Microfinance Repayment Schedules in West Bengal, India

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Sector(s): Finance, Gender

Fieldwork: Centre for Micro Finance (CMF)

Location: West Bengal, India

Sample: 1,026 clients in 100 groups, 845 clients in 169 groups, 213 clients in 148 groups

Target group: Women and girls

Outcome of interest: Earnings and income Business investment

Intervention type: Credit Risk mitigation

Dados: Download Dataset from the Open ICPSR

Partner organization(s): Evidence for Policy Design (EPoD), Village Financial Services (VFS)

Most microfinance institutions follow a rigid contract model: clients repay loans in weekly installments beginning shortly after disbursement. Researchers tested two features of these contracts, repayment frequency and the time of the first repayment, to determine if characteristics of the loan contract affect borrowers' repayment behavior and the types of investments they make. They found that less frequent repayments did not increase defaults. A two-month grace period before beginning repayment raised the default rate slightly but allowed entrepreneurs to invest more in their businesses, resulting in long term economic gains.

Policy issue

Most microfinance institutions (MFIs) structure their credit contracts in a similar way: clients meet in groups and repay loans in weekly installments beginning shortly after disbursement. The Grameen Bank, one of the first and best-known MFIs, established this model in Bangladesh in the 1970s, and it has since become the classic model of micro-lending in many countries. Group lending and weekly collection of repayment installments are widely seen as the key features of microfinance that reduce default risk, making lending to the poor financially viable. Repayment at weekly meetings, MFIs argue, imposes fiscal discipline, helping clients form repayment and savings habits. Initiating repayments immediately likewise imposes discipline and reduces the likelihood that a client will take the money and run. In addition, the classic repayment schedule increases interactions with loan officers, which may help build trust between clients and banks.

Yet, there may be advantages to offering more flexible repayment schedules for the lenders as well as the borrowers. Collecting weekly installments is costly for MFIs. If MFIs can lower costs by reducing the frequency of repayments, they may be able to lower

interest rates, scale up operations, and reach additional clients in remote or previously underserved locations. Early initiation of repayment may reduce the amount entrepreneurs invest in their businesses since they often set aside a portion of the loan for immediate repayment. As a result, they may be less likely to invest in raw materials or inventory, purchases that have high returns in the long run but are risky because they tie up cash in the short run. Despite the potential to better meet the needs of MFIs and their clients, there is limited evidence on the effects of deviating from the traditional microfinance contract design.

Context of the evaluation

Village Financial Services (VFS) is an MFI operating in peri-urban neighborhoods of Kolkata, India. Most of the loans VFS offers resemble traditional micro-credit contracts, made to groups of women and repaid weekly. Access to credit or savings, both formal and informal, is limited in these neighborhoods, and VFS faces almost no competition from other lenders. VFS works exclusively with women, most of whom have a household income of less than US$2 a day. There is a high rate of business ownership, and selling and tailoring saris are common occupations.



A woman in India working at a loom. Photo credit: DR Travel Photo and Video | Shutterstock.com

Details of the intervention

Researchers examined variations in microfinance contract design in partnership with VFS. They compared weekly and monthly repayments in one evaluation, tested a two-month grace period before initiating repayment in another, and expanded the repayment frequency experiment to evaluate the effect on financial stress in a third.

Monthly repayments: Researchers examined how repayment frequency affected default and late payment rates. VFS offered loans of INR 4000 (about US$100) with a fixed Rs. 400 interest payment to 1026 first-time borrowers in 100 groups. These were randomly assigned to one of three different repayment schedules:

1. *Standard weekly repayment:* 30 groups repaid INR 100 every week for 44 weeks
2. *Monthly repayment:* 38 groups repaid INR 400 every month for 11 months
3. *Monthly repayment with weekly meetings:* 32 groups repaid monthly, but met with a loan officer every week for the first three months

Two-month grace period: Researchers examined how delaying the first payment until two months after disbursing the loan affected investment in businesses and loan repayment. Eight hundred and forty-five clients in 169 loan groups received loans ranging from INR 4000 (about US$90) to INR 10,000 (about US$225). The groups paid the same amount in interest but were assigned to two different repayment schedules:

1. *Standard schedule:* 85 groups began repayment two weeks after receiving the loan
2. *Grace period:* 84 groups began repayment two months after receiving the loan

Monthly repayments with a focus on financial stress: Researchers replicated the repayment frequency experiment and included additional questions on levels of financial stress. Seven hundred and forty clients in 148 groups were assigned to weekly or monthly repayment frequencies. A subgroup of 213 clients was surveyed by cell phone every 48 hours for seven weeks, and they were asked questions about their confidence in their ability to repay the loan, their anxiety about loan repayment, arguments with their spouse about finances, and the amount of time they spent thinking about loan repayment.

Results and policy lessons

Taken together, the results from these evaluations indicate that MFIs can improve upon the standard contract model that uses weekly repayment beginning shortly after disbursal.

Monthly repayments: Switching from weekly to monthly repayments did not affect the repayment rate. There was no difference in the default rate or the frequency of late payments between groups.

Two-month grace period: The grace period increased clients' economic activity. Grace period clients invested INR 364.9 (roughly 6 percent) more in their businesses compared to regular clients and were twice as likely to start a new business. After three years, these clients reported weekly profits that were 57.1 percent higher than the comparison group mean of INR 1,587 per week and household incomes that were 19.5 percent higher than the comparison group mean of just over INR 20,000 per week. Grace period clients also reported roughly 80 percent more business capital. However, grace period clients were more than three times more likely to default than regular clients, which is consistent with the theory that the grace period allows for riskier investments that, if successful, have a higher rate of return.

Monthly repayments with a focus on financial stress: Clients with monthly repayments were no more likely to default in the short term, and they scored 45 percent lower on an index of financial stress than clients with weekly repayments. Compared to weekly clients, monthly clients worried about repayment 51 percent less often. They were 54 percent less likely to lack confidence in their ability to repay and were 60 percent less likely to spend significant time thinking about repayment. Monthly clients also reported investing more in their businesses and having higher income, which suggests that the flexibility encouraged more profitable investments.

These results suggest that the microfinance sector can gain by moving away from the traditional contract model. Switching to lower frequency repayment schedules could allow MFIs to save on the costs of repayment collection, with no added risk of default, while also reducing clients' stress levels. Although offering a grace period before beginning repayment increased the default rate, it allowed entrepreneurs to make larger investments in their businesses, resulting in longer term economic gains. This is an area with large potential for further research, and the researchers are planning to conduct follow-up surveys to determine the long term effects of these contract modifications on participants' business outcomes.

Field, Erica, and Rohini Pande. 2008. "Repayment Frequency and Default in Microfinance: Evidence from India." Journal of the European Economic Association 6(2-3): 501-09. Field, Erica, Rohini Pande, John Pap and Y. Jeannette Park. 2012. "Repayment Flexbility Can Reduce Financial Stress: A Randoized Control Trial with Microfinance Clients in India." PLoS ONE 7(9): e45679. Field, Erica, Rohini Pande, and John Papp. 2013. "Does Micro?nance Repayment Flexibility Affect Entrepreneurial Behavior and Loan Default?" American Economic Review 103(6): 2196‰ÛÒ2226 Field, Erica, Rohini Pande, John Papp, and Natalia Rigol. "Does the Classic Microfinance Model Discourage Entrepreneurship Among the Poor? Experimental Evidence from India." Working Paper, November 2012.