Performance Indicators for Microfinance Institutions

# TECHNICAL GUIDE

Section on Portfolio Quality

### **3rd Edition**

MicroRate

&

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

Washington, D. C.,

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

Performance indicators for microfinance institutions: technical guide

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

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

332.2 P282-dc21

This publication was prepared by Damian von Stauffenberg (MicroRate), Tor Jansson (Inter-American Development Bank), Naomi Kenyon (MicroRate) and María-Cruz Barluenga-Badiola (Inter-American Development Bank). It can be downloaded electronically from the web-sites of the Inter-American Development Bank (<u>www.iadb.org/sds/mic</u>) and MicroRate (<u>www.microrate.com</u>), 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 (<u>mipyme@iadb.org</u>) or MicroRate (<u>info@microrate.com</u>).

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

July 2003

Micro, Small and Medium Enterprise Division TeamSustainable Development Department Inter-American Development Bank 1300 New York Avenue, N.W. Washington, D.C. 20577 USA International Data Analysis Rating Vice Presidency MicroRate 2107 Wilson Bvd, Suite 450 Arlington, VA 22207 USA

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

### FOREWORD

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

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

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

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

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

Damian von Stauffenberg, Director MicroRate Alvaro Ramirez, Chief Micro, Small and Medium Enterprise Division, IDB

## **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,<sup>2</sup> by the outstanding gross portfolio as of a certain date. Since the ratio is often used to measure loans affected by arrears of more than 60, 90, 120 and 180 days, the number of days must be clearly stated (for example PaR30).

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

#### What It Means

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

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

#### What to Watch Out For

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

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

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

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

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

#### Where the Industry Is

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

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



MicroRate 32: Portfolio at Risk, December 31, 2002





#### **PROVISION EXPENSE RATIO**

#### Loan Loss Provisioning Expenses / Average Gross Portfolio

#### How to Calculate It

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

#### What It Means

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

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

#### What to Watch Out For

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

#### Where the Industry Is

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



MicroRate 32: Provision Expense Ratio, December 31, 2002





#### **RISK COVERAGE RATIO**

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

#### How to Calculate It

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

#### What It Means

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

#### What to Watch Out For

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

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

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

#### Where the Industry Is

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







MicroRate 32: Average Risk Coverage Ratio, 2000 – 2002

<sup>&</sup>lt;sup>3</sup> Pro-Mujer was not included as its high-risk coverage ratio is not indicative of the sample, and distorts results considerably.

#### WRITE-OFF RATIO

#### Value of Loans Written-Off / Average Gross Portfolio

#### How to Calculate It

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

#### What It Means

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

#### What to Watch Out For

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

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

#### Where the Industry Is

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



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



