

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

**Researchers:**

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**Sector(s):** Finance

**Fieldwork:** Innovations for Poverty Action (IPA)

**Location:** Luzon and Visayas, Philippines

**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)

### **Policy issue**

The recent and rapid growth of the microfinance industry in the developing world can be attributed, in large part, to the achievement of impressively high loan repayment rates among microborrowers. However, although final default rates are low amongst microfinance borrowers, late repayment is a much larger issue. While microborrowers have surprised skeptics with their ability to repay loans, microfinance institutions (MFIs) and commercial banks lending to the poor still struggle with relatively high transaction costs and low rates of return. 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.

Researchers, in partnership with Microenterprise Access to Banking (MABS) and two rural banks in the Philippines, 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, provides 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**

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 12 treatment 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.

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