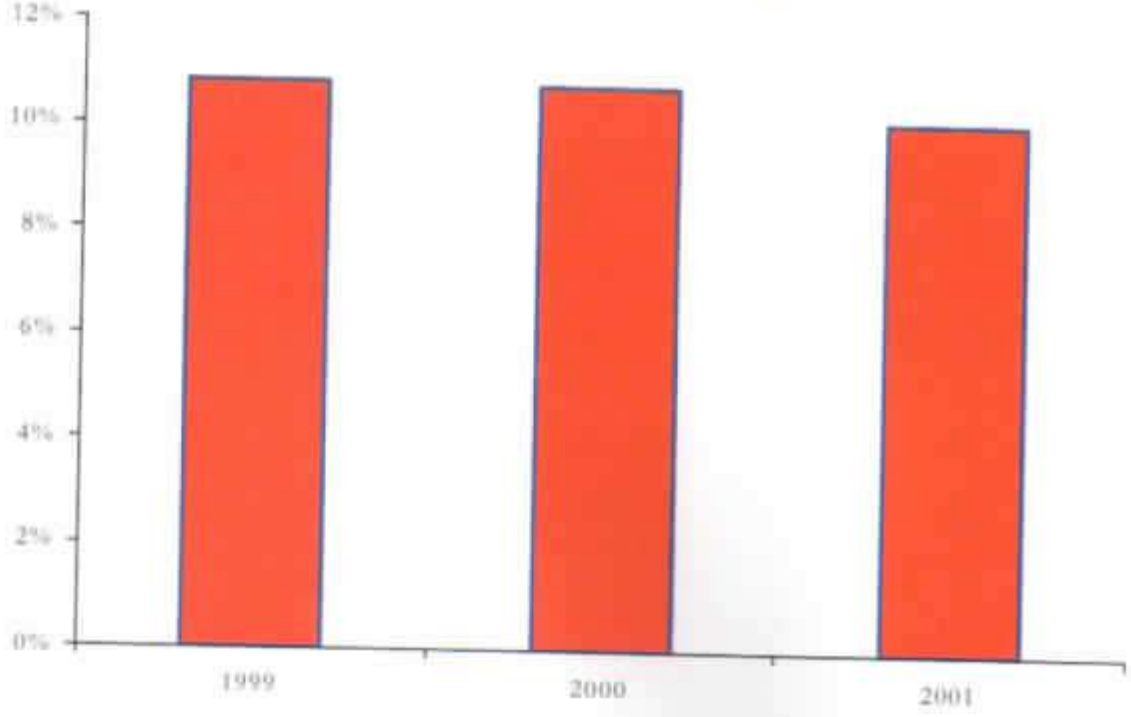
Where the Industry Is

The Funding Expense Ratio for the MicroRate 29 averaged 10.2% in 2001, after peaking at 10.8% in 1999 and 2000. As expected, the ratio is higher for institutions with higher leverage. In 2001, average Funding Expense Ratio among regulated MFIs in the sample was 10.9% (average leverage 4.5), versus 8.4% for MicroRate 29 NGOs (average leverage 1.3). In general, licensed and supervised MFIs are more highly leveraged than NGOs and therefore have substantially higher Funding Expense Ratios. There are exceptions to this rule among the MicroRate 29: The Funding Expense Ratio of Finde remains low because the company still benefits from subsidized loans. But Finde also demonstrates how the structure of MFIs tends to change as they formalize. In 2001, the year it formalized, Finde's debt/equity ratio nearly doubled from 1 to 1.9 and its Funding Expense Ratio jumped from 7.4% to 10%. The Bolivian MFIs, Caja los Andes BancoSol and FIE have been able to achieve low funding expenses despite above average leverage through savings mobilization efforts.

MicroRate 29: Funding Expense Ratio, December 31, 2001



MicroRate 29: Average Funding Expense Ratio, 1999 - 2001



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 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.

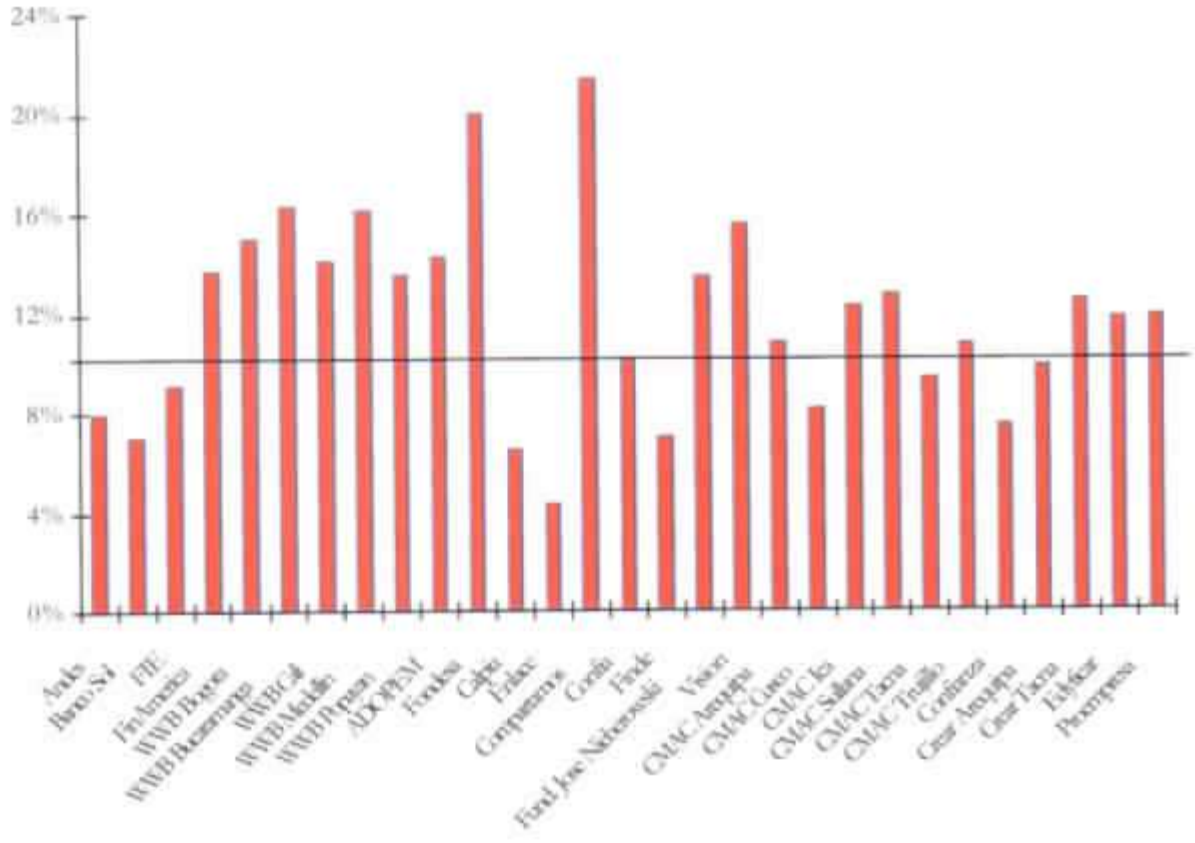
What to Watch Out For

In many cases, the funding liabilities of MFIs include a substantial amount of 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 by raising lending rates.

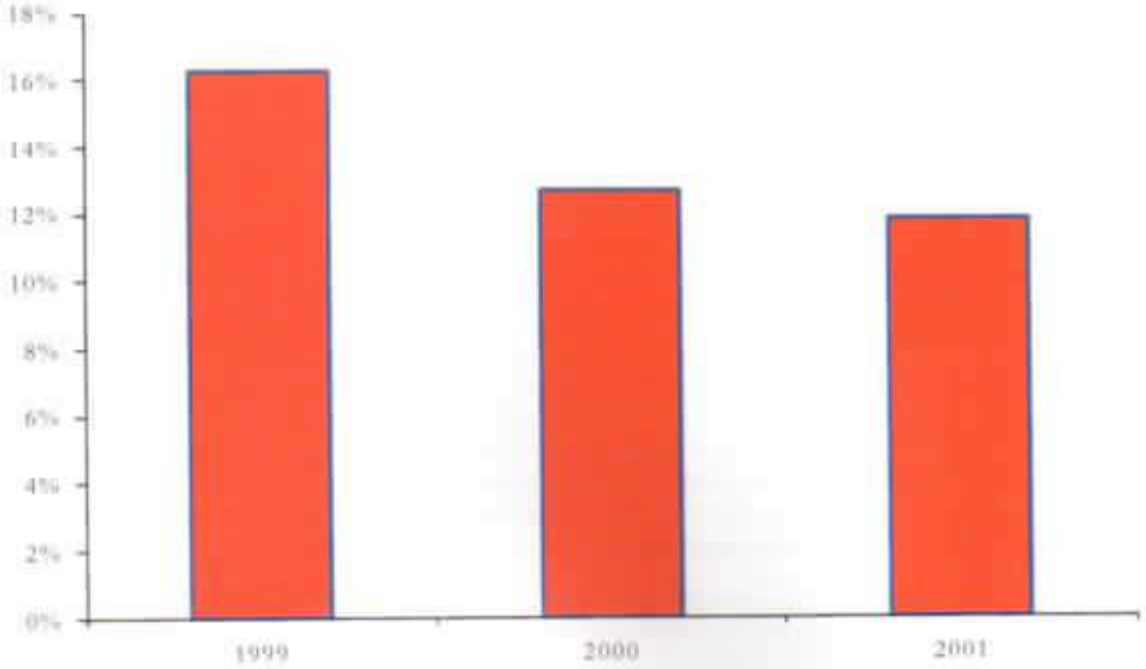
Where the Industry Is

The Cost of Funds ratios of the MicroRate 29 largely reflect interest rates in their respective countries. The two MFIs with the highest ratios, Compartamos in Mexico and Adopem in the Dominican Republic borrow at high commercial rates in their local markets. The three Bolivian MFIs at the left of the graph also are largely commercially funded, but they have become remarkably efficient in tapping local credit markets. Deposits at BancoSol, for instance, account for 65% of capitalization. The same is true for Calpia (El Salvador), which boasts the lowest Cost of Funding Ratio among the 29.

MicroRate 29: Cost of Funds Ratio, December 31, 2001



MicroRate 29: Average Cost of Funds Ratio, 1999 - 2001



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 as 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 to equity ratios, because as NGOs their ability to borrow from commercial lenders has been limited. As MFIs reconstitute themselves as 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.

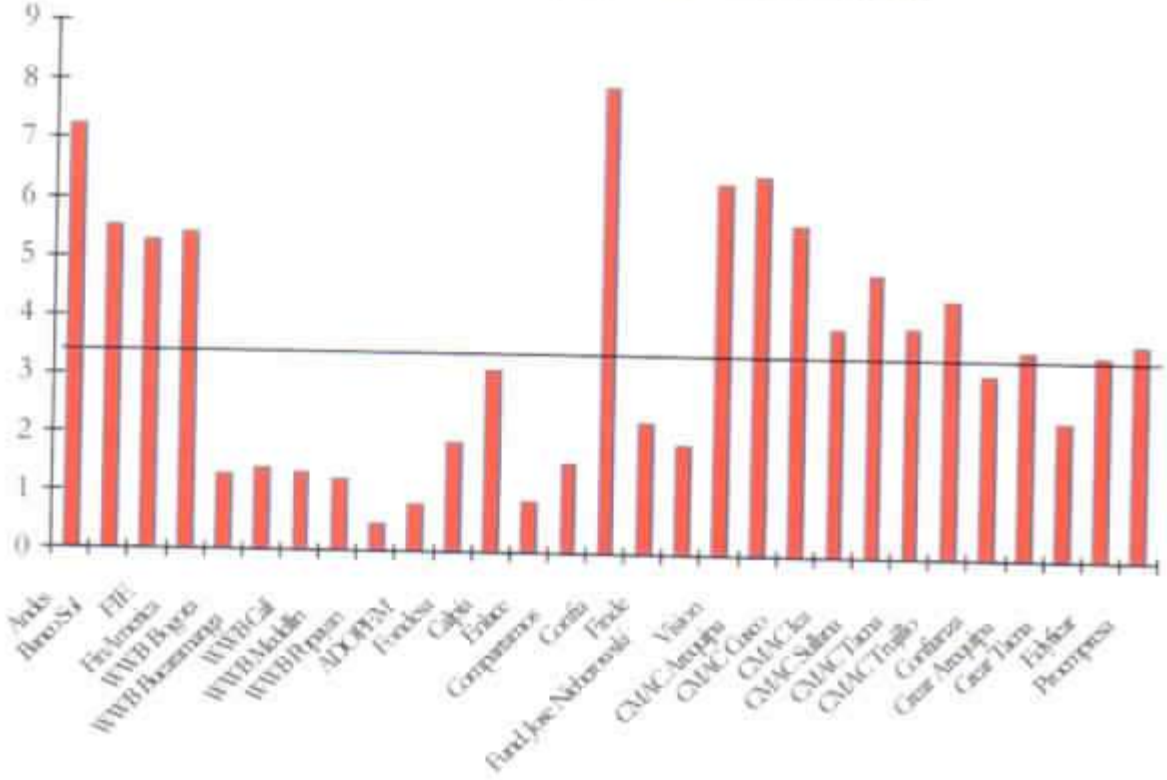
What to Watch Out For

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 an MFI's margins. The terms on which an 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 relied on short-term lines of credit.

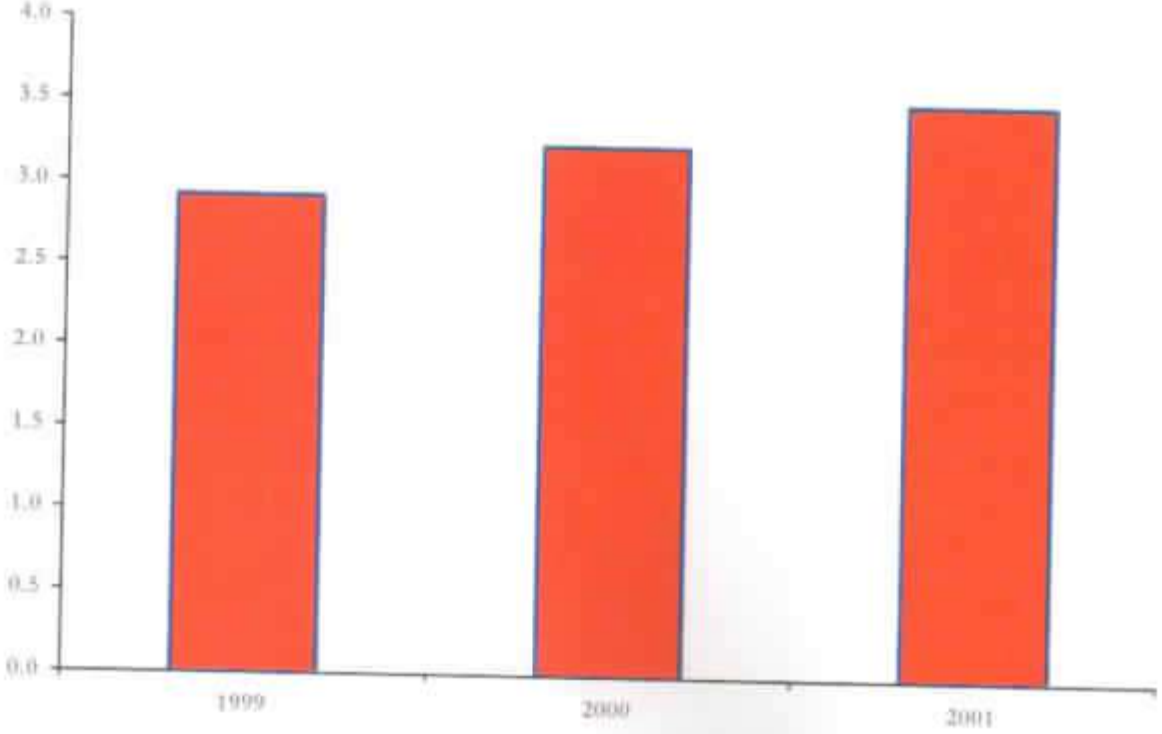
Where the Industry Is

As MFIs develop and mature, leverage continues to increase. In fact, the average Debt/Equity Ratio for the MicroRate 29 reached 3.5 in 2001. These figures become more meaningful when one separates regulated MFIs from NGOs. In 2001 regulated MFIs averaged 4.5, versus 1.3 for NGOs. Regulated MFIs are generally more 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-to-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. But even among regulated MFIs, the Debt/Equity Ratio is still much lower than is customary for commercial banks.

Micro Rate 29: Debt/Equity Ratio, December 31, 2001



MicroRate 29: Average Debt/Equity Ratio, 1999 - 2001



PROFITABILITY

RETURN ON EQUITY[6]

Net Income / Average Equity

How to Calculate It

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

What It Means

Return on Equity (RoE) 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 most 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 an 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 will cover 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 29 leading MFIs in Latin America showed a loss for 2001 (based on adjusted figures). 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 (15.5% vs. 9.1% in 2001) 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.

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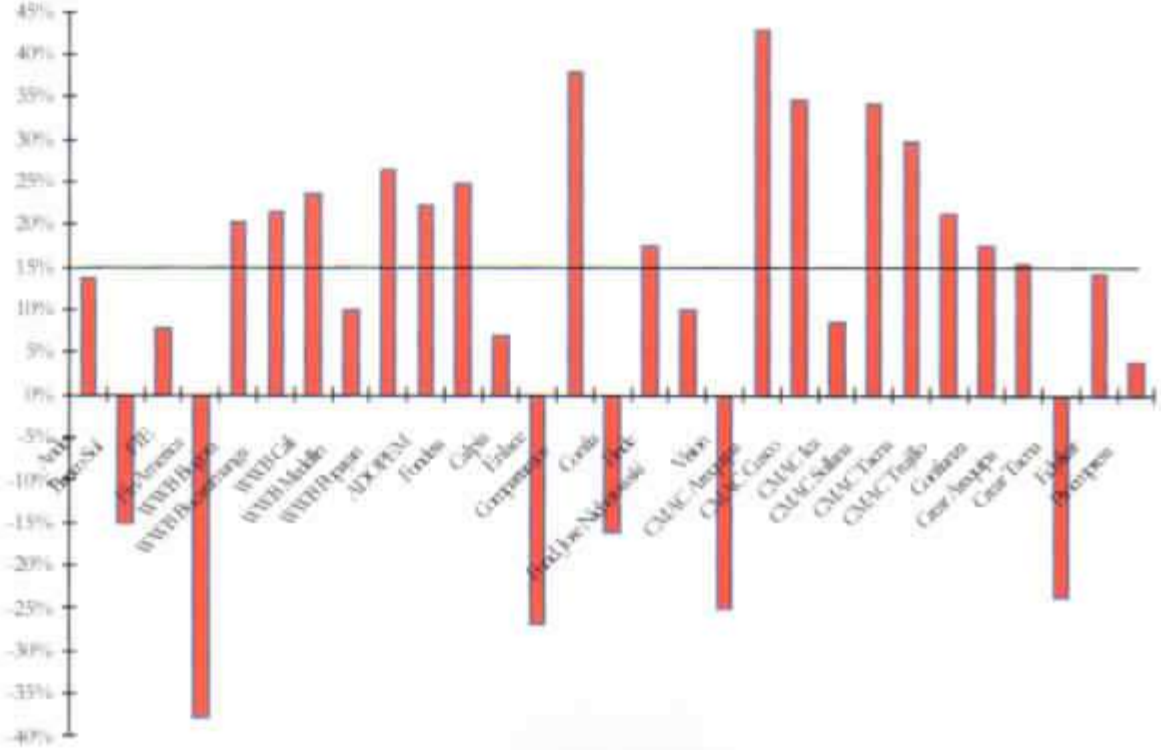
[6] The term Return on Equity is used whenever return on *average* equity is measured. If return as of a certain date is measured, that date should be specifically stated, for instance: "Return on Equity as of 12/01." The same applies to Return on Assets.

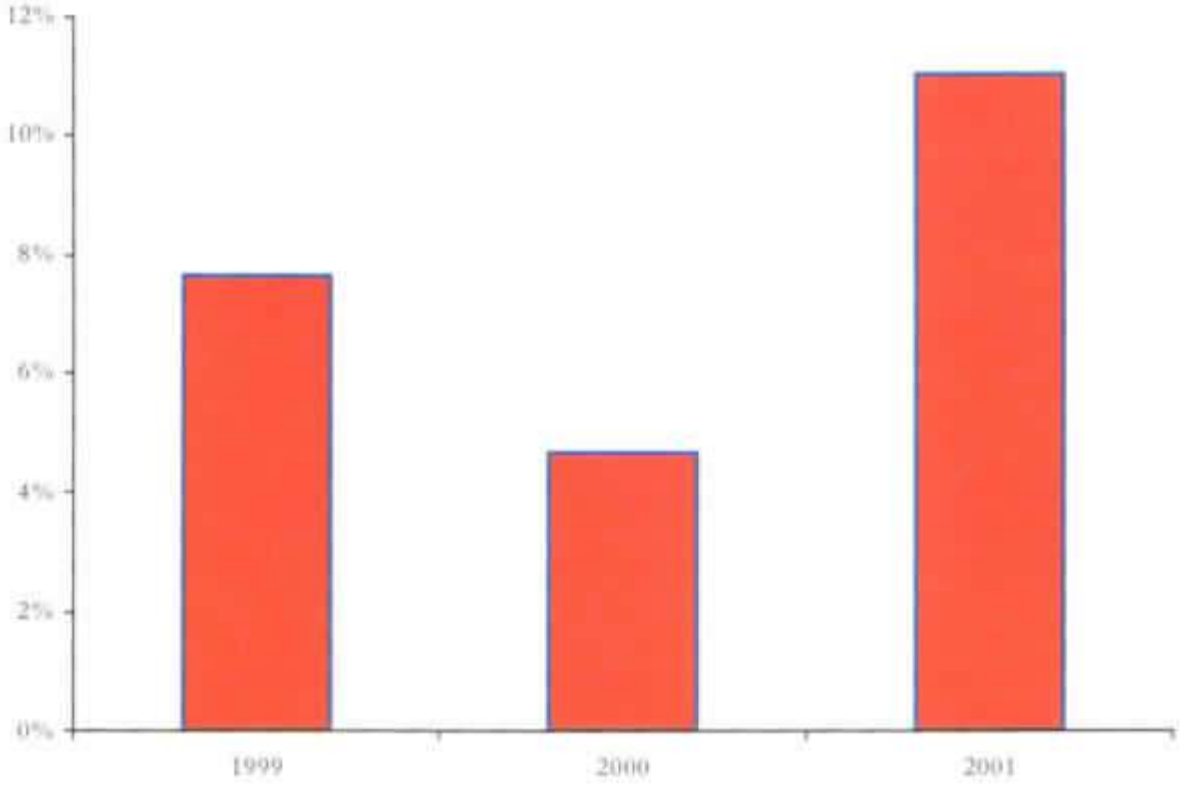
Among the MicroRate 29, CMAC Arequipa had the highest return on equity in 2001 thanks to a combination of excellent efficiency, high leverage and above average portfolio yields. Compartamos in Mexico, the second most profitable company in the sample, by contrast achieved its result thanks to very high portfolio yields and despite low leverage (Compartamos converted into a regulated MFI only in 2001) and low efficiency (their extremely small rural loans are expensive to administer).

At the other end of the scale, four of the six MFIs with losses suffered in the MicroRate 29 comparison as provision expenses were adjusted to reflect provisioning policies common among MFIs. These companies have significant amounts of larger loans, which are secured by formalized collateral. Following their respective banking laws, they therefore applied much lower provision expenses than those used for this comparison. BancoSol for instance, which shows significant losses in the table, was marginally profitable according to its audited accounts. Similarly, Finamerica, Confia and Vision had delinquent portfolios, which were well collateralized. Two of them showed profits and one a loss. The effect of the provision adjustment was compounded by the fact that the MicroRate 29 comparison treats restructured loans as delinquent.

MicroRate 29: Return on Equity, December 31, 2001



MicroRate 29: Average Return on Equity, 1999 – 2001



RETURN ON ASSETS

Net Income / Average Assets

How to Calculate It

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

What It Means

Return on Assets (RoA) 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.

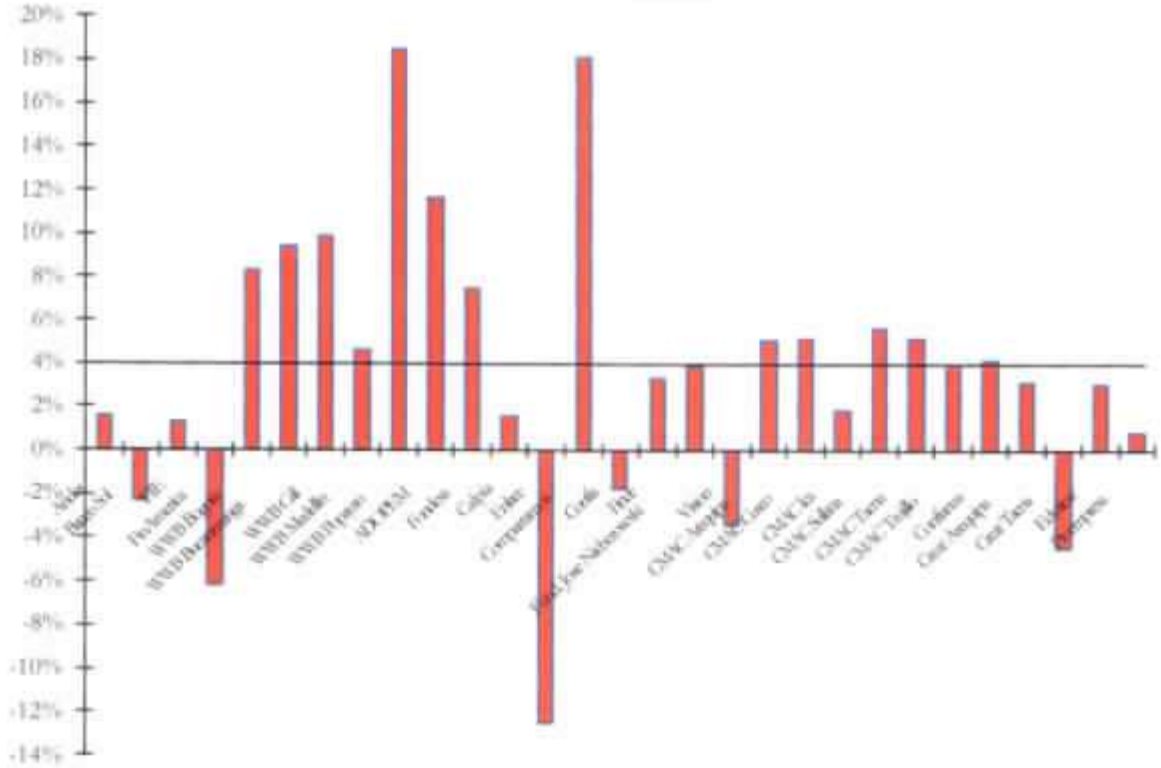
What to Watch Out For

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. Supervised MFIs, which can more easily access commercial funding sources, are more highly leveraged and therefore manage to earn good returns on equity despite relatively low returns on assets.

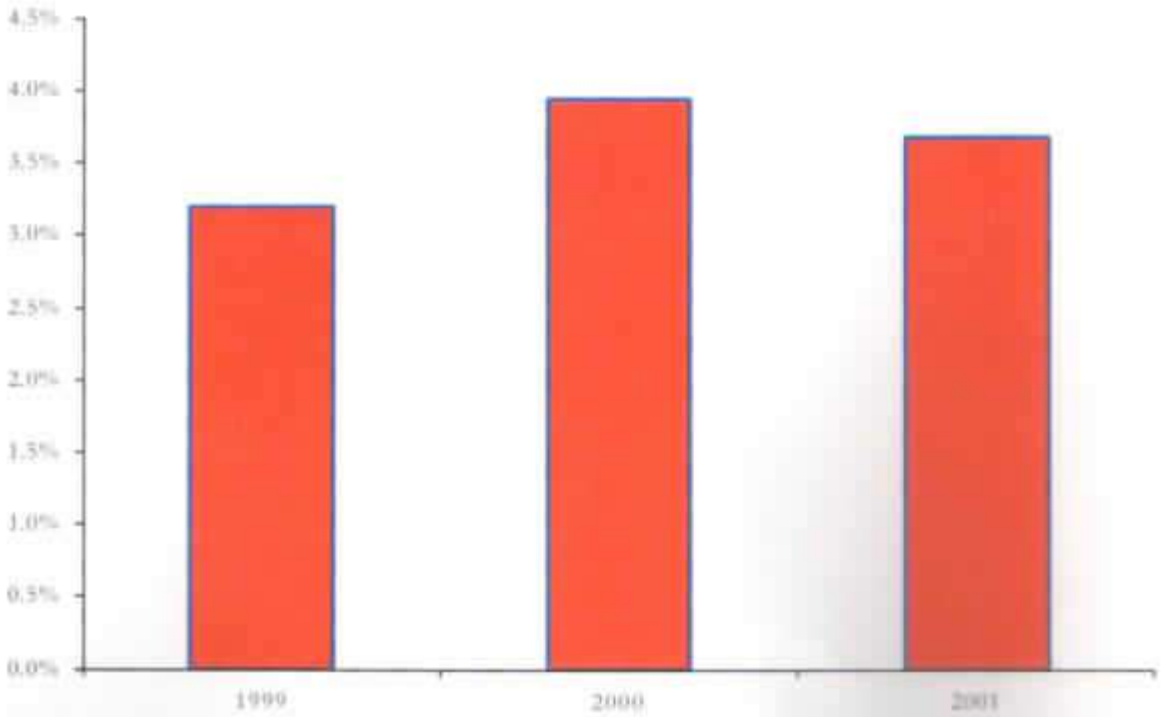
Where the Industry Is

The return on assets achieved by the microfinance industry has increased continually during the past few years and is today far above commercial banking levels. In 2001, Return on Assets averaged 3.7% for the MicroRate 29. The graph below shows *adjusted* RoA. The effects of this adjustment were discussed in the section on Return on Equity; the impact on Return on Assets is the same.

MicroRate 29: Return on Assets, December 31, 2001



MicroRate 29: Average Return on Assets, 1999 - 2001



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

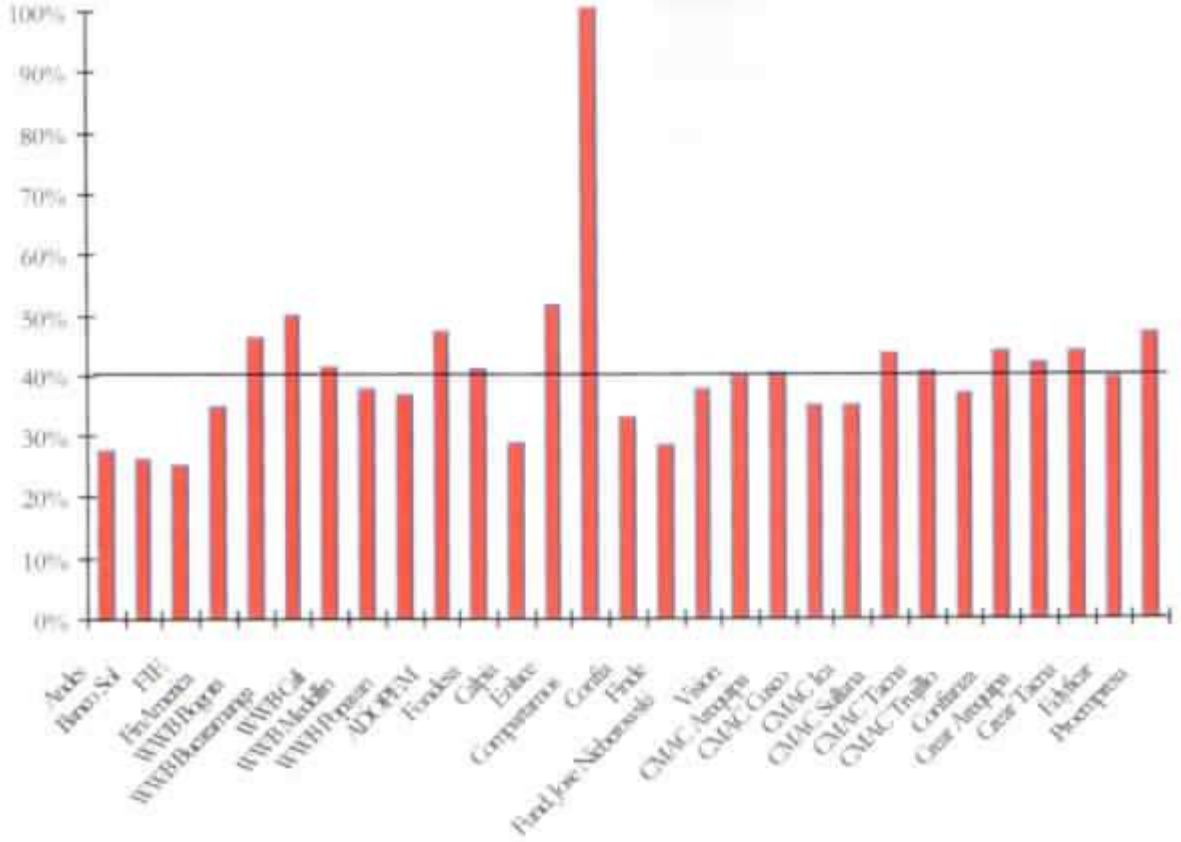
For Portfolio Yield to be meaningful, it must be understood in the context of the prevailing interest rate environment the MFI operates in. Generally speaking, Portfolio Yield is the initial indicator of an institution's ability to generate revenue with which to cover its financial and operating expenses. 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

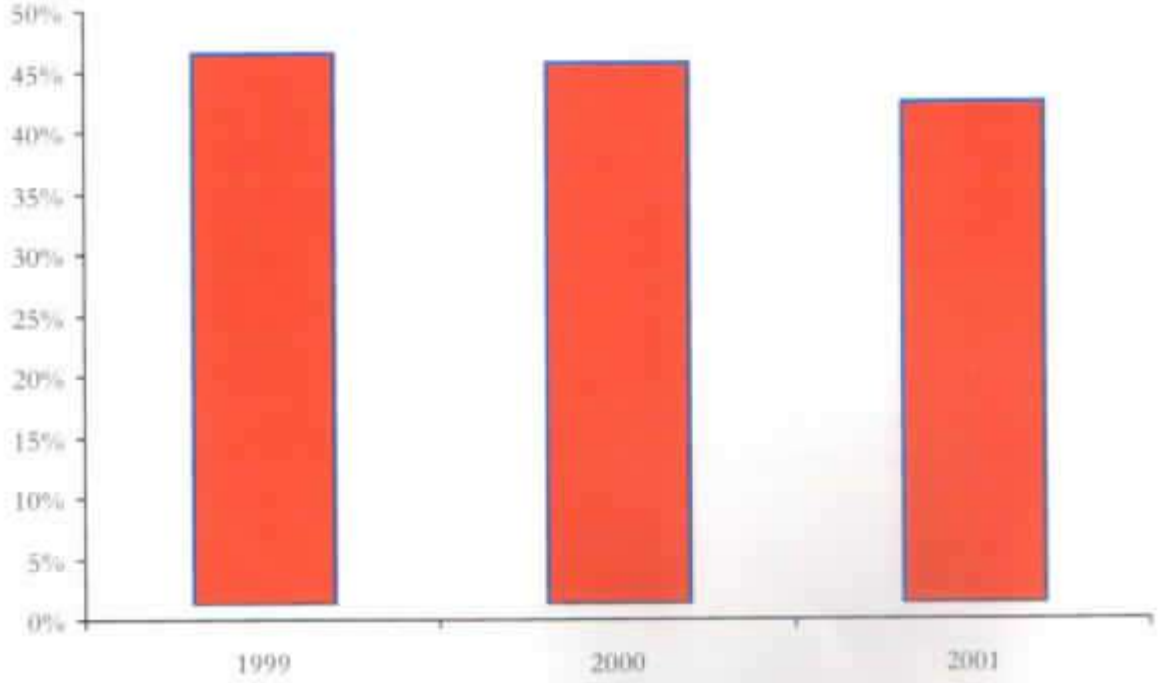
As the microfinance industry matures, Portfolio Yield continues to decrease. That is as it should be. Increased competition has led to increased efficiency, which in turn has allowed MFIs to generate increasing profits from lower yields. Average Portfolio Yield for the MicroRate 29 was 41.2% in 2001, down from 44.4% in 2000.

Portfolio Yield mainly seems to be driven by competition, though declining international interest rate levels no doubt also had an impact. The three 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 eight countries represented in the MicroRate 29, averaging 26.7% in 2001. Remarkably, companies, which received virtually no subsidies charged the lowest rates. It is also counterintuitive that portfolio size and average loan size which, as has been shown, have an impact on an MFI's Operating Expense Ratio (its "efficiency") actually have less influence on what the clients ultimately pay for credit.

MicroRate 29: Portfolio Yield, December 2001



MicroRate 29: Average Portfolio Yield, 1999 - 2001



ANNEX I: CALCULATING THE RATIOS

Balance Sheet (US$'000)

FIE, Bolivia	31-Dec-00	31-Dec-01
ASSETS		
Cash and Banks	529	434
Temporary Investments	3,710	2,068
Net Loans	20,808	25,068
Gross Loans	22,424	27,443
Performing Loans	*20,416*	*24,886*
Portfolio at Risk	*2,007*	*2,557*
Loan Loss Reserve	1,616	2,374
Interest Receivables	277	336
Other Current Assets	286	356
Current Assets	**25,610**	**28,262**
Long Term Investments	36	37
Property and Equipment	842	918
Other Long Term Assets	-	-
Total Assets	**26,487**	**29,217**
LIABILITIES		
Demand Deposits	26	233
Short Term Time Deposits	5,931	4,640
Short Term Funding Liabilities	942	1,433
Other Short Term Liabilities	1,481	1,420
Current Liabilities	**8,380**	**7,726**
Long Term Time Deposits	5,507	6,152
Long Term Funding Liabilities	8,234	10,924
Quasi-Capital Accounts	-	-
Other Long Term Liabilities	-	-
Total Liabilities	**22,121**	**24,802**
EQUITY		
Capital	3,130	2,933
Earnings (Losses) Period	404	410
Retained Earnings	208	195
Other Capital Accounts	624	877
Total Equity	**4,366**	**4,415**
Total Liabilities & Equity	**26,487**	**29,217**

Income Statement (US$'000)

FIE, Bolivia	31-Dec-00	31-Dec-01
Interest and Fee Income	5,773	6,318
Cash Interest and Fee Income	*5,496*	*5,982*
Accruals (Int.. Receivables)	*277*	*336*
Interest and Fee Expense	1,971	2,009
Net Interest Income	**3,802**	**4,309**
Provision for Loan Loss	850	1276
Net Interest Income After Provisions	**2,952**	**3,033**
Operating Expense	2,754	2,815
Personnel	*1,662*	*1,730*
Other Administrative Expense	*1,092*	*1,085*
Net Operating Income	**198**	**218**
Other Income	449	477
Investment Income	*324*	*134*
Other Non-Extraordinary Income	*125*	*343*
Other Expenses	101	116
MFI's Inflation Adjustment (if any)	*72*	*56*
Other Non-Extraordinary Expenses	*29*	*60*
Net Not-Operating Income	**546**	**579**
Extraordinary Items	26	(1)
Extraordinary Income	*26*	*-*
Extraordinary Expense	*-*	*1*
Net Income Before Taxes	**572**	**577**
Taxes	168	167
Net Income	**404**	**410**

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

Items	2001
Cash and Bank Current Account Plus Readily Marketable Investments	$ 2,502
Gross Outstanding Non-Restructured Portfolio w/Arrears > 30 days plus Total Gross Restructured Portfolio	$ 2,557
Interest and Fee Income	$ 6,318
Interest and Fee Expense	$ 2,009
Loan Loss Provisioning Expense	$ 1,276
Loan Loss Reserve	$ 2,374
Operating Revenue	$ 6,318
Net Operating Income	$ 218
Net Income Before Donations	$ 410
Number of Borrowers (Excluding consumer and Pawn Loans) in 2001	22,613
Number of Borrowers (Excluding consumer and Pawn Loans) in 2000	23,402
Operating Expenses (Personnel Expenses + Administrative Expenses + Depreciation)	$ 2,815
Short-Term Assets	$ 28,262
Short-Term Liabilities	$ 7,726
Total Assets	$ 29,217
Total Equity	$ 4,415
Total Liabilities	$ 24,802
Total Outstanding Gross Portfolio	$ 27,443
Total Staff	181
Loan Officers	76
Write-Offs During the Period	$ 358
Period Average Assets	$ 27,852
Period Average Equity	$ 4,390
Period Average Funding Liabilities	$ 22,011
Period Average Gross Portfolio	$ 24,933

OPERATING EXPENSE RATIO	**Operating Expenses (Personnel Expenses + Administrative Expenses +Depreciation) / Period Average Gross Portfolio** Example: $2,815/$24,933 = 11.3%
COST PER BORROWER	**Operating Expenses (Personnel Expenses + Administrative Expenses +Depreciation) / Period Average Number of Borrowers** Example: $2,815/ ((23,402+22,613)/2)= $122
PERSONNEL PRODUCTIVITY	**Number of Borrowers (excluding Consumer and Pawn Loans) / Total Staff** Example : 22,613/181= 125
LOAN OFFICER PRODUCTIVITY	**Number of Borrowers (excluding Consumer and Pawn Loans) / Loan Officers** Example: 22,613/76 = 298
PORTFOLIO AT RISK RATIO	**Outstanding Balance in Arrears over 30 Days plus Restructured Loans / Total Outstanding Gross Portfolio** Example: $2,557/$27,443 = 9.3%
PROVISION EXPENSE RATIO	**Loan Loss Provisioning Expenses / Period Average Gross Portfolio** Example: $1,276/$24,933 = 5.1%
RISK COVERAGE RATIO	**Loan Loss Reserves / Outstanding Balance on Arrears over 30 days plus Refinanced Loans** Example: $ 2,374/$2,557 = 92.8%

WRITE-OFF RATIO	**Value of Loans Written Off / Period Average Gross Portfolio** Example: $358/$24,933 = 1.4%
FUNDING EXPENSE RATIO	**Interest and Fee Expenses / Pe riod Average Gross Portfolio** Example: $2,009/$24,933 = 8.1%
COSTS OF FUNDS RATIO	**Interest and Fee Expenses / Period Average Funding Liabilities** Example: $2,009/$22,011 = 9.1%
DEBT/ EQUITY	**Total Liabilities / Total Equity** Example: $24,802/$4,415 = 5.6
RETURN ON EQUITY	**Net Income Before Donations / Period Average Equity** Example = $410/$4,390 = 9.3%
RETURN ON ASSETS	**Net Income Before Donations / Period Average Assets** Example: $410/$27,852 = 1.5%
PROFIT MARGIN	**Net Operating Income / Total Operating Revenue** Example: $218/$6,318 = 3.4%
PORTFOLIO YIELD	**Interest and Fee Income / Period Average Gross Portfolio** Example: $6,318/$24,933 = 25.3%

ANNEX II: THE MICRORATE 29

As of December 2001:

Company	Country	Portfolio	Clients
Andes	Bolivia	$52,557,000	43,530
BancoSol	Bolivia	$81,030,000	61,368
FIE	Bolivia	$27,443,000	22,613
FinAmérica	Colombia	$18,885,000	16,468
WWB Bogotá	Colombia	$3,300,000	10,079
WWB Bucaramanga	Colombia	$4,877,000	19,632
WWB Cali	Colombia	$17,710,000	38,063
WWB Medellín	Colombia	$3,930,000	10,908
WWB Popayán	Colombia	$9,616,000	36,049
ADOPEM	Dom. Rep.	$9,946,000	28,079
Fondesa	Dom. Rep.	$5,354,000	3,367
Calpia	El Salvador	$31,863,000	36,318
Enlace	El Salvador	$1,528,000	9,483
Compartamos	Mexico	$24,848,000	92,773
Confia	Nicaragua	$13,460,000	13,509
FINDE	Nicaragua	$7,280,000	5,282
F.J. Nieborowski	Nicaragua	$2,915,000	4,163*
Visión	Paraguay	$19,324,000	35,057
CMAC Arequipa	Perú	$50,045,000	50,209
CMAC Cusco	Perú	$17,297,000	22,011*
CMAC Ica	Perú	$12,280,000	12,124
CMAC Tacna	Perú	$10,130,000	13,476
CMAC Sullana	Perú	$19,949,000	45,258*
CMAC Trujillo	Perú	$27,373,000	46,967
Confianza	Perú	$2,663,000	3,640
Crear Arequipa	Perú	$2,951,000	3,098
Crear Tacna	Perú	$3,451,000	2,858
Edyficar	Perú	$20,045,000	20,452
Proempresa	Perú	$5,005,000	5,509

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

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