Text Message Loan Repayment Reminders for Micro-Borrowers in the Philippines

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Sector(s): Finance

Fieldwork: Innovations for Poverty Action (IPA)

Location: Various

Sample: 1,259 new borrowers

Target group: Rural population

Outcome of interest: Credit balance/repayment

Intervention type: Nudges and reminders

AEA RCT registration number: AEARCTR-0001853

Partner organization(s): Green Bank of Caraga, Microenterprise Access to Banking Services (MABS), Rural Bank of Mabitac (RB Mabitac)

Poor microentrepreneurs have surprised skeptics with their ability to repay loans, but microfinance institutions and commercial banks lending to low-income individuals still struggle with relatively high transaction costs and low rates of return. In "the text message capital of the world," the Philippines, researchers tested the effect of text message reminders on client repayment rates. In contrast with previous research, they found that text message reminders did not increase repayment on average. Yet for repeat borrowers, who had known their loan officer longer, reminder messages with the officer's name did result in significantly higher repayment rates.

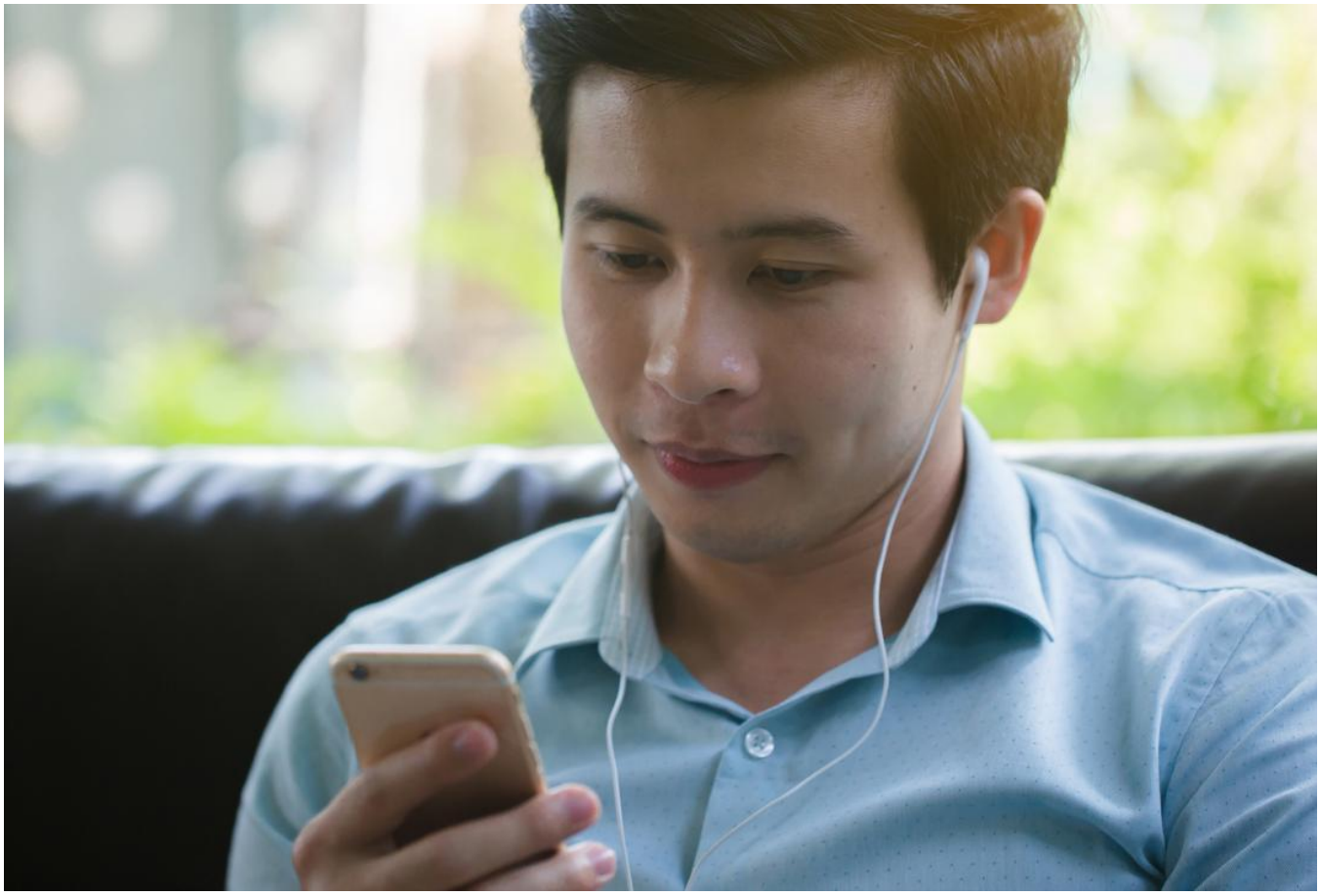
Policy issue

High loan repayment rates have helped fuel the recent and rapid growth in microfinance in low- and middle-income countries. However, although final default rates are frequently low, late repayment is still a large issue for many lenders. All types of MFIs, from strictly for-profit to mission-oriented, would benefit from inexpensive mechanisms for boosting timely repayment rates and lowering administrative costs per borrower. One such solution may be automated loan repayment reminders sent via text (or SMS) on mobile phones. This study tests the effectiveness of one such intervention in improving repayment and reducing default.

Context of the evaluation

Known as the text message capital of the world, the Philippines witnesses the transmission of over 1 billion text messages every day and thus offers a prime setting for testing the effectiveness of text message reminders on improving client repayment rates.

In partnership with the USAID-funded Microenterprise Access to Banking (MABS) and two rural banks in the Philippines, IPA designed a study to test the effectiveness of text message reminders as a tool for boosting repayment among micro-borrowers. Both banks are for-profit institutions that operate individual-liability microfinance lending programs. All new clients at select branches of both banks who had provided cell phone numbers to the bank and who availed of these loans during the study period were automatically enrolled in the study. MABS, a national initiative established to expand financial services, and provide technical assistance and training to local banks.



Microentrepreneurs in the Philippines were sent text reminders when their payments were due. Photo: Shutterstock.com

Details of the intervention

Researchers randomly assigned approximately 1,259 new borrowers who had just received their first loans from their respective banks into a comparison group or one of twelve intervention groups (with various combinations of timing, framing, and personalized messages). Beyond assessing the overall impact of text reminders, the study was designed to explore the importance of timing, framing, and personalization of the text message reminders. Regarding timing, researchers explore whether messages received two days before the due date, one day before the due date, or on the due date itself prove to be the more useful for reminding borrowers to pay. Secondly, the framing, or psychology, of the message sent was varied between emphasizing either the benefit of compliance or the cost of non-compliance to motivate repayment. Finally the importance of personalizing the text message was assessed by comparing messages with the account officer's name with those containing the client's name.

Over the course of sixteen months between January 2009 and April 2010, cell phone numbers and payment due dates were submitted by the three partner banks on a weekly basis to an automated text message application that sent the assigned text

message to borrowers on the appropriate date. All loans required payments on a weekly basis, and the average loan term at the Rural Bank of Mabitac was three months, while the average loan term at Green Bank was six months.

Following the enrollment of clients into the study, IPA analyzed bank data through June 2010 to examine differences in repayment rates, instances of default, and late payments across the twelve intervention groups. IPA also analyzed the cost of the text message system to the banks, taking into account loan officer time, cost of the software development, and administrative costs.

Results and policy lessons

The study did not find that text messages reminders increased repayment on average. The timing treatments did not have significant effects relative to the comparison group, nor significant differences from each other. Nor did framing the message as a loss or gain produce significant improvements relative to the comparison group, or significant differences from each other.

However, researchers did find that including the loan officer's name significantly improved repayment. That is, results suggested that this message reduced the likelihood that a loan was unpaid thirty days after maturity by 5.5 percentage points, a 41 percent reduction. The effects of mentioning the loan officer's name are only significant for borrowers who had been serviced by the same loan officer before.

While most text messages did not work, the results suggest a role for personal relationships between borrowers and loan officers. For repeat borrowers who know their loan officer, the reminder messages with the officer's name may trigger feelings of obligation and/or reciprocity to pay back the loan.

Karlan, Dean, Melanie Morten, and Jonathan Zinman. "A Personal Touch: Text Messaging for Loan Repayment." Working Paper, August 2013.