How To Reduce Arrears In Microfinance Institutions

by Dan Norell

Abstract: Reducing arrears is crucial if MFIs are to achieve self-sufficiency. MFI staff must understand the causes of arrears—whether from clients' testing the MFI's determination to collect, crises in clients' lives, loans that are too large, or loans given on the basis of favoritism. Analytical tools for assessing and preventing arrears include key measures for analyzing arrears (e.g., portfolio quality ratios and performance ratios by credit officer) and financial ratio tests for determining appropriate loan size. The key to reducing arrears is to follow up late loans quickly, form strong solidarity groups, update and enforce credit policies, focus credit officers' services in a specific geographic scope, not lend to start-up businesses, and provide financial incentives for credit officers. In critical arrears situations, MFIs should suspend lending to new clients until portfolio quality improves, as well as ascertain clients' ability and willingness to repay in order to design appropriate strategies to pursue.

Introduction

A key to achieving scale and operational and financial self-sufficiency is to reduce the percentage of loans in arrears. To maintain good portfolio quality, microfinance professionals must understand (1) what causes arrears and (2) how arrears can be reduced. This paper addresses these two elements.

Causes of Arrears

Delinquent loans are loans that have been written off by a microfinance institution (MFI). Arrears are defined as late loans, and they can increase in MFIs for several reasons. Common reasons are explained below.

- Microentrepreneurs often test the MFI to see if it is serious about collecting loan payments. They may know the MFI is a nonprofit organization funded by overseas donors, meaning that MFI staff are not responsible to shareholders to make a profit.
- Clients' lives are often full of unpredictable crises, such as illness or death in the family. They are called on to provide for the extended family and are seen as disloyal to them if they refuse. They feel compelled to provide financial help, even if the funds are borrowed from the MFI.
- If loans are too large for the cash needs of the business, extra funds may go toward personal use. When the loan needs to be repaid, the client cannot pay back the loan without decapitalizing the business. In other words, the client has to use the net equity of the business to pay back the loan. World Vision's Georgia Credit Fund cites the use of the loan for personal uses as a key factor in the success or failure of a loan.
- If loans are given on the basis of favoritism, clients may attempt to delay payment or default. They often hope that their friend on the MFI staff will encourage the organization to write off the loan rather than take the clients to court or seize their property. This can be a problem with small business loans. Often, the larger the loan size, the greater the incentive for friends of credit officers to receive these loans.

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Analytical Tools for Assessing and Preventing Arrears

Key Measures for Analyzing Arrears

To reduce arrears, an aging analysis should be done monthly, because it is the only way for management and the board of directors to know the portfolio's health. If done regularly, a problem's seriousness can be reinforced with each report and discussed by management and the board. Key measures for analyzing the arrears situation are described below.

Portfolio at Risk (over one day late). The ratio of risk equals the value of outstanding balance of loans over one day late divided by the value of loans outstanding. The Portfolio at Risk (over one day late) ratio is an early warning device, indicating a lack of financial discipline in the system. An accountant from a World Vision–affiliated MFI did not register partial payments as late, wanting to keep the ratio looking good and not penalize clients who were making an effort to repay. When the MFI installed a computerized loan-tracking system, it was not as charitable as the accountant. Partial payments were registered as late, incurred a late-payment charge, and were put in the Portfolio at Risk (over one day) statistics. This showed management that clients were not paying because they were not held accountable, and this contributed to a major arrears problem.

In some ways, loans that are one to thirty days late can be compared to the common cold. Although it's not a serious problem initially, it can worsen into pneumonia. Quick action by MFI credit officers and management is needed. Because clients often know one another, late payments can become infectious and spread into widespread delinquency. The industry standard for Portfolio at Risk (over one day late) is below 10 percent.

Portfolio at Risk (over thirty days late). This ratio equals the value of outstanding balances of loans late more than thirty days divided by the value of loans outstanding. It is the key arrears measure because it means the borrower has awakened thirty mornings and chosen not to repay the MFI, so the probability of nonpayment continuing is high. The credit officer and MFI must take some action or stand losing the entire loan. Hence the name *Portfolio at Risk*. According to one writer (Rosenberg, 1999, p. 14) for the Consultative Group for the Poorest (CGAP):

> This measure discriminates between loans where a payment is just barely late and much riskier loans that have been overdue a long time. It distinguishes a late payment that represents the last installment of a 24-month loan from one that represents the first. It gives proper relative weight to small and large loans, short- and long-term loans. Managers who receive a daily or weekly aged Portfolio at Risk (PAR) report can quickly pick out loans that need to be pursued aggressively, while keeping a finger on the pulse of overall portfolio quality. No one indicator meets all needs or all situations, but an aged PAR is generally the single most useful indicator. Almost all MFIs should produce and use such a report.

The industry standard for the Portfolio at Risk (over thirty days late) is less than 5 percent. At a higher rate, the MFI risks losing the entire loan balance.

Principal Payments in Arrears (over one day late). This ratio is calculated by dividing the value of principal payments in arrears by the value of loans outstanding, very similar to the Portfolio at Risk (over one day late). The only difference is that the numerator has the value of principal payments in arrears rather than the value of outstanding balances of loans in arrears. Many practitioners prefer the Portfolio at Risk to the Principal Payments in Arrears because it measures the entire amount the MFI stands to lose, not just missed principal payments. The World Vision U.S. standard for this measurement is 8 percent. Because the value of late principal payments is divided against the entire value of loans outstanding, the measure needs to be lower than the Portfolio at Risk (over one day late) measurement. The Portfolio at Risk (over one day late) measurement is calculated by using the entire value of the outstanding balances of loans in arrears.

Principal Payments in Arrears (over thirty days late). This ratio equals the value of payments in arrears (over thirty days late) divided by the value of loans outstanding. There is no clear industry standard for this measurement, but World Vision U.S. uses a standard of less than 4 percent.

Repayment Rate. This ratio is calculated as the amount paid (minus any prepayments) divided by the sum of the amounts due plus the amounts past due.This ratio has fallen out of favor among microfinance practitioners because it hides a looming arrears problem. Often prepayments are not subtracted, so the good works of prepayers cover up late payments of those in arrears. The industry standard is 95 percent.

Financial Ratios by Credit Officer. While it is helpful to management to know the health of the MFI's loan portfolio, the credit officers and their supervisor should list each financial ratio by credit officer. The credit officer and supervisor can then take steps to reduce each credit officer's arrears rate.

Tests for Determining Appropriate Loan Size

It is critical that the loan size be appropriate for the size of the business. This paper argues that MFIs should ascertain the repayment capacity of clients' businesses by collecting data on sales and assets. It could be maintained that loans should be given solely on the basis of character, since microcredit is often called "character-based lending," but loans create debt for the client. A Mennonite Economic Development Associates (MEDA) program once gave a loan for a chicken business to a pastor—a man of impeccable character. However, because the pastor was not a good financial manager, he was saddled with a very large debt that he could not repay.

MFI staff can use financial ratios to determine appropriate loan size. Several of these financial ratios will be discussed.

However, not all the financial ratios discussed are required to determine the loan size, especially for solidarity groups. The first two (Debt-Equity Ratio and Repayment Capacity) are the most important for solidarity group and community banking loans. These ratios require that the community bank or loan officer collect sales, assets, and liabilities information from each client. This information is important to collect because if the MFI is lowering sales or decreasing a client's net worth, then the loan may be harming rather than helping the client.

Debt-Equity Ratio. This ratio is the key determinant of the loan size a client should receive. The Debt-Equity Ratio equals the sum of existing liabilities and the loan amount divided by the net equity, where net equity equals assets minus liabilities. MEDA usually has 0.50 as the maximum debt-equity ratio allowable for a loan. This means that if the business has a net equity after liabilities of $1,000, the maximum size loan with no other existing liabilities is (0.50)($1,000), or $500. In special cases, the debt-equity ratio may exceed 0.50, but it should never be more than 0.75. These special cases include the following:

- The business has net equity that is less than $500.
- The client wants to purchase a fixed asset at a fixed price.
- The client has a contract for the goods to be produced.
- The client has customer advances that inflate the debt owed.
- The client has an excellent repayment history.

It is very easy to give a loan that is too large. Care should be exercised so that the client and the MFI are not exposed to too much risk. Some credit officers may argue that clients have too few assets to be included as equity. One credit officer in the World Vision Azerbaijan Microfinance Program, who lent to Internally Displaced Persons, challenged the ratio. He felt that the sales and profit potential for selling goods such as leather jackets was greater than reflected in the debt-equity ratio. While this assertion may be correct, the risk for the MFI increases with increases in the leverage of the debt to equity.

Repayment Capacity. This ratio is second most important in determining loan size. It compares the client's average monthly payment (principal and interest) to the business's current monthly sales. The average payment should not exceed 8 percent of monthly sales.

The repayment capacity ratio equals the average monthly payment, divided by current monthly sales. Use of this ratio prevents overburdening the client with difficult payments. The MFI should use the current monthly sales figure and avoid overly optimistic growth projections. One Georgian Credit Fund credit officer felt that an 8 percent limit was too liberal because profits in Eastern Europe ran at about 7–11 percent of sales. If 8 percent of sales were used to repay the MFI, the entrepreneurs would not have any additional profits left to reinvest in the business; instead, they would just be working for the MFI with no benefit to their business or families. With the individual lending program, the Georgia Credit Fund sets a maximum of 15 percent of profits to be used for principal and interest, so it intends to set the initial repayment capacity ratio at a maximum of 2 percent of sales.

Loan Collateral. Loans may be secured by individual guarantors or, in the case of groups, other group members. In the past, the MEDA program in Nicaragua, CHISPA, required that each member of the solidarity group pledge collateral to the group. In case of individual defaulting, other group members can pay the individual's part of the late principal, interest, and penalty payments and take the property that was pledged in collateral. These pledges are written down and signed; the group leader and the MFI each keep one copy. (Currently, CHISPA has been converted to a registered bank whose focus is individual lending rather than solidarity group lending.) The loan collateral ratio equals the estimated value of collateral divided by the loan amount.

Some organizations believe that the collateral pledged should be at least twice the loan amount. For example, $400 must be pledged to qualify for a loan of $200. Other MFIs only require 100 percent or 125 percent. The more collateral that is pledged, the lower the risk to the MFI. World Vision generally requires 100 percent of the loan in collateral and recommends a loan collateral ratio of 2.

Increase in Owners' Equity. Another evaluation measure is the increase in net owners' equity during the last loan cycle compared to the increase in loan size. This may seem logical, given the .50 limit to the debt-equity ratio, but it bears repeating. It is easy to allow the loan size to get too big, especially on repeat loans. If the MFI requires the net owners' equity to grow proportionally to the loan increase, the debt equity ratio should not change. For example, if in the first loan the debt-equity ratio of existing liabilities of $500 plus the loan amount $500 divided by the net equity of $2000 equals .50, then a second loan of $600 should be balanced with at least $2,200 in net equity—a $200 increase—so that the debt-equity ratio remains the same: the existing liabilities of $500 plus the loan amount $600 divided by the net equity of $2,200 still equals .50.

Character and Integrity. Character and integrity tests are as important as financial tests, since microfinance is often called *character-based lending*. In Zimbabwe, Dunn & Bradstreet lists individuals who have been taken to court for bad debts. With group lending, each group member should be well known to each other group member, for each signs individually to guarantee the entire group's loan. With individual lending, guarantors often guarantee the loan, and they should vouch for the character of the client. They need to know that if clients do not repay their loans, the MFI will take the guarantor to court to collect on the loan.

Reducing Arrears

Preventing or Reducing Arrears

MFIs can take a number of actions to reduce arrears. To begin with, quick follow-up visits right after a missed payment are key to reducing arrears. One credit officer in a MEDA-affiliated MFI in Nicaragua has an almost zero percent arrears rate. He checks each day before the close of business for his clients who did not pay that day. After office hours or early the next day, he visits the client to inquire about the missed payment. If the late client is visited the first day after the repayment is missed, the credit officer comes as a friend and can warn of the consequences of late payment, including legal action the MFI takes as a matter of policy. However, a credit officer who comes a week or more later may be perceived as a police officer for the MFI. The credit officer should clearly communicate that the MFI will take action, but should not overplay his or her hand and upset the client. The client could then say, "Fine, I will see you in court. Until then, I will not cooperate at all."

For group loans, regular visits to the home and business of the chairperson are important. One main reason MFIs use group-lending methods is to lower transaction costs. If the follow-up for late group loans is done on an individual basis for individual businesses, the cost savings are lost. Unfortunately, it is often the chairperson or another leader who has misused the money. To reduce the risk of this, the roles and responsibilities of the chair and other leaders need to be clear in the training and home visits. The chairs need to know that the first stop in case of arrears will be their house or business. Any MFI-initiated court action will target the assets of the chairperson first.

The formation of strong solidarity groups is also key to preventing high arrears. The training and formation stage often covers several sessions. Group members must clearly understand their roles and responsibilities and fully grasp that they are individually signing for the loans of each group member. MEDA's affiliate in Nicaragua states several key group principles in its Solidarity Group Credit Policies and Procedures (1997):

- Groups of four to six individuals (preferably five) select each other based on trust and knowledge of each other's business and character. They operate their businesses and preferably live in the same area. Ideally, their businesses are the same size and have the same credit needs and debt capacity.

- Each group uses the loan for the purpose specified in the loan application.
- Each member of the group participates in all training activities.
- Each group selects a group leader who is responsible to collect and submit payments each week, liaison with the credit officer, and initiate and maintain group peer pressure.
- Each group member agrees to guarantee the loans of others in the group. If one member fails to pay, other group members are responsible to make the payment.
- Senior management should regularly review lending policies and procedures. The credit supervisor should check with credit officers daily to ensure that policies are followed. It makes no sense to have strong policies on paper that are not followed in the field.

Next, if credit officers have a specific geographic region, they can visit clients more often; limiting geographic scope reduces time and money wasted traveling from the office to clients' businesses. More visits enable credit officers to develop relationships in their neighborhoods.

Another benefit of assigning credit officers specific geographic regions is that the impact of increasing clients' incomes can, in turn, have an impact on the neighborhood. If many clients live in one neighborhood, visible signs of development can be seen: greater economic activity; more interest in schools, churches, and community institutions; and higher levels of school attendance by children of microentrepreneurs. On the other hand, if the MFI's benefits are spread over an entire metropolitan area, the multiplier effect of higher incomes will be diluted. World Vision has found this synergistic effect in other programming. As a consequence, World Vision programming now focuses on specific areas called *Area Development Programs* (ADPs), which may include credit, savings, health, well-drilling, education, and other services.[1]

Another strategy for reducing arrears is to loan only to microentrepreneurs who have been in business at least twelve months. Businesses are most likely to fail within the first year of operation. If they have existed for at least twelve months on the owner's money, the infusion of money from the MFI should be a lower risk than if the business is a start-up. Some MFIs use six months as a minimum, others three. The lower the number of months, the higher the risk for the MFI. This measure cannot always be applied, e.g., when working with Internally Displaced Persons (IDPs, persons displaced by civil conflict), who will not usually have an existing business.

Since many of these businesses are start-ups, it pays to be conservative in loan size. Some Georgia Credit Fund credit officers maintain that in a transitional economy like the Republic of Georgia, year-old businesses were more likely to fail than those that were three months old because they were more likely to face significant changes in the economic environment. For example, small bakeries were struggling because the government allowed only large bakeries to sell on the street. A new entrepreneur would not open a bakery because of new competition from large bakeries, but an entrepreneur who opened such a bakery one year ago would be stuck trying to make the best of a difficult situation. A new business may be less likely to fail than an older one in a dynamic economy.

Yet another way to reduce arrears is to require the credit officer to visit the client and the client to receive training prior to the transaction of each loan. It is easy for MFIs to assume that a client or group should get larger loans after each loan cycle, assuming that clients will repay new loans on time if they have repaid past loans on time. However, it is often on the second and third loans that clients fall behind, perhaps because the loan size has grown too big or because the client has begun to take the MFI for granted. The MFI should apply the same rigorous financial and character tests to both new and repeat loans. Only by treating each loan as new can the loan sizes be calibrated each time, on the basis of actual financial data.

Finally, financial incentives can be used to lower the arrears rates for individual credit officers. One MEDA partner in

Zimbabwe, Phakama (Arise) Economic Development Company, developed the following incentives for credit officers:

- 5% of salary if 95% of target portfolio is maintained in the month.
- 10% of salary if the arrears rate is not more than 10%.
- 20% of salary if the arrears rate is not more than 5%.
- 30% of salary if the arrears rate is not more than 2%.

Katherine Stearns writes about credit officer incentive plans in *The Hidden Beast: Delinquency in Microenterprise Credit Programs* (p. 51):

> Another strategy that has proven quite effective in finding solutions is to design an incentive system for the loan officers that includes on-time payments as an important variable. If well designed, the system can motivate advisers to look for and eliminate the causes of arrears, as well as to meet other program objectives. An evaluation of the ADEMI program in the Dominican Republic concluded that one of the most important factors contributing to the decrease in arrears (payments past due more than 1 day/portfolio) from 25 percent in 1986 to 10 percent in 1988 was the incentive system implemented for the advisers in which they receive monthly bonuses depending upon the performance of their portfolios.

The above measures are important for preventing or reducing arrears. Sometimes an arrears problem is so serious, however, that the MFI's management needs to take more drastic action.

Reducing Arrears in a Critical Situation

If the arrears rate has risen to such an extent that it threatens the life of the MFI, management must take serious measures. Several that MFIs have used are described below.

Suspending lending to new clients until the Portfolio at Risk (over one day) ratio falls to below 10 percent would send a clear message that arrears are taken seriously by the MFI's management and the board of directors. In school, a student may not advance to the next grade until mastering a certain level. Likewise, an MFI should not be allowed to access more lending capital until a certain level of proficiency is achieved. It is suggested that a Portfolio at Risk (over one day) ratio of less than 10 percent, a Portfolio at Risk (over thirty days) ratio of less than 5 percent, and a Principal Payments in Arrears (over one day) ratio of less than 8 percent serve as such minimal passing grades. A funder could limit any new loan funds until these measures are met, thus limiting uncontrolled growth. Credit officers would be more careful with client selection. In one World Vision–established MFI, the credit officers in one branch worked hard to exceed loan disbursement quotas, but portfolio quality was poor. The MFI's branch office was threatened with closing down unless it improved the portfolio quality.

It is much easier for MFIs to find new clients than to get money back from clients in arrears, but credit officers must focus on the latter. By focusing on poor loan decisions, credit officers and the entire MFI can learn from mistakes. The risk of limiting loans until the Portfolio at Risk (over one day) rate meets certain targets is that portfolio growth could stagnate, which could discourage credit officers. In fact, arrears may increase because the portfolio (denominator in the statistics) is dwindling. The MFI managers will need to balance the follow-up on the collection of late loans with the review of some new loans.

If the two Portfolio at Risk rates are very large, the MFI should also consider establishing a special incentive program for credit officers to collect very late loans. If it is part of a time-fixed recovery program, the institution could pay 5 percent of payments received from late payers. An alternative is to give an equal share of the incentive payment received to each credit officer.

For very late loans (group loans over five weeks without a payment, individual loans at sixty days without a payment), credit officers should visit each late payer. The credit officer should classify the client into one of the four following categories: (1) willing and able to repay, (2) willing but unable to repay, (3) unwilling but able to repay, and (4) unwilling and unable to repay.

With the institution's management, the following courses of action could be considered.

Willing and Able to Repay. Management could allow credit officers to receive payment, even partial payment, at the client's business or home. The Georgia Credit Fund implemented this alternative by having the credit officer and the supervisor visit the client's business.

Willing but Unable to Repay. Rescheduling should be considered for clients with a very good excuse. This means that the principal, interest due, and penalty due are added up as the starting balance on a new loan, for which the client signs a new loan contract. Rescheduling can, however, hide a problem that can resurface in a worse condition, even encouraging delinquency. The day of reckoning comes when repayments start again. The MFI does not have any guarantee that late payments will not occur again. The Georgia Credit Fund reports that rescheduling has caused difficulty for many clients because the profitability of the businesses did not improve. They are now pursuing possible partial liquidation of the collateral together with rescheduling.

Unwilling but Able to Repay. The institution can pursue legal action or inform the community and influential persons of clients' unwillingness to repay. Their names can be publicly posted. Religious and community leaders can push them to pay. Community leaders can be informed that the MFI will stop lending in the neighborhood if arrears are too high. The entire neighborhood could lose because of several persons' unwillingness to honor their legal obligations. Handing clients over to debt collectors should be considered, but the institution then loses most of its leverage. If the MFI visits the client, all funds still go through the debt collector, which is very hard for the MFI to track. Also, most collectors' microenterprise clients are smaller than their other clients. They may spend more time frying larger fish and leave microenterprise clients' files untouched. Another option is to train staff in debt collection; perhaps an attorney could help the MFI develop this capacity.

Unwilling and Unable to Repay. Following up on such groups is a poor use of staff time. They are best referred to debt collectors or written off.

Credit officers and their supervisors in several MFIs have found this "triage" activity very helpful in serious arrears situations. They can determine where to invest significant staff time (willing and able and unwilling but able quadrants) to yield the most improvement in the repayment of payments in arrears.

Conclusion

There is no magic recipe to reduce arrears. Often it is just plain hard work. First, prevention is always better than cure, so a clear understanding by the client that arrears will not be tolerated is key to keeping the situation from getting out of hand.

Second, MFIs need to have clear and effective credit policies and procedures approved by the board of directors that are followed by credit officers. If the policies and procedures are not effective, then the credit officers need to have a hand in creating new ones.

Third, management and credit officers need to pay attention to details. The average arrears rate of each credit officer's portfolio should be tracked weekly or biweekly.

Credit officers must respond quickly to problem clients in their portfolios. The credit supervisor must respond quickly to solve credit officer problems. A microfinance portfolio with very low arrears can, within a few months, exhibit a dramatic rise in arrears, which can destroy the MFI. It is very important that practitioners watch carefully that policies are followed once they are put in place. If things are not working, then the institution needs to identify the problem areas and fix them quickly. The alternative is bankruptcy.

If an MFI can reduce arrears and get the basics of finance right, then the organization's overall goals will likely make a significant contribution to the economic development of the poor people in a country. While reducing arrears is not the only determinant in the successful sustainability of MFIs, it is an important building block.

Notes

1. World Vision's Area Development Program (ADP) approach to development came about because of its all-inclusive nature. Instead of covering just a few villages, an ADP could cover a whole geographical area or an area within clearly defined political boundaries such as districts, provinces, etc. This means that the program would be larger, with 500 to 10,000 children and populations of 10,000 to 50,000 who benefit. Also, the ADP approach provides opportunities for long-term assistance. Program life has increased from a range of three to seven years to twelve to fifteen years. This came about as a result of the realization that development is a process that takes a long time. Genuine transformation takes years and should impact entire communities to be considered sustainable.

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