Performance Indicators for Microfinance Institutions

TECHNICAL GUIDE

MicroRate
Inter -American Development Bank

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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 the Inter-American Development Bank (IDB), the Consultative Group to Assist the Poorest (CGAP), the United States Agency for International Development (USAID) and MicroRate, a specialized microfinance assessment firm, to sit down and discuss whether it would be possible to agree on the names and definition of a set of commonly used indicators. The roundtable discussions were supported by two other specialized microfinance assessment firms: M-CRIL in India and PlaNet Rating in France. 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 group met for two full days during the spring of 2001.

The purpose of this Guide is relatively narrow. It is intended to reflect the roundtable discussions described previously and mark the start of a gradual process of consultation and discussion to reach industry-wide agreement on the definition of a set of indicators measuring the financial condition, performance and risk of microfinance institutions. The Guide is not meant to establish or impose a standard; rather, it is meant to be a "living" document that continually reflects the emerging consensus on the nomenclature and definition of indicators in the field of microfinance. Its publication in a binder format will allow for additions as well as changes to the names and definitions of the indicators.

The Guide also 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 20 Latin American microfinance institutions compiled by MicroRate (the "MicroRate 20"). 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 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, 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.

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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.[1] Considering that the efforts to develop meaningful indicators for management and governance conditions are somewhat recent, this area has been omitted from this first 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.[3]

In an attempt to be as specific and concrete as possible, the Guide provides a calculation of all the included indicators. 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 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

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[1] One useful ratio in the area of management and governance is the Staff Turnover Ratio (defined here by dividing the staff with less than a year in the institution over the total staff of the institution at the end of the period), which can be a good proxy indicator of staff satisfaction. Another simple indicator is the presence (or absence) of an internal auditor, who reports directly to the board rather than to management. As a rule of thumb, if an MFI's gross portfolio exceeds $5 million, it should have an internal auditor. For smaller MFIs an internal auditor, though desirable, may often not be affordable.

[2] For example, the ownership structure of an institution is important as it determines to whom an MFI ultimately responds. One should be careful to note whether the institution is majority owned by an NGO or by actual investors. Finansol in Colombia, a licensed and supervised institution majority owned by an NGO exemplifies this danger. The institution, while incorporated as a for-profit finance company, was in reality run by the NGO that owned it. The NGO, Corposol, did not have the experience needed to manage a financial intermediary and after a period of explosive growth in 1994 and 1995, Finansol nearly went bankrupt in 1996. One reason for this failure was the lack of diversity of Finansol's shareholders.

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 4 other indicators related to portfolio quality and associated risks: Write-Off Ratio, Loan Loss Reserve Ratio, Provision Expense Ratio and Risk Coverage Ratio.[3]

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 dollar per dollar microcredit is highly labor intensive: a hundred dollar loan does requires as about as much administrative effort as a loan a thousand times its size. 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 two indicators to measure productivity and efficiency: Borrowers / Total Staff (productivity) and Operating Expenses / Average Gross Portfolio (efficiency).

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.

This publication includes four indicators to gauge the financial management of a microfinance institution: Financial Expense Ratio, Cost of Funds Ratio, Liquidity Ratio and the Debt/Equity Ratio.

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[3] 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

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 returns because portfolio yields have sunk so low.

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 loan delinquency as of 60, 90, 120 and 180 days, the number of days should be clearly stated (for example PaR60)

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 (certainly 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, Cooperativa FUCAC, 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.

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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.

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.

Another crucial aspect in assessing portfolio risk is related to the practice of restructuring and refinancing loans. The Colombian MFI FinAmerica, 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.

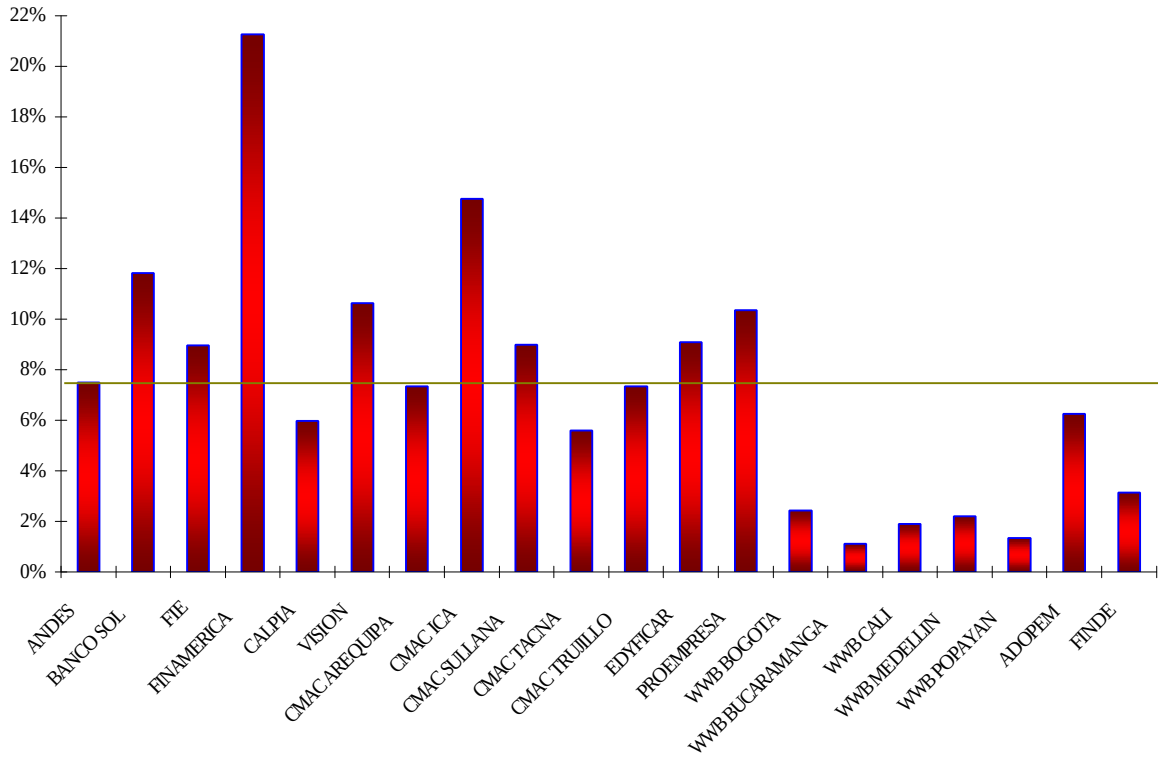
Finally, loan repayment frequency is yet another relevant factor in assessing portfolio risk. Generally speaking, greater loan repayment frequency enhances the seriousness of the Portfolio at Risk figure. If repayments are weekly, a loan that is more than 30 days overdue will have missed at least three 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. FIE's PaR over 30 days is 9%, that of Andes is 7.5%. On the face of it, Andes has the better portfolio. Not necessarily so. Looking beyond PaR to loans over 180 days past due would show that FIE has written them off whereas Andes still carries US$925,000 (2.2% of gross portfolio) of such seriously delinquent loans on its books. This fact is highlighted when the Loan Loss Reserve Ratio of these two institutions is considered. Caja los Andes' Reserve Ratio is higher than FIE's precisely due to the fact that Caja los Andes' higher PaR represents a greater risk to the institution.

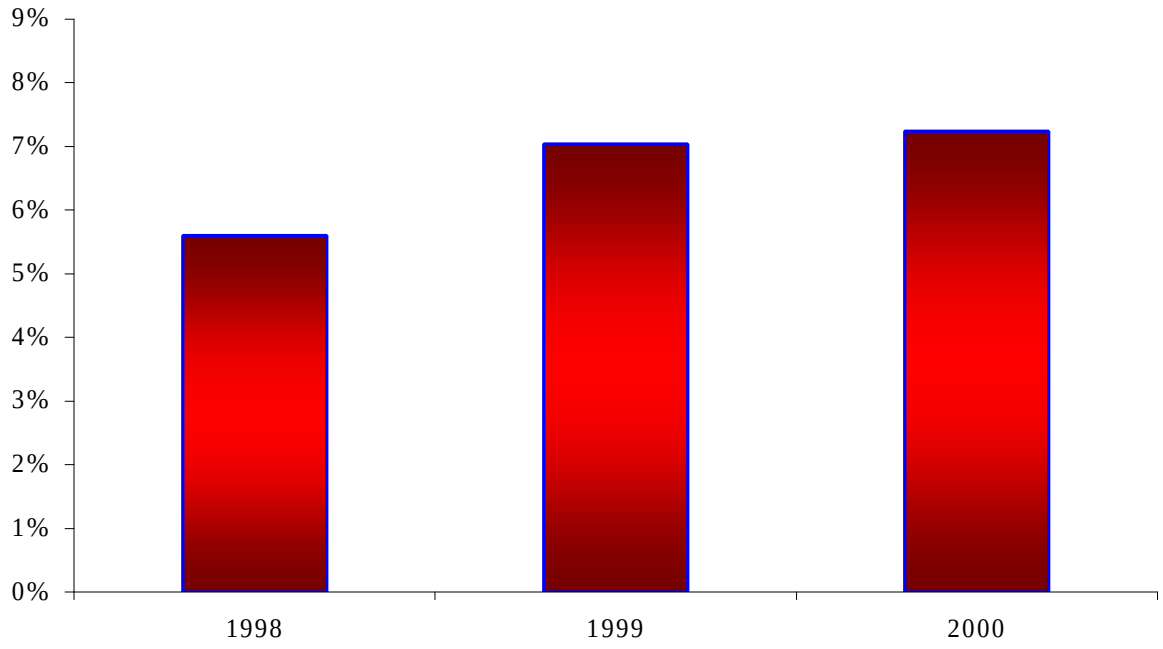
Where the Industry Is

Portfolio at Risk has traditionally been far lower in MFI's than in the commercial banking sector. The leading MFIs carry portfolios at risk of 3-6%, with few exceeding 10%. In 2000, the average Portfolio at Risk for the MicroRate 20 was 7%, up from about 5% in 1998. 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.

MicroRate 20: Portfolio at Risk, December 2000



MicroRate 20: Portfolio at Risk, 1998-2000



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 seen together with the Risk Coverage Ratio and the Loan Loss Reserve 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.

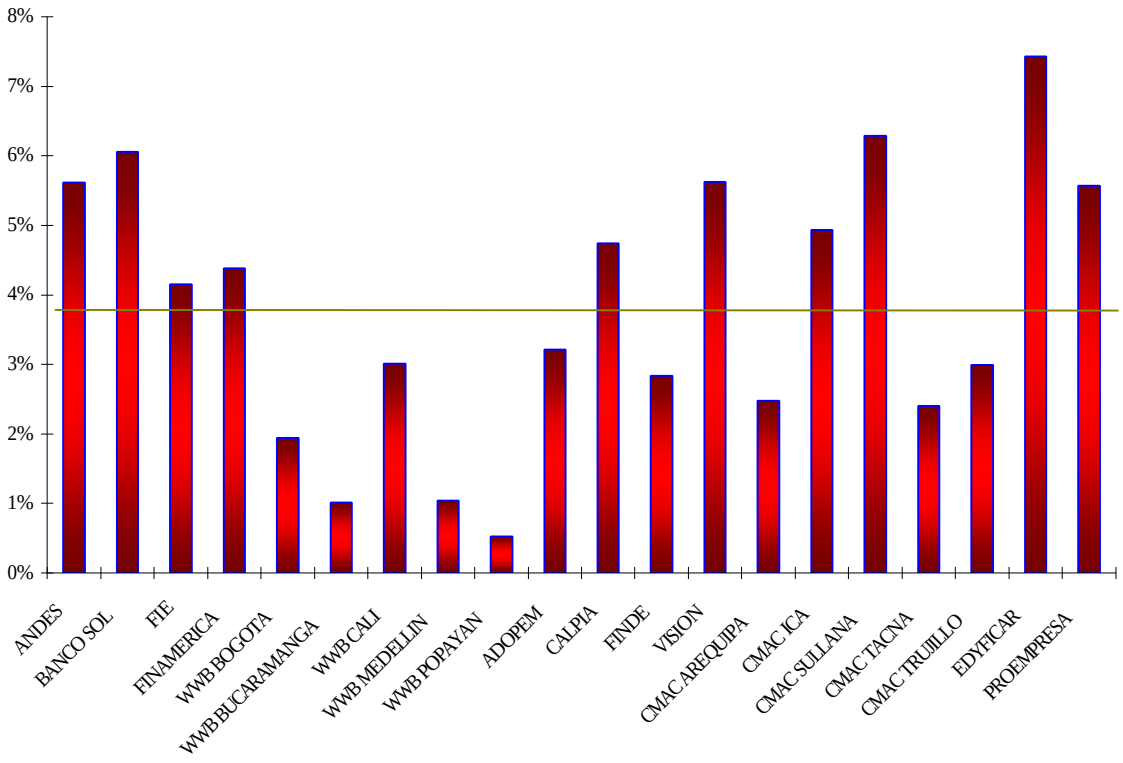
What to Watch Out For

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. 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).

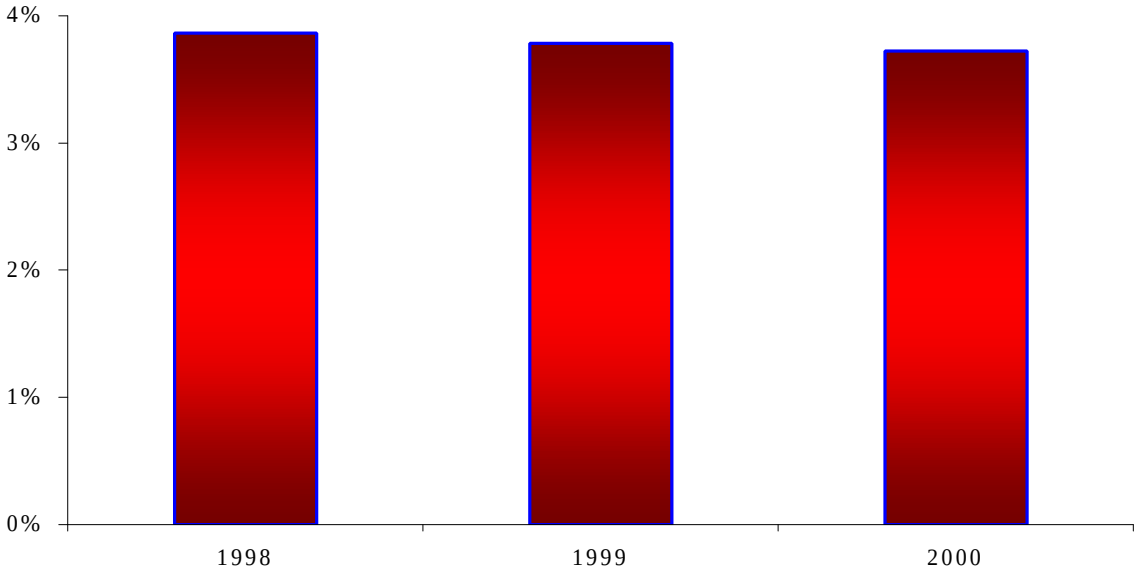
Where the Industry Is

Provision Expense Ratios for the MicroRate 20 vary widely. The average for the group has not changed significantly in recent years, although a slight decrease is visible for the period 1998-2000.

MicroRate 20: Provision Expense Ratio, December 2000



MicroRate 20: Provision Expense Ratio, 1998-2000



LOAN LOSS RESERVE RATIO

Loan Loss Reserves / Total Outstanding Gross Portfolio

How to Calculate It

The Loan Loss Reserve Ratio is calculated by dividing loan loss reserves by total outstanding gross portfolio.

What It Means

The Loan Loss Reserve Ratio reflects accumulated provision expenses (minus write-offs) and gives an indication of management's expectation of future loan losses. Generally speaking, it is a rough indicator of the overall quality of the portfolio.

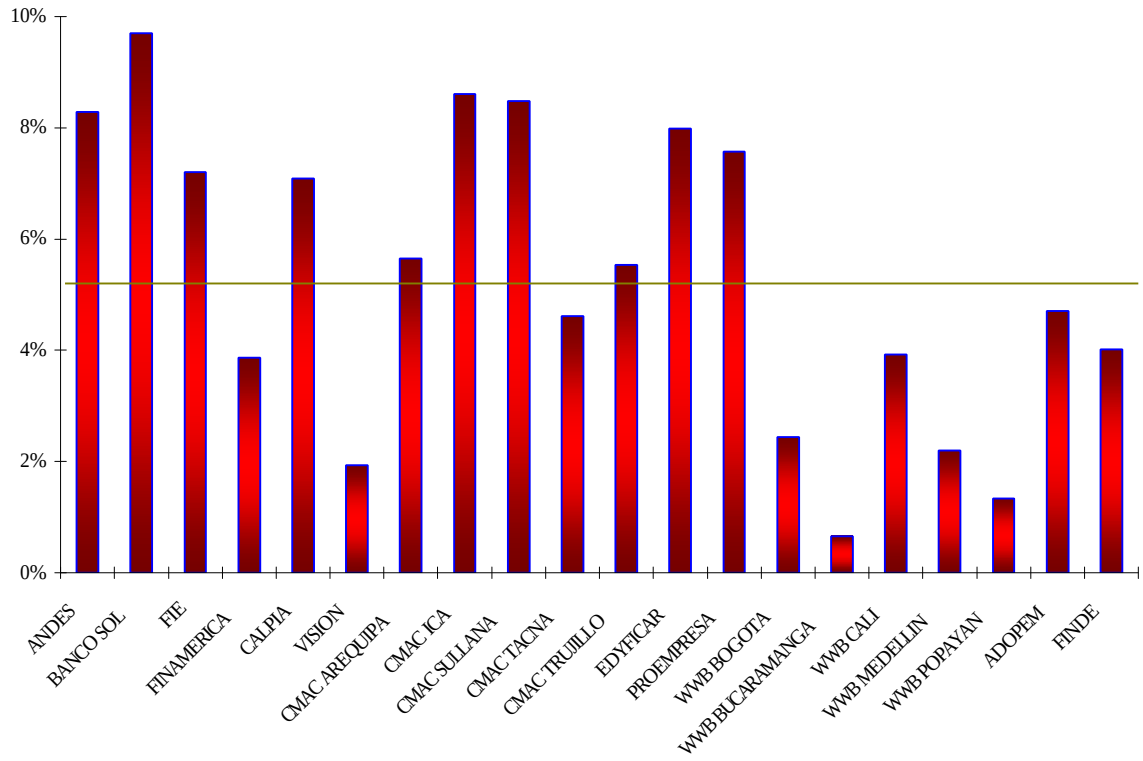
What to Watch Out For

In isolation, the Loan Loss Reserve Ratio does not hold much information. An institution may have a low 5% Loan Loss Reserve Ratio and be seriously over-reserved; conversely, an institution with a high 12% Loan Loss Reserve Ratio may be seriously under-reserved. To obtain a meaningful idea of whether loan loss reserves are appropriate, it is essential to also look at other measures, such as Portfolio at Risk and the Provision Expense Ratio. For instance, in Colombia, both WWB-Cali and FinAmérica have a Loan Loss Reserve Ratio equivalent to 4%. Yet WWB-Cali is over-provisioned because its PaR30 is only 1% of gross portfolio, while FinAmérica with a PaR30 of 21% is under-provisioned. Remember, however, that both institutions may have perfectly valid reasons for setting loan loss reserves as they did.

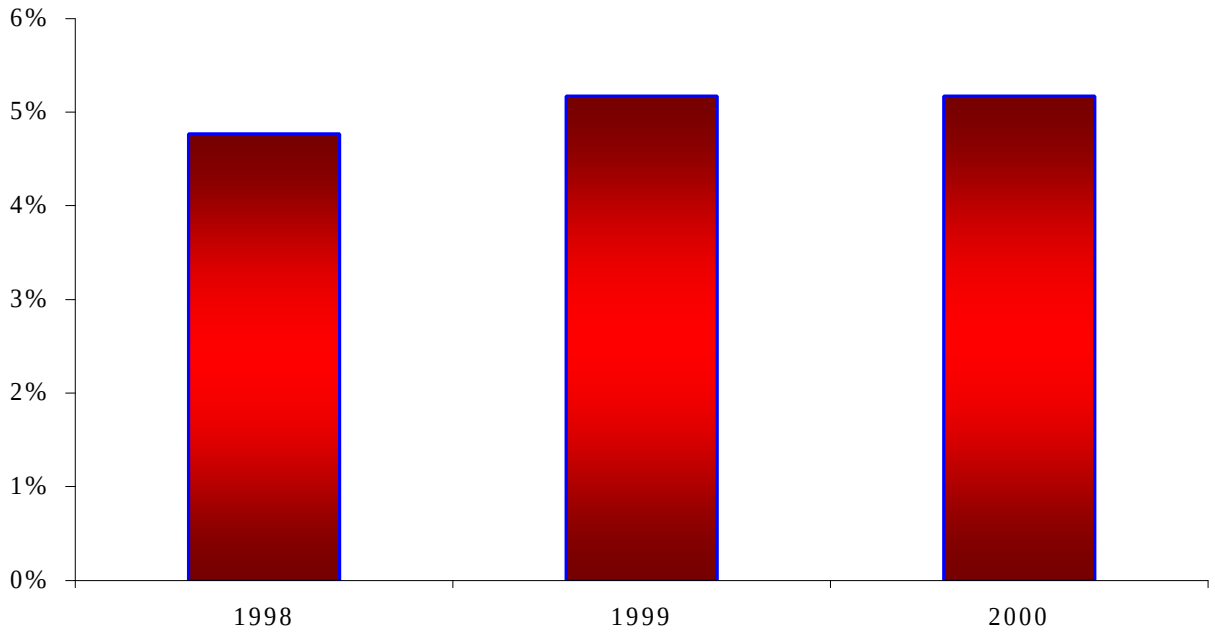
Where the Industry Is

Loan loss reserves increased rapidly in 1999 as MFIs reacted to a deepening recession, especially in the Andean countries. As is to be expected, the level of loan loss reserves moved roughly in parallel with Portfolio at Risk. This trend continued in 2000, when loan loss reserves remained at the high levels reached during the previous year.

MicroRate 20: Loan Loss Reserve Ratio, December 2000



MicroRate 20: Loan Loss Reserve Ratio, 1998-2000



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 on 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. 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," which reflects the fact that microfinance still is a relatively new phenomenon and that the risk profile of microfinance portfolios is still not well understood. High loan loss reserves also take into account that microloan portfolios are often not well 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, in cases 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 may set limits on provisions.

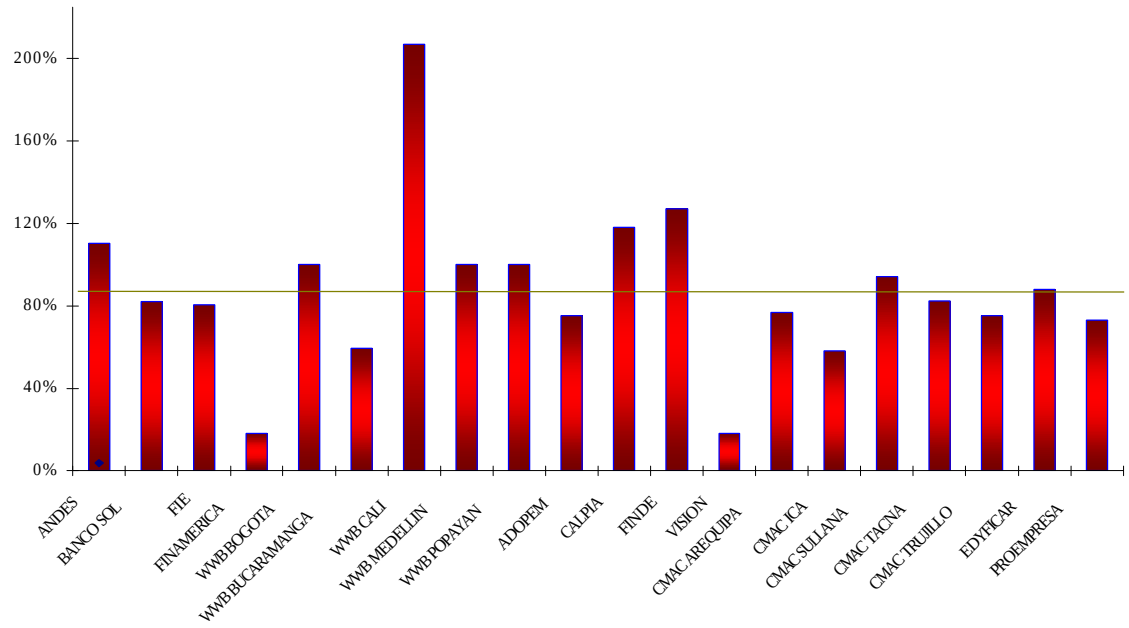
For institutions with very high coverage (>200%), these seemingly high reserves may be a prudent measure to combat future downturns in the economy or preempt poor performance of the portfolio. WWB Cali in Colombia, one of the leaders in microfinance, has increased loan loss reserves to 207% of Portfolio at Risk for 2000, up from 104% in 1999. In this case, management is bracing the institution 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% of average gross portfolio 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 overdue by only a few days. 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.

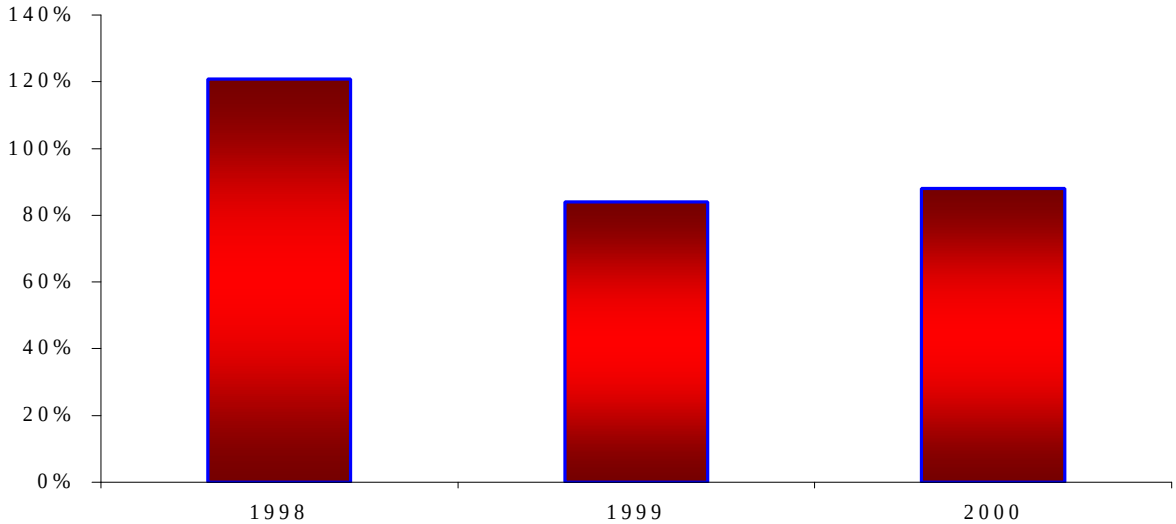
Where the Industry Is

It has generally been assumed that Risk Coverage Ratios would gradually decline as the microfinance industry matures. The MicroRate 20 seemed to confirm that expectation in 1999, when the average Risk Coverage Ratio dropped fast. But in 2000 it began to increase again. This could be in response to persistent economic difficulties in countries like Bolivia, Peru and Colombia, which carry a heavy weight in the sample. NGOs are increasing their coverage ratios to fall in line with the rest of the industry. On average, the Risk Coverage Ratio was 86% as of December 2000.

MicroRate 20: Risk Coverage Ratio, December 2000



MicroRate 20: Risk Coverage Ratio, 1998-2000



WRITE-OFF RATIO

Write-Offs / 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 figure 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 the written-off loan is under-reserved, 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

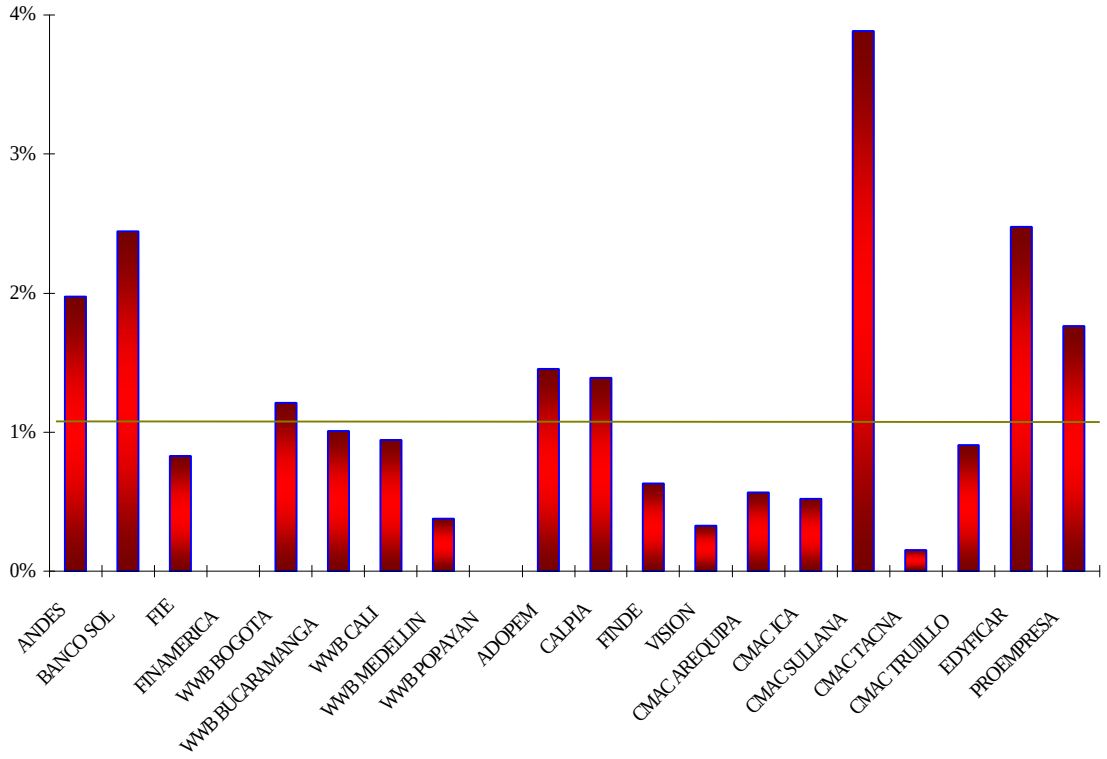
Some institutions will take aggressive write-offs to attempt to sanitize their portfolios. They will then show a low Portfolio at Risk, and only the Write-Off Ratio will allow an analyst to detect that this improvement is more apparent than real. Other MFIs resist writing off their seriously delinquent 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. The PaR30 of both Caja los Andes and ADOPEM is approximately 6% of gross portfolio. However, if ADOPEM wrote off according to internationally accepted standards (write-off after 180 days), its Portfolio at Risk would drop from 6% to 2.8%. Clearly, the two portfolios present different risk profiles–a difference that remains invisible unless the Write-Off Ratio is taken into account.

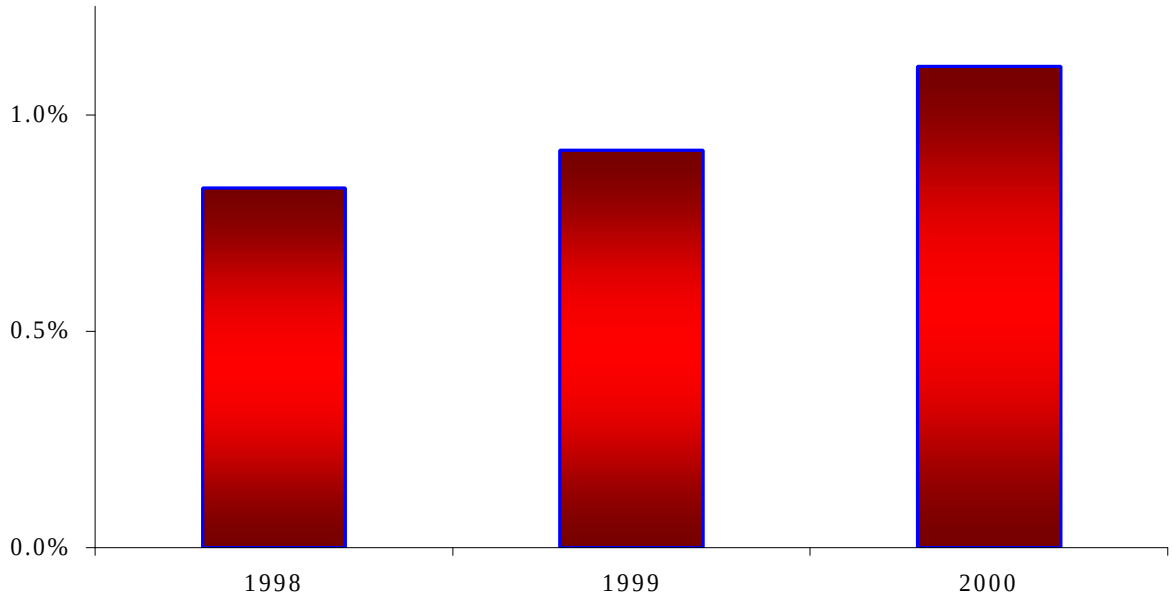
Where the Industry Is

Write-offs have remained surprisingly low among the MicroRate 20 since 1998, particularly considering the rise in Portfolio at Risk and in Loan Loss Reserves. One would hope that this is further evidence of the resilience of microfinance portfolios in the face of economic hardship. However, it could simply be a sign of reluctance of some MFIs to accept reality.

MicroRate 20: Write-Off Ratio, December 2000



MicroRate 20: Write-Off Ratio, 1998-2000



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 an 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 an 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 smaller MFIs like FIE, WWB Cali or WWB Popayán, can outperform other MFIs many times their size.

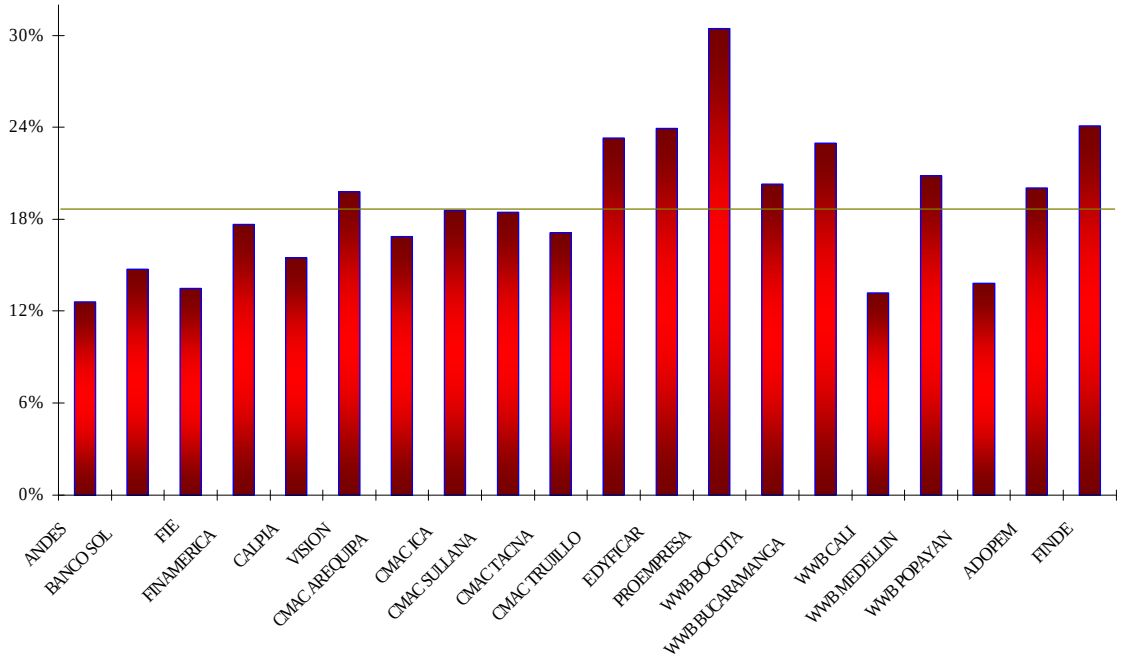
Loan size has a more decisive impact on efficiency than scale, particularly if average loans drop much below US$300. In village banking operations for example, where loan size is often US$100 or less, operating expenses are usually above 40% of average gross portfolio. Comparing the 15.5% efficiency ratio of BancoSol (average loan balance per client US$1,222) to the 52% of Enlace (US$125) or the 55% of Compartamos (US$161) would be highly misleading. 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.

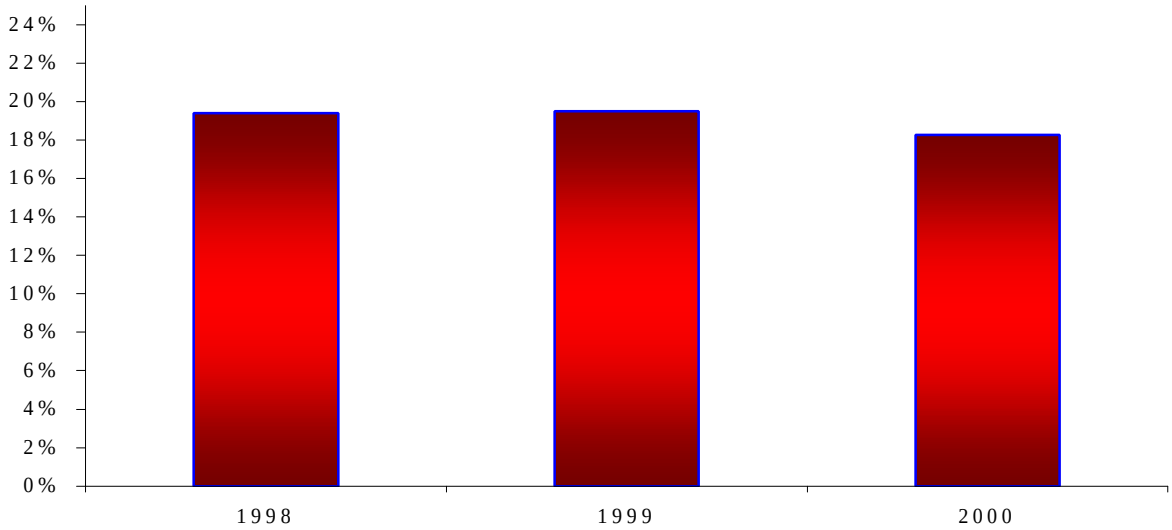
Where the Industry Is

The reduction of the Operating Expense Ratio has been the primary driver of increased profitability in the microfinance sector over the last several years. While an Operating Expense Ratio of 25% was considered acceptable a few years ago, today leading urban MFIs in Latin America typically achieve Operating Expense Ratios below 20% and the very best are approaching 10%. The average Operating Expense Ratio of the MicroRate 20 was 18.3% in 2000.

MicroRate 20: Operating Expense Ratio, December 2000



MicroRate 20: Operating Expense Ratio, 1998-2000



BORROWERS PER STAFF

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

How to Calculate It

This ratio is calculated by dividing the total number of borrowers of an institution by the total number of staff. Total number of 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. Total borrowers is used instead of total loans since the labor intensive credit function of the organization is more a function of borrowers than of loans. Pawn loans and consumer loans are typically excluded from this calculation, as they require far less screening and analysis efforts by staff.

Total staff is defined as the total number of people that work full-time in an MFI. Full-time employees are those who the company acknowledges as such and it is normally understood that the person works 8 hours a day 5 days a week. However, this is not a *sine qua non* condition.

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 usually does not mean that staff works less, but that they are tied up in excessive and time-consuming paperwork and procedures.

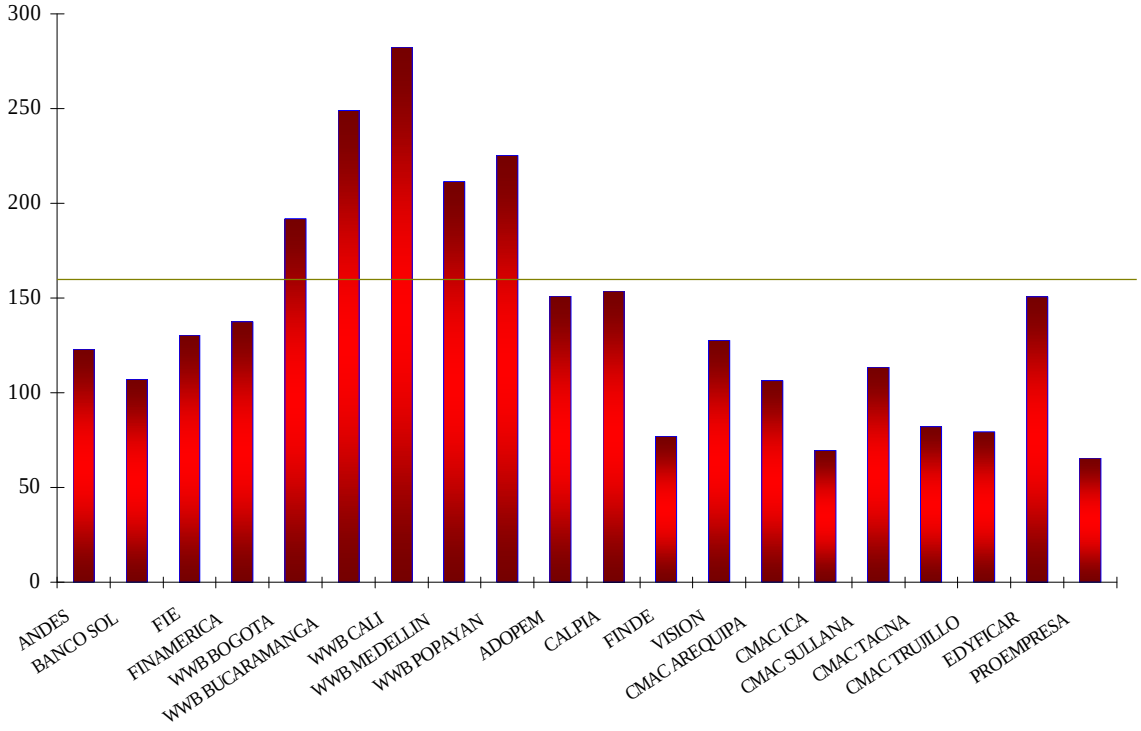
What to Watch Out For

Traditionally, the microfinance community has used the ratio of Clients per Credit Officer (or Loans per Credit Officer) to measure productivity. However, using total staff instead of credit officers in the denominator provides a more complete view of the institution's productivity, particularly in cases where the institution has very efficient credit officers but cumbersome and bureaucratic back office procedures (or vice versa). Furthermore, the use of borrowers in the numerator (as opposed to clients) allows for a better comparison across institutions regardless of whether they accept deposits or not (licensed and supervised microfinance institutions typically accept deposits).

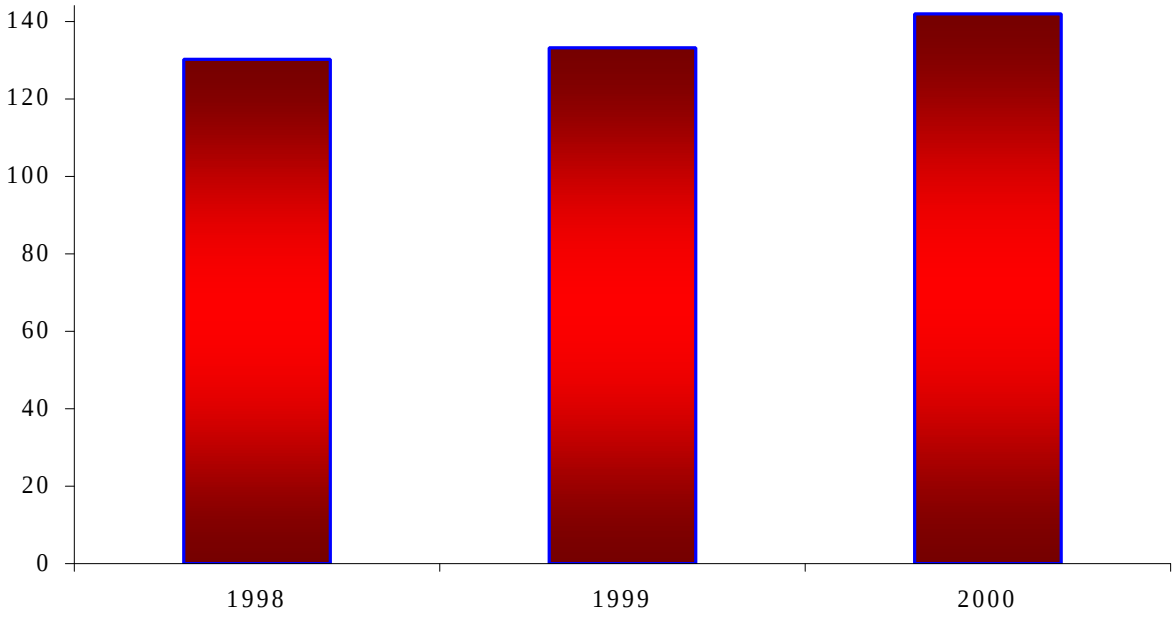
Where the Industry Is

The Number of Borrowers per Staff is one of the ratios that most uniquely define microfinance institutions, as compared to commercial banks. Productivity among the MircroRate 20 has steadily increased during the past few years, from 129 in 1998 to 142 in 2000. The most productive MFIs are Women World Banking affiliates in Cali, Bucaramanga and Popayan (Colombia).

MicroRate 20: Borrowers Per Staff, December 2000



MicroRate 20: Borrowers per Staff, 1998-2000



Financial Management

FINANCIAL EXPENSE RATIO

Interest and Fee Expenses / Average Gross Portfolio

How to Calculate It

The Financial 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 Financial Expense Ratio (the financial cost incurred by the institution to fund itself) is the net interest margin. The Financial 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 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 Financial Expense Ratio.

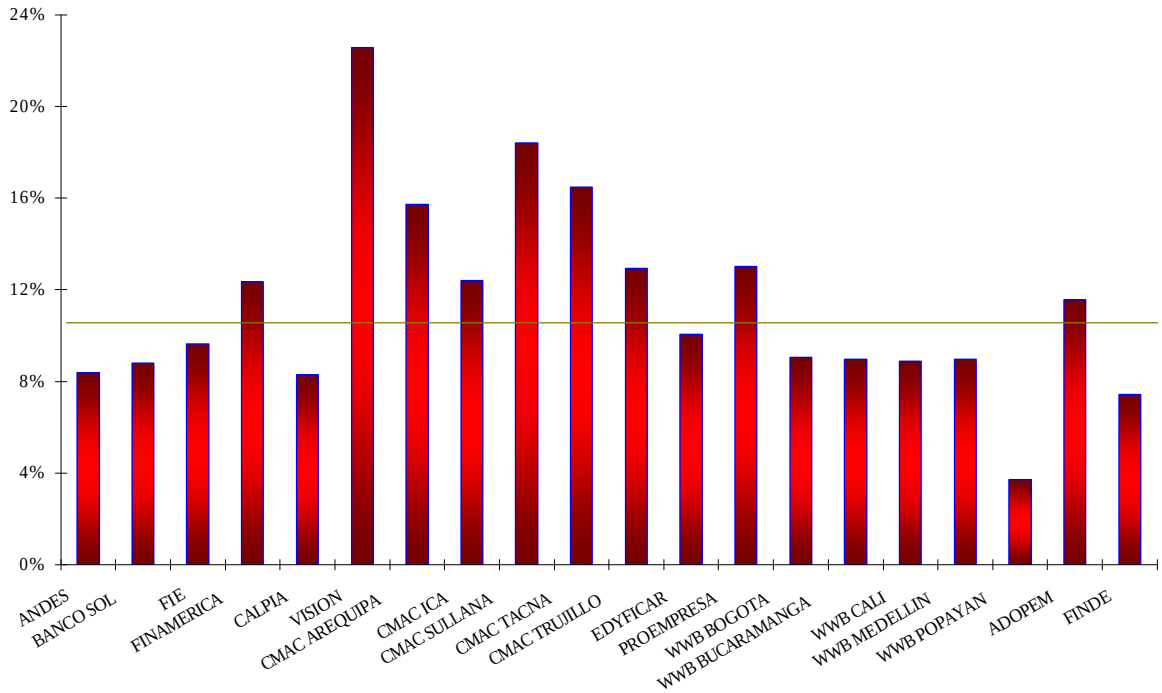
What to Watch Out For

The Financial 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 Financial Expense Ratio may in fact be very profitable if its leverage is high. Conversely, a low Financial Expense Ratio may be a sign of low leverage and therefore tends to go hand in hand with a low Return on Equity.

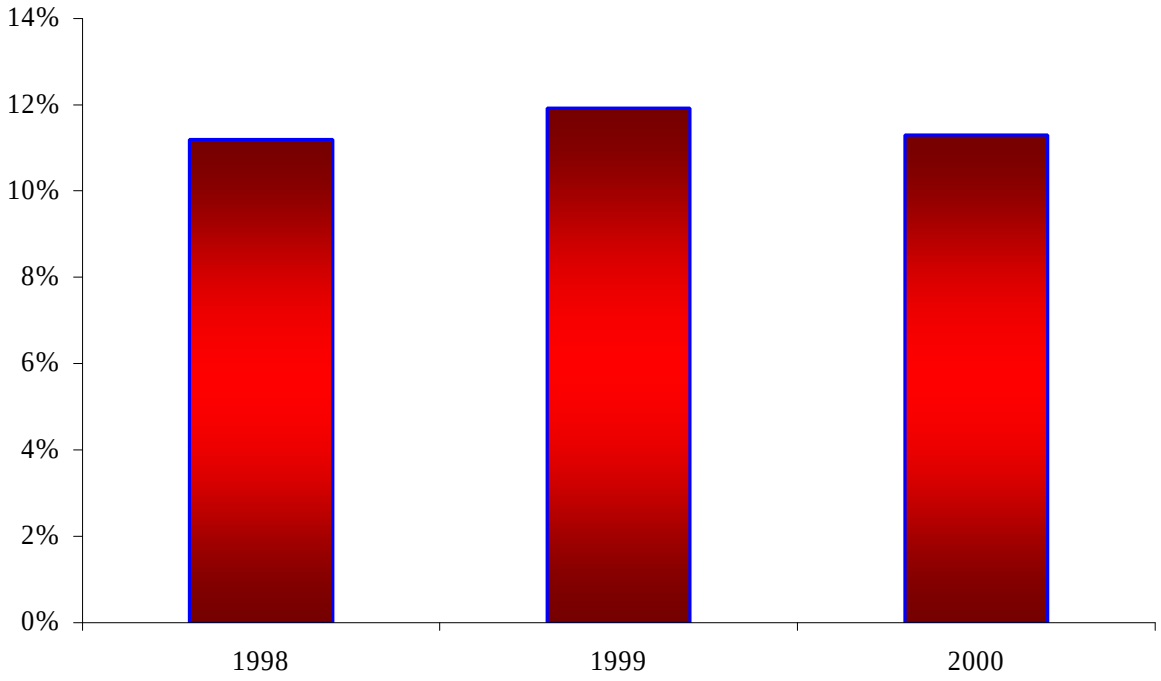
Where the Industry Is

The Financial Expense Ratio for the MicroRate 20 averaged 11% in 2000, after peaking at 11.9% in 1999. As expected, the ratio is higher for institutions with higher leverage. In general, licensed and supervised MFIs are more highly leveraged than NGOs and therefore have substantially higher Financial Expense Ratios. There are two exceptions to this rule among the MicroRate 20: FINDE in Nicaragua and Caja los Andes in Bolivia. FINDE's financial expense ratio remains low because the company still benefits from subsidized loans, while Caja los Andes has been able to achieve low financial expenses despite above average leverage through savings mobilization efforts.

MicroRate 20: Financial Expense Ratio, December 2000



MicroRate 20: Financial Expense Ratio, 1998-2000



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, their 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.

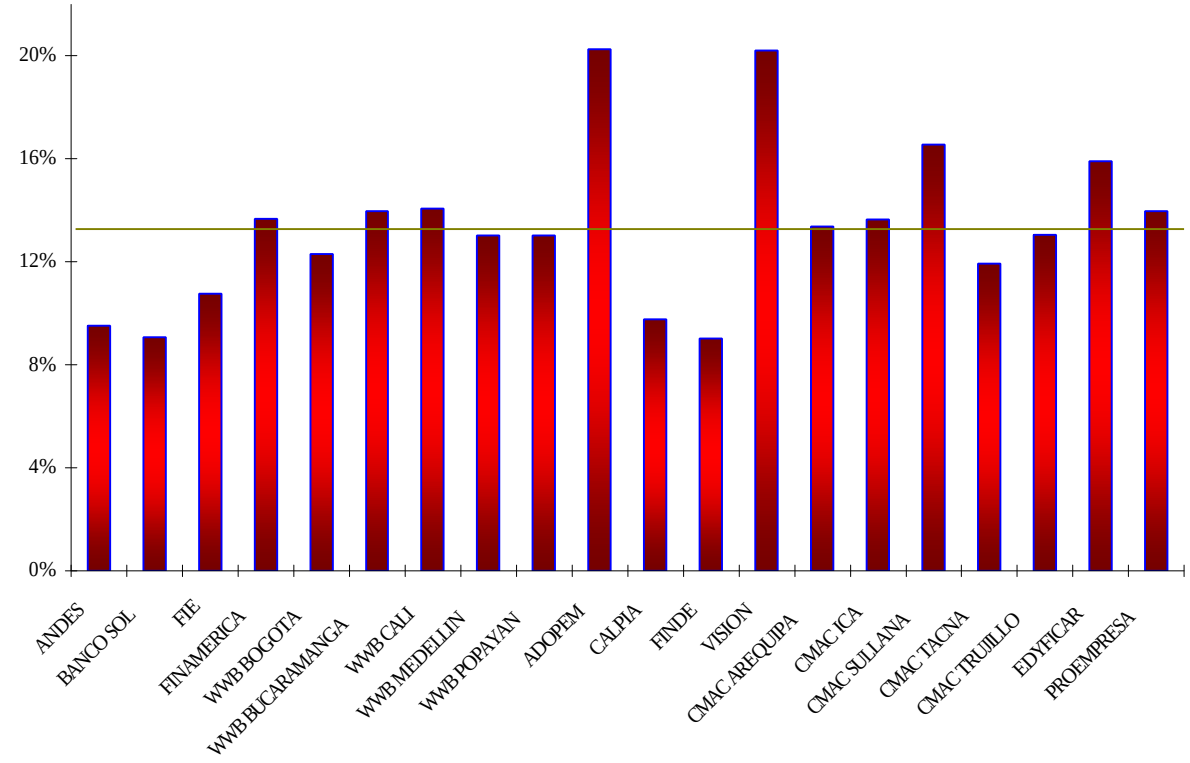
What to Watch Out For

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.

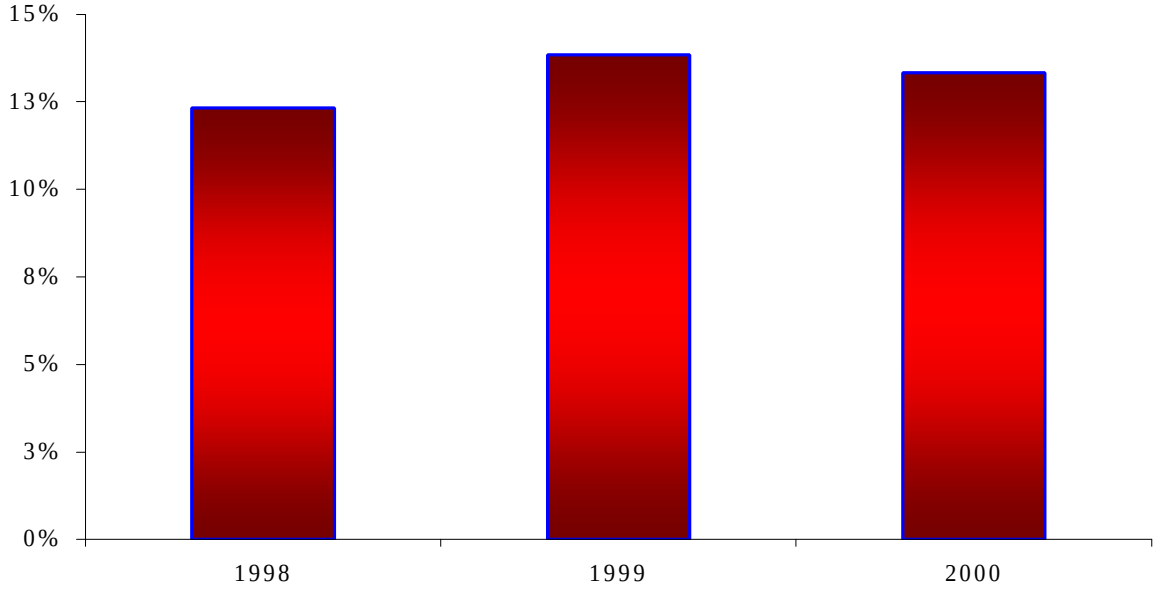
Where the Industry Is

The Cost of Funds ratios of the MicroRate 20 largely reflect interest rates in their respective countries. The two MFIs with the highest ratios, Vision in Paraguay 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. FINDE in Nicaragua, on the other hand, which ties BancoSol as the MFI with the lowest Cost of Funds, still benefits from substantial low-cost donor funding.

MicroRate 20: Cost of Funds Ratio, December 2000



MicroRate 20: Cost of Funds Ratio, 1998-2000



LIQUIDITY RATIO

(Cash and Bank Current Accounts + Readily Marketable Investments) / Total Assets

How to Calculate It

The Liquidity Ratio is calculated by dividing total cash and readily marketable investments by total assets.

What It Means

The Liquidity Ratio indicates the institution's ability to meet short-term liabilities and unforeseen expenses. The ratio is so heavily influenced by the particular circumstances of each MFI that it is nearly impossible to construct benchmarks of good or bad practice. An MFI may prefer to maintain a very high Liquidity Ratio (>25%) because it foresees high demand for its loans, or because it worries about instability. But high levels of liquidity can also indicate that an MFI is managing its funds poorly. A low Liquidity Ratio (<5%) often indicates that an MFI has outgrown its funding sources and is facing a cash crunch. It could also indicate that the institution has developed a sophisticated way of accurately predicting cash needs.

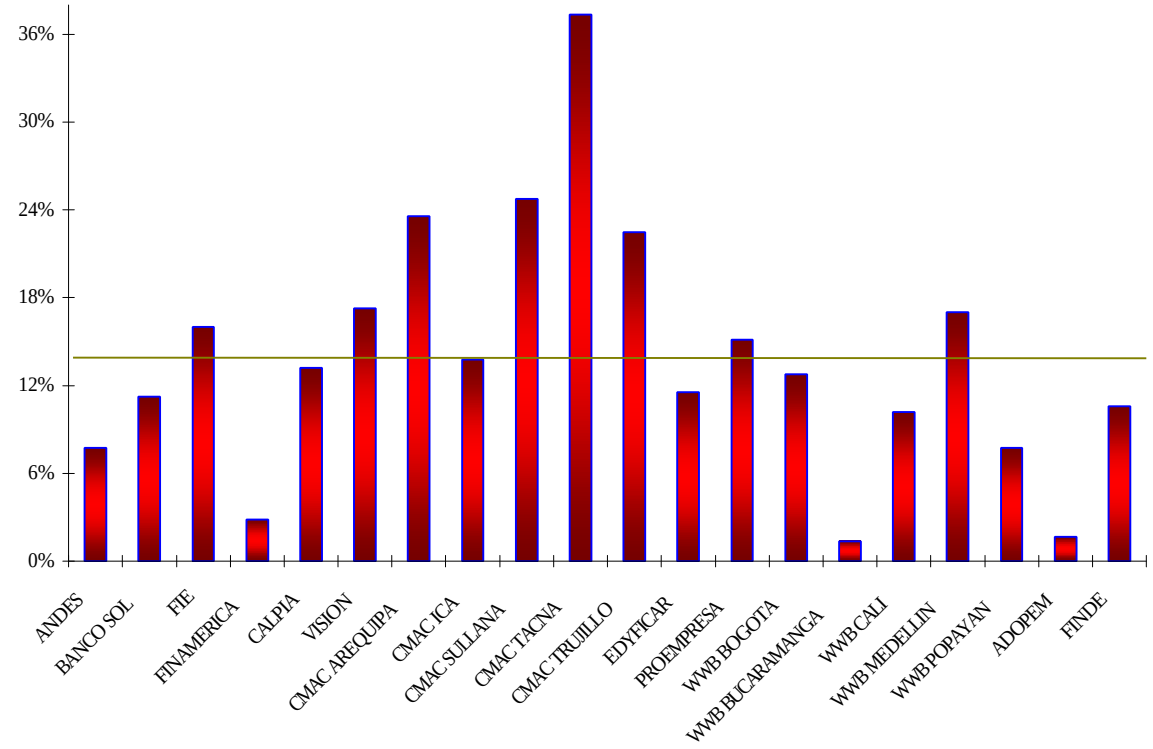
What to Watch Out For

MFI's often do not have complete control of their funding sources and, especially in the case of subsidized funds, they therefore cannot optimize the timing of inflows. As a result, they may find themselves with insufficient or far too much liquidity. A low Liquidity Ratio should not always give cause for concern since many institutions maintain open credit lines with commercial banks from which they may be able to draw freely. It is important to take the amount and conditions of such credit lines into account when assessing the risk of a liquidity crunch.

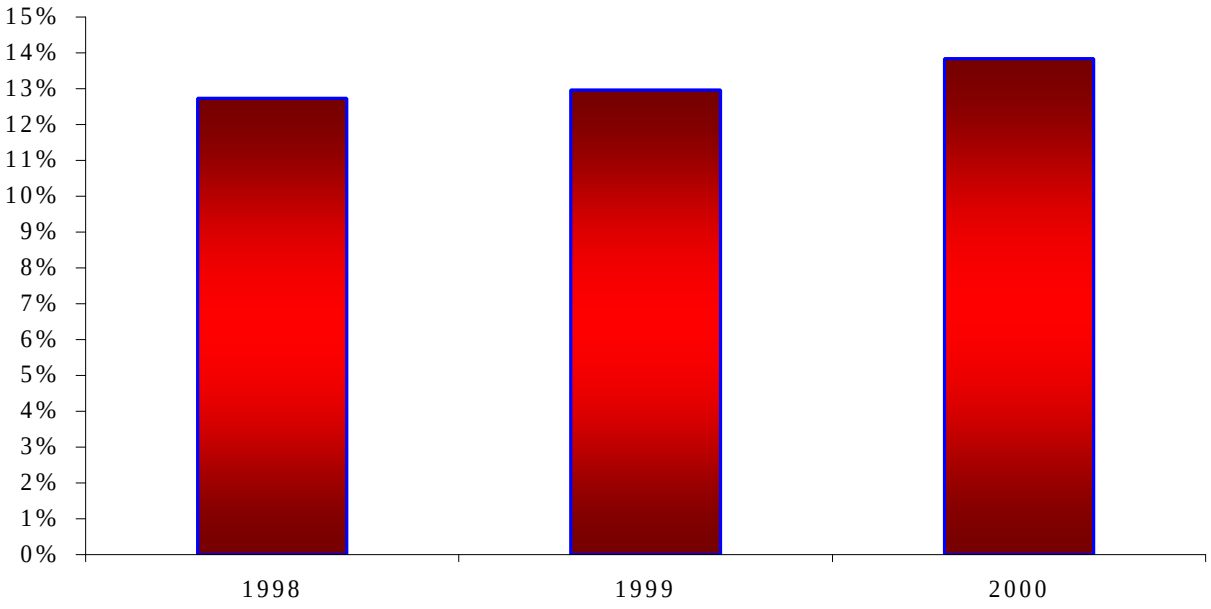
Where the Industry Is

The average Liquidity Ratio for the MicroRate 20 is equivalent to 14%. While the average has steadily increased over the past three years, it is not very meaningful, because of the large differences among MFIs. As a rule, the companies with the lowest liquidity ratio are finding it difficult to raise enough funding to sustain their growth. It is interesting to note that there are substantial differences among the three Bolivian MFIs. FIE, with the highest liquidity ratio is taking advantage of low borrowing rates in capital markets to create an ample cushion of funds with which to finance future growth. BancoSol, with the lowest liquidity ratio, does not expect to grow while it is shifting the composition of its loan portfolio; hence the company prefers to avoid the expense of maintaining high liquidity.

MicroRate 20: Liquidity Ratio, December 2000



MicroRate 20: Liquidity Ratio, 1998-2000



DEBT/EQUITY RATIO

Total Liabilities / Total Equity

How to Calculate It

The Debt/Equity Ratio is calculated by dividing total liabilities by total equity.

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 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 was limited. As MFIs reconstitute themselves as regulated intermediaries, however, debt/equity ratios typically rise rapidly. Risk and volatility (whether the MFI is likely to be exposed to strong 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 would, because microloan portfolios are backed by less collateral and their risk profiles are still not as well understood as those of conventional banks.

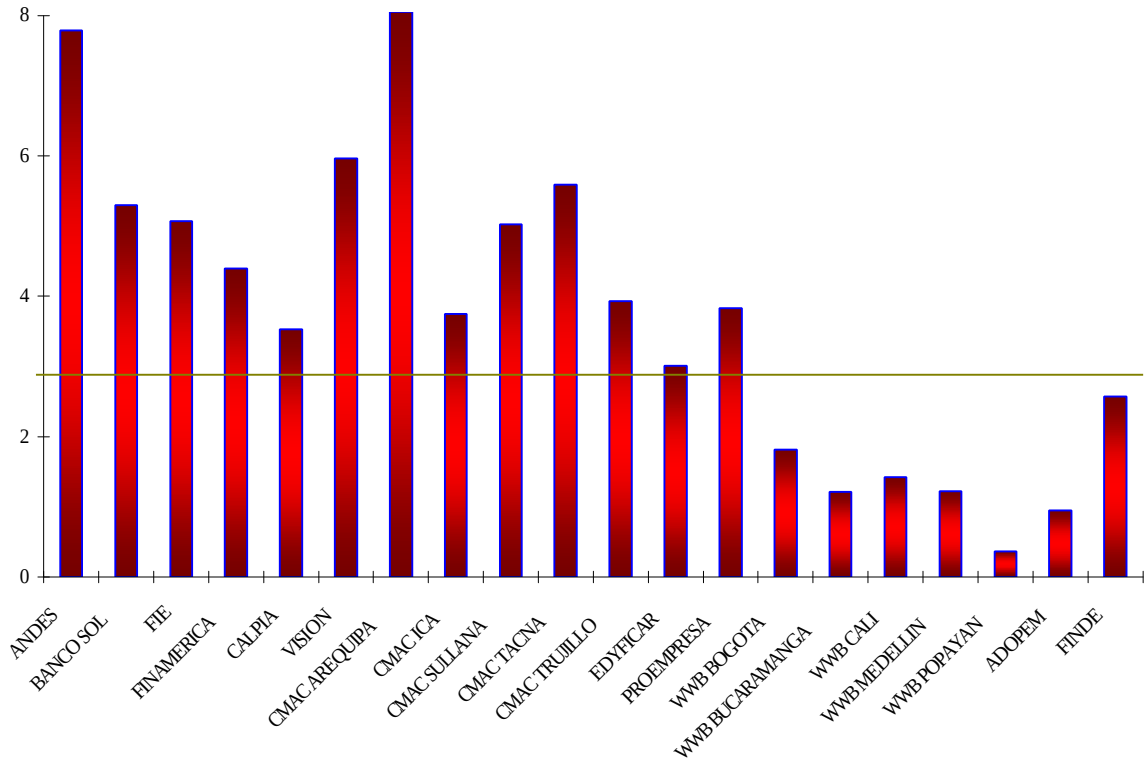
What to Watch Out For

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 carry. 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 short-term lines of credit would.

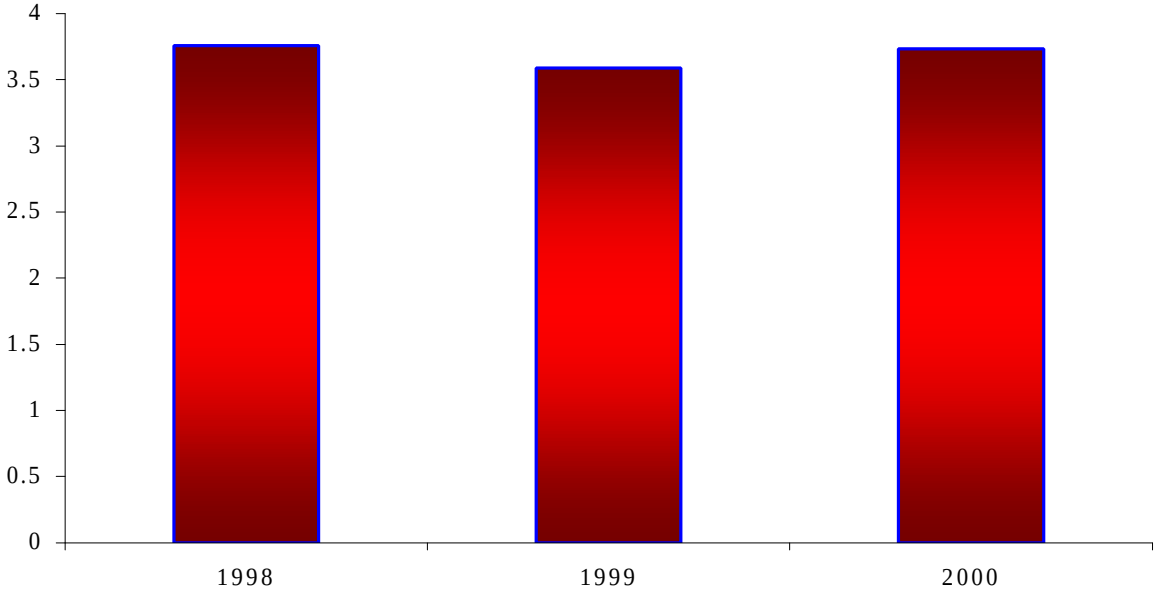
Where the Industry Is

As MFIs develop and mature, leverage continues to increase. In fact, the average Debt/Equity Ratio for the MicroRate 20 reached 3.8 in 2000. These figures become more meaningful when one separates supervised MFIs from NGOs. Supervised 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.

Micro Rate 20: Debt/Equity Ratio, December 2000



MicroRate 20: Debt/Equity Ratio, 1998-2000



PROFITABILITY

RETURN ON EQUITY[6]

Net Income / Average Equity

How to Calculate It

Return on Equity is calculated by dividing net income (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 indicates the return on their investment in the institution. However, given that most MFIs are not-for-profit-organizations, the RoE measure 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 common issue to consider is that of taxes. Incorporated and supervised MFIs generally pay taxes, while not-for-profit, non-supervised MFIs do not; also, reporting and other requirements of bank regulators add to the cost 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 30% and less, 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 allow an institution to remain profitable despite a multitude of weaknesses.

Where the Industry Is

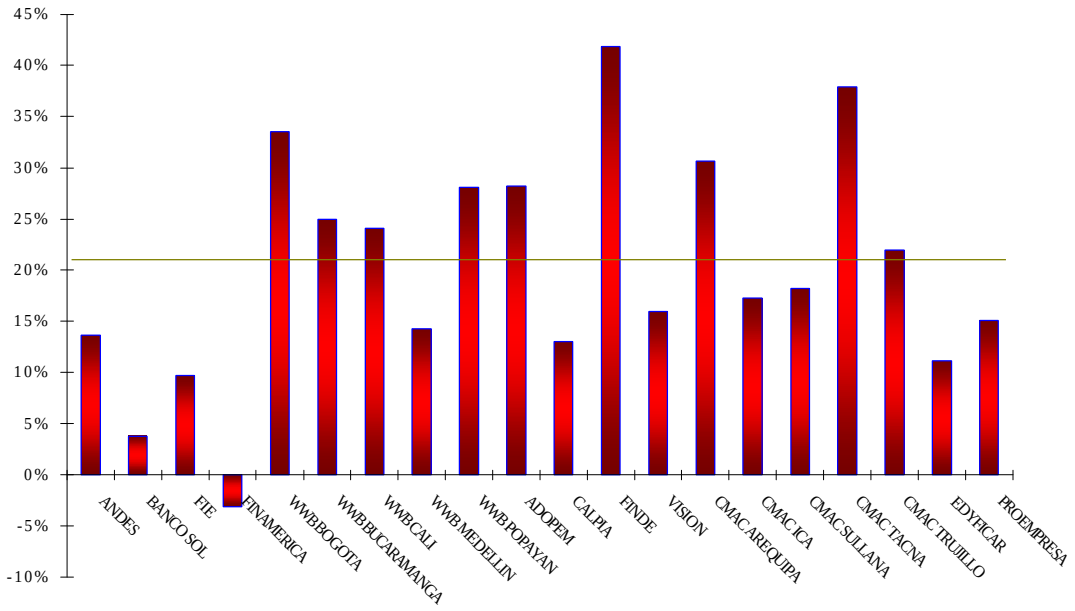
Return on Equity is perhaps the single most impressive story to emerge from the MFI industry in recent years. Despite a highly unfavorable economic environment during the past few years, only one of 20 leading MFIs in Latin America showed a loss for 2000. While recession, particularly in the Andean countries has curtailed portfolio growth and increased arrears, 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 even though the

[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 12/00." The same applies to Return on Assets.

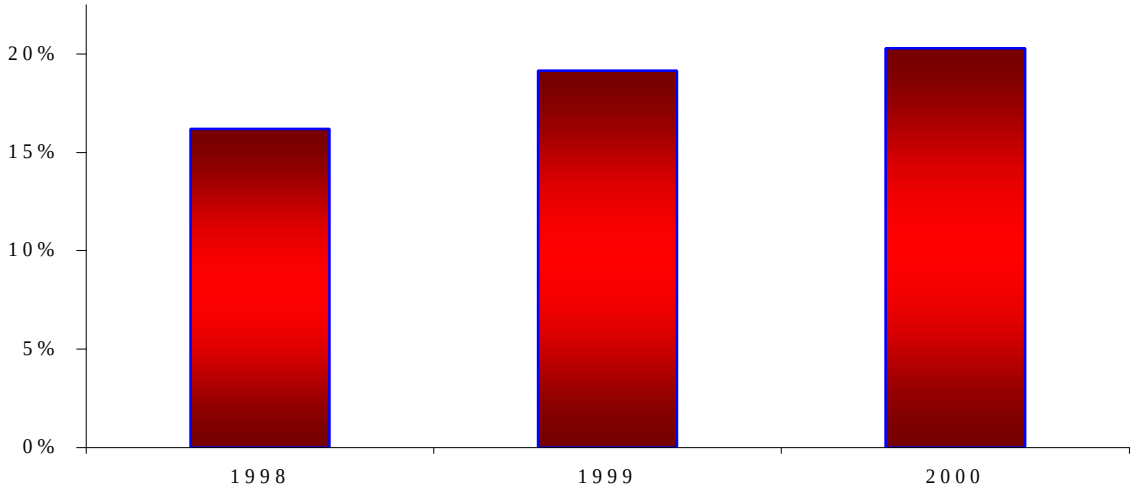
NGOs operate with significantly lower debt-equity ratios. The explanation is that supervised institutions tend to operate in more competitive markets, where portfolio yields are lower.

Among the MicroRate 20, FINDE had the highest return on equity in 2000. This Nicaraguan MFI is characterized by relatively large average loan size, which leads to low operating costs. However, portfolio yield is high. Finamerica in Colombia on the other hand, the only MFI showing a loss, was handicapped by statutory interest rate ceilings, which made it all but impossible to operate profitably. Colombia has since modified these ceilings for microfinance institutions.

MicroRate 20: Return on Equity, December 2000



MicroRate 20: Return on Equity, 1998-2000



RETURN ON ASSETS

Net Income / Average Assets

How to Calculate It

Return on Assets is calculated by dividing net income (excluding any 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.

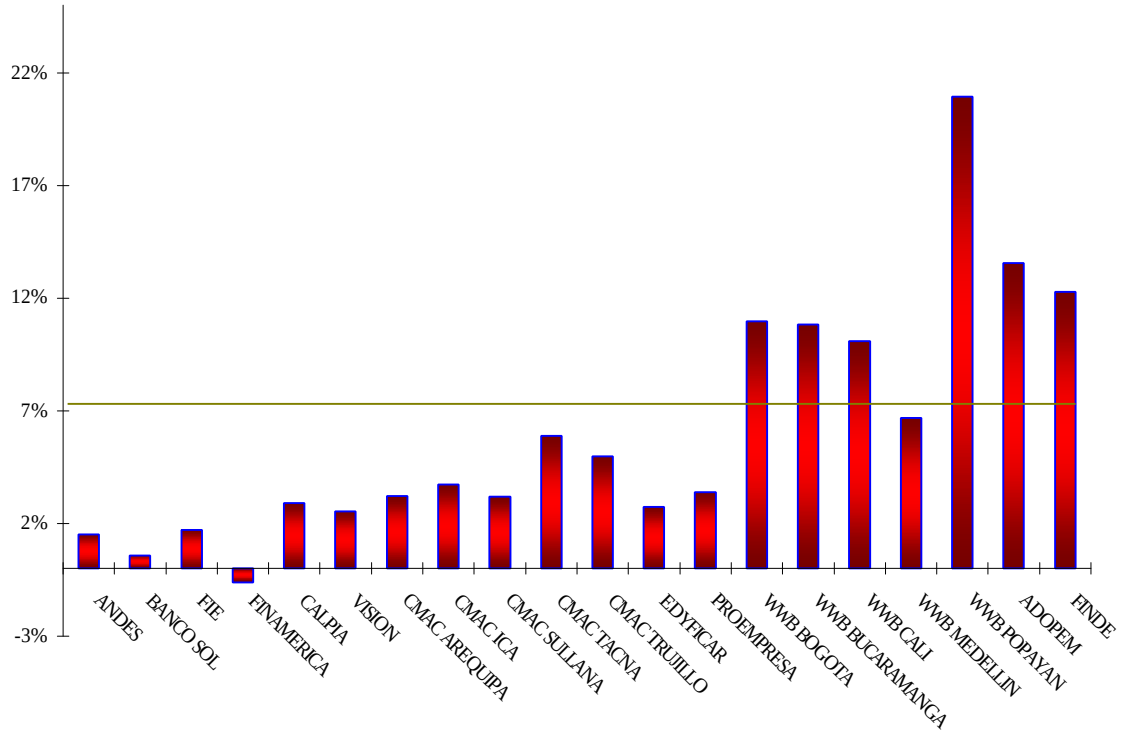
What to Watch Out For

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 a relatively low returns on assets.

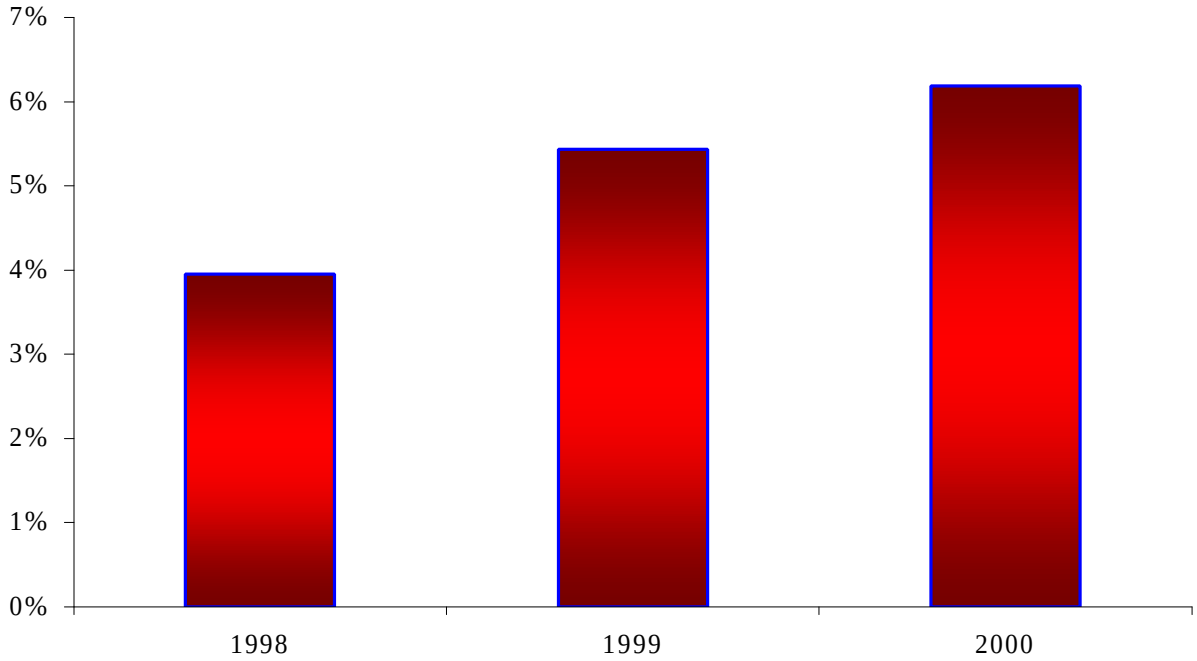
Where the Industry Is

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 2000, Return on Assets averaged an astonishingly high 6% for the MicroRate 20. The only MFI with losses, Finamérica in Colombia, was severely affected by Colombian interest rate ceilings that fail to take into account the high cost of administering microfinance portfolios. Colombia has since modified its laws governing interest rates.

MicroRate 20: Return on Assets, December 2000



MicroRate 20: Return on Assets, 1998-2000



PORTFOLIO YIELD

Interest and Fee Income / Average Gross Portfolio

How to Calculate It

Portfolio Yield is calculated by dividing total interest and fee income (in other words all income generated by the loan portfolio) by the period average gross portfolio.

What It Means

Portfolio Yield measures how much the MFI actually received in 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 fees. It also provides insight into its 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

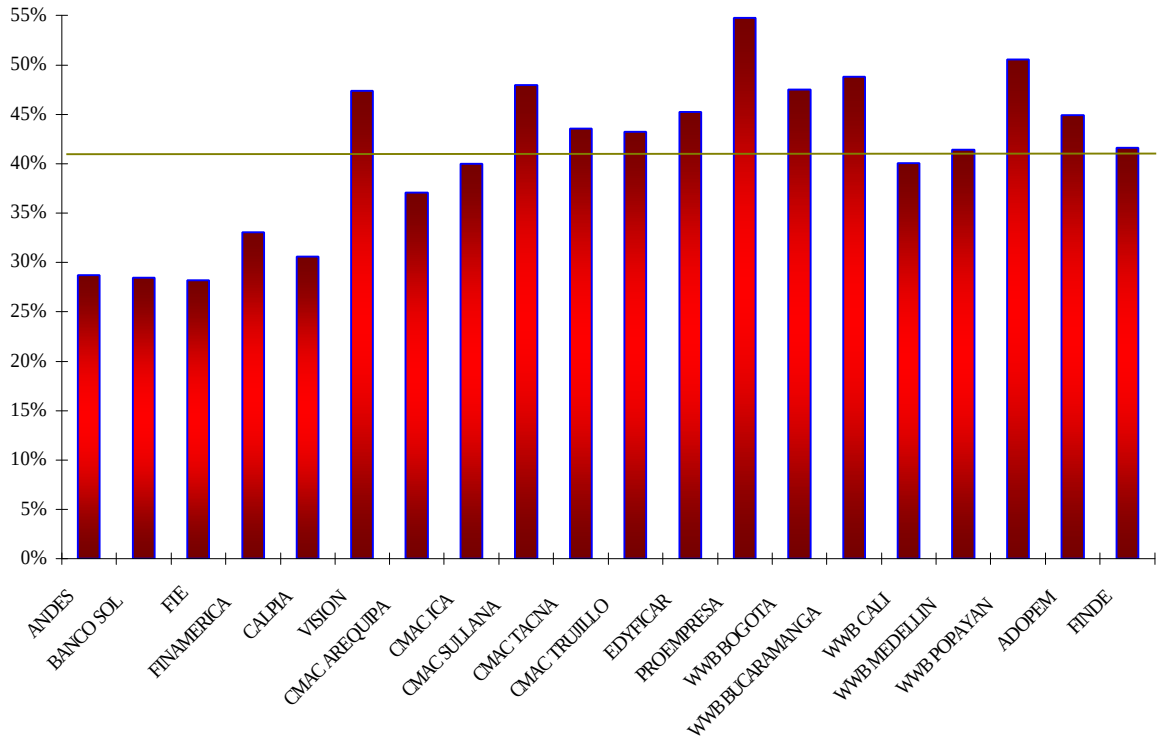
For Portfolio Yield to be meaningful, it must be understood in the context of the prevailing interest rate environment the MFI operates in. Generally speaking, Portfolio Yield is the initial indicator of an institution's ability to generate revenue with which to cover its financial and operating expenses.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

Where the Industry Is

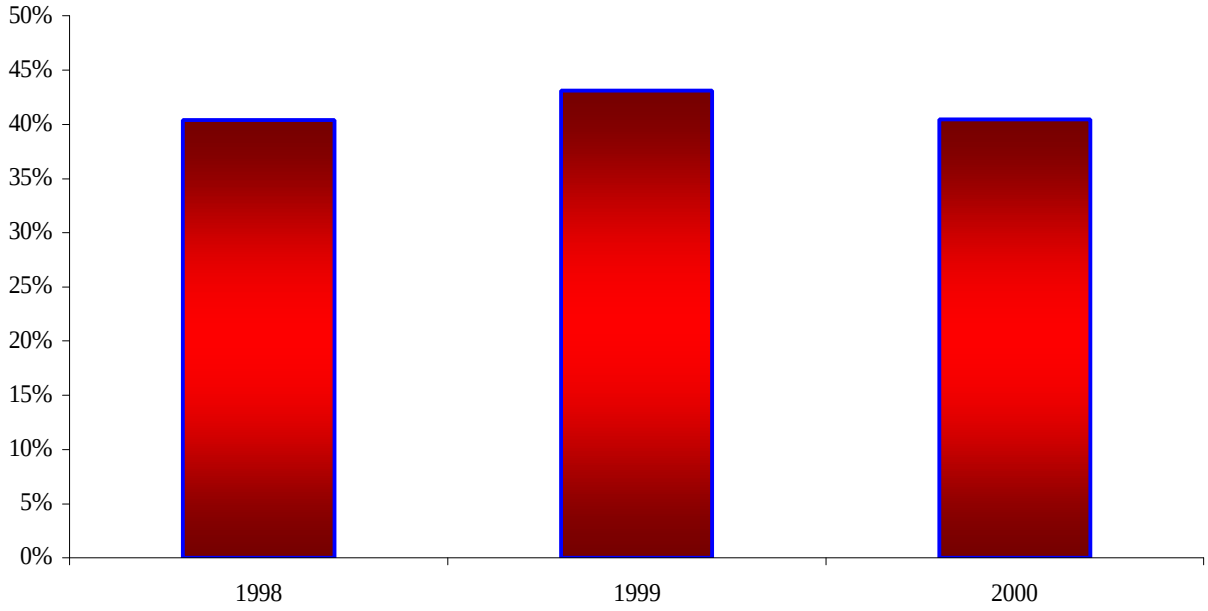
As the microfinance industry matures, Portfolio Yield continues to decrease. That is as it should be. Increased competition has led to increased efficiency, which in turn has allowed MFIs to generate increasing profits from lower yields. Average Portfolio Yield for the sector in 2000 equaled 41%, down from 43% in 1999.

Portfolio Yield mainly seems to be driven by competition. The three Bolivian MFIs at the left end of the chart (below) operate in the most competitive market and they charge the lowest rates, even though they receive virtually no subsidies. Portfolio size and average loan size which, as has been shown, have an impact on and MFI's Operating Expense Ratio (its "efficiency") have less influence on what a microentrepreneur ultimately pays for credit.

MicroRate 20: Portfolio Yield, December 2000



MicroRate 20: Portfolio Yield, 1998-2000



ANNEX I: CALCULATING THE INDICATORS

Balance Sheet

MFI Name		FIE	FIE
Country		**Bolivia**	**Bolivia**
Except if noted otherwise figures are in:		Thousands	Thousands
UNADJUSTED BALANCE SHEET (US$'000)		**31-Dec-99**	**31-Dec-00**
ASSETS			
Cash and Banks		227	529
Temporary Investments		2,305	3,710
Net Loans		17,475	20,808
Gross Loans		18,489	22,424
Performing Loans		*17,329*	*20,416*
Portfolio at Risk		*1,160*	*2,007*
Loan Loss Reserve		1,013	1,616
Interest Receivables		207	277
Other Current Assets		189	286
Current Assets		**20,403**	**25,610**
Long Term Investments		32	36
Property and Equipment		382	842
Other Long Term Assets		-	-
Total Assets		**20,817**	**26,487**
LIABILITIES			
Demand Deposits		-	26
Short Term Time Deposits		3,324	5,931
Short Term Funding Liabilities		2,047	942
Other Short Term Liabilities		852	1,481
Current Liabilities		**6,222**	**8,380**
Long Term Time Deposits		5,706	5,507
Long Term Funding Liabilities		4,922	8,234
Quasi-Capital Accounts		-	-
Other Long Term Liabilities		-	-
Total Liabilities		**16,850**	**22,121**
EQUITY			
Capital		1,669	3,130
Earnings (Losses) Period		247	404
Retained Earnings		283	208
Other Capital Accounts		1,768	624
Total Equity		**3,967**	**4,366**
Total Liabilities & Equity		**20,817**	**26,487**

Income Statement

MFI Name		FIE	FIE
Country		**Bolivia**	**Bolivia**
Except if noted otherwise figures are in:		Thousands	Thousands
UNADJUSTED INCOME STATEMENT (US$'000)		**31-Dec-99**	**31-Dec-00**
Interest and Fee Income		5,306	5,773
Cash Interest and Fee Income		*5,099*	*5,496*
Accruals (Int.. Receivables)		*207*	*277*
Interest and Fee Expense		1,491	1,971
Net Interest Income		**3,816**	**3,802**
Provision for Loan Loss		923	850
Net Interest Income After Provisions		**2,892**	**2,952**
Operating Expense		2,602	2,754
Personnel		*1,599*	*1,662*
Other Administrative Expense		*1,003*	*1,092*
Net Operating Income		**290**	**198**
Other Income		184	449
Investment Income		*118*	*324*
Other Non-Extraordinary Income		*66*	*125*
Other Expenses		110	101
MFI's Inflation Adjustment (if any)		*48*	*72*
Other Non-Extraordinary Expenses		*62*	*29*
Net Not-Operating Income		**364**	**546**
Extraordinary Items		-	26
Extraordinary Income		-	*26*
Extraordinary Expense		-	-
Net Income Before Taxes		**364**	**572**
Taxes		117	168
Net Income		**247**	**404**

Information Needed to Calculate the Ratios

	2000
Except noted otherwise figures are in	Thousands
Cash and Bank Current Account Plus Readily Marketable Investments	$ 4,239
Gross Outstanding Non-Restructured Portfolio w/Arrears > 30 days plus Total Gross Restructured Portfolio	$ 2,007
Interest and Fee Income	$ 5,773
Interest and Fee Expense	$ 1,971
Loan Loss Provisioning Expense	$ 850
Loan Loss Reserve	$ 1,616
Net Income Before Donations	$ 404
Number of Borrowers (Excluding consumer and Pawn Loans)	22,044
Operating Expenses (Personnel Expenses + Administrative Expenses + Depreciation)	$ 2,754
Short-Term Assets	$ 25,610
Short-Term Liabilities	$ 8,380
Total Assets	$ 26,487
Total Equity	$ 4,366
Total Liabilities	$ 22,121
Total Outstanding Gross Portfolio	$ 22,424
Total Staff	169
Write-Offs During the Period	$ 170
Period Average Assets	$ 23,652
Period Average Equity	$ 4,166
Period Average Funding Liabilities	$ 18,320
Period Average Gross Portfolio	$ 20,456

OPERATING EXPENSE RATIO	**Operating Expenses (Personnel Expenses + Administrative Expenses +Depreciation) / Period Average Gross Portfolio** Example: $2,754/$20,456 = 13.46%
NUMBER OF BORROWERS PER STAFF	**Number of Borrowers (excluding Consumer and Pawn Loans) / Total Staff** Example : 22,044/169 = 130
PORTFOLIO AT RISK RATIO	**Outstanding Balance on Arrears over 30 Days plus Restructured Loans / Total Outstanding Gross Portfolio** Example: $2,007/$22,424 = 8.95%
PROVISION EXPENSE RATIO	**Loan Loss Provisioning Expenses / Period Average Gross Portfolio** Example: $850/$20,456 = 4.15%
RISK COVERAGE RATIO	**Loan Loss Reserves / Outstanding Balance on Arrears over 30 days plus Refinanced Loans** Example: $ 1,616/$2007 = 80.51%
LOAN LOSS RESERVE RATIO	**Loan Loss Reserves / Total Outstanding Gross Portfolio** Example: $1,616/$22,424 = 7.20%
WRITE-OFF RATIO	**Write-Offs During Period / Period Average Gross Portfolio** Example: $170/$20,456 = 0.83%

FINANCIAL EXPENSE RATIO	**Interest and Fee Expenses / Period Average Gross Portfolio** Example: $1,971/$20,456 = 9.63%
COSTS OF FUNDS RATIO	**Interest and Fee Expenses / Period Average Funding Liabilities** Example: $1,971/$18,320 = 10.76%
LIQUIDITY RATIO	**Cash and Bank Accounts+ Readily Marketable Investments / Total Assets** Example: $4,239/$26,487 = 16.00%
DEBT/ EQUITY	**Total Liabilities / Total Equity** Example: 22,121/$4,366 = 5.06
RETURN ON EQUITY	**Net Income Before Donations / Period Average Equity** Example = $404/$4,166 = 9.69%
RETURN ON ASSETS	**Net Income Before Donations / Period Average Assets** Example: $404/$23,652 = 1.70%
PORTFOLIO YIELD	**Interest and Fee Income / Period Average Gross Portfolio** Example: $5,773/$20,456 = 28.22%

ANNEX II: THE MICRORATE 20

(December 2000)

Company	Country	Portfolio	Clients
Andes	Bolivia	$45,762,000	41,695
BancoSol	Bolivia	$74,529,000	60,976
FIE	Bolivia	$22,424,000	23,402
FinAmérica	Colombia	$15,204,000	16,101
WWB Bogotá	Colombia	$2,720,000	7,879
WWB Bucaramanga	Colombia	$3,203,000	12,248
WWB Cali	Colombia	$12,720,000	33,046
WWB Medellín	Colombia	$2,929,000	8,883*
WWB Popayán	Colombia	$6,360,000	22,663
ADOPEM	Dom. Rep.	$7,649,000	20,511
Calpía	El Salvador	$1,308,000	35,910
FINDE	Nicaragua	$4,886,000	4,940
Visión	Paraguay	$20,226,000	28,219
CMAC Arequipa	Perú	$37,750,000	45,991*
CMAC Ica	Perú	$10,013,000	12,440
CMAC Tacna	Perú	$8,310,000	12,978*
CMAC Sullana	Perú	$14,460,000	37,563*
CMAC Trujillo	Perú	$18,182,000	40,889*
Edyficar	Perú	$11,696,000	16,451
Proempresa	Perú	$4,467,000	3,416

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