

## Encouraging Savings through SMS Messages in the Dominican Republic

**Researchers:**

**Sector(s):** Finance

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

**Location:** Dominican Republic

**Sample:** 73,209 unbanked remittance recipients and 2,147 recently banked recipients

**Partner organization(s):** Banco de Ahorro y Crédito Unión (Banco Unión)

There is a growing body of evidence on the efficacy of SMS reminders to encourage banking clients to save more. Researchers in the Dominican Republic partnered with savings and credit institution Banco Unión to conduct two randomized evaluations of tailored SMS reminders: The first on their ability to influence remittance recipients' decisions to open savings accounts, and the second on their ability to influence existing account-holders' decisions to save. SMS messages did not increase the number of savings accounts and led participants to transact less than participants who did not receive any messages.

### Policy issue

The central mechanism behind an SMS reminder is its ability to draw attention. Banking clients may wish to save more than they do if they forget to deposit, remember at inopportune moments, or forget the importance they place on saving. By making the act of saving more salient, SMS can help clients prioritize both short- and long-term financial needs.

There is evidence from several countries that SMS messages can be effective in this regard. In a pilot study, savings clients in the Philippines, Peru, and Bolivia increased their savings by 6 percent when they received messages reminding them to save. In Peru, savings increased by 16 percent when the texts reminded savers of a specific goal<sup>1</sup>. These early studies provided a compelling proof-of-concept; however, there existed deeper questions about how SMS could best be used to encourage savings by varying the content, timing, and frequency of the SMS. This evaluation explored those questions in the context of a savings account for remittance recipients in the Dominican Republic.

### Context of the evaluation

In 2015, the Dominican Republic received US\$4.9 billion in remittances from abroad, an 8.5 percent increase from the prior year and the highest growth rate for remittances in the region. At over 7 percent of GDP, these transfers are an important source of foreign exchange. They are also important for a recipient household: incoming remittances constitute 14 percent of a recipient's monthly income on average. About half of recipient households have a bank account they can use to store the inflows and build reserves.

Banco de Ahorro y Crédito Unión (Banco Unión) is a for-profit savings and credit institution formed in 2008. Banco Unión delivers over 200,000 remittances per month. About 80 percent of these remittances are delivered to recipients directly at their households; most of the remaining 20 percent are picked up at one of Banco Unión's six bank branches. In 2013, Banco Unión partnered with the Inter-American Development Bank's (IDB) Multilateral Investment Fund (MIF) to develop savings accounts tailored to the needs of its remittance recipients. In 2014, about 75% of balances had least US\$1. However, Banco Unión was concerned that remittance recipients did not consider the accounts as valid savings mechanisms.

Since 2014, researchers have been conducting evaluations in multiple contexts to explore how SMS can be used to encourage savings. Additional evaluations are being conducted in Peru, the Philippines, Ghana, and Colombia.



Researchers partnered with Banco Unión to conduct evaluations of tailored SMS reminders.

Photo: Paul Smith | J-PAL/IPA

## Details of the intervention

Researchers partnered with Banco Unión to conduct two randomized evaluations to test the effect of tailored SMS messages on remittance recipients' decisions to open savings accounts and account holders' decisions to save.

### Account Opening

In the first evaluation, remittance recipients received SMS messages that encouraged them to open a savings account. Researchers selected 73,209 Banco Unión clients who received at least one remittance in the two months prior to the SMS campaign and did not have a deposit account or active loan. Of these participants, 6,062 were randomly assigned to the comparison group and did not receive any SMS messages..

The remaining 66,747 participants received one SMS message per month that varied along the following dimensions:

*Introduction:* To understand whether personalized messages capture the attention of the client, participants were randomly assigned to receive a generic greeting or a personalized greeting.

*Message Content:* Participants were randomly assigned to receive one of 11 different messages in three thematic areas: generic "financial education" messages based on Banco Unión's series of online videos; information about various features of Banco Unión's products, or "rules of thumb" meant to encourage savings.

*Framing:* Participants were randomly assigned to receive the message as a straightforward declarative statement or phrased as a question. This portion of the evaluation was meant to test whether the inquisitive frame encouraged reflection and engagement with the message content.

*Message Ending:* To understand whether a call to action would influence client behavior, participants were randomly assigned to receive an action-oriented phrase encouraging them to visit a bank branch or a simple slogan.

*Duration:* To understand whether the duration of reminders affected account adoption, researchers randomly varied whether clients received monthly SMS messages for four, five, or six months.

Messages were sent between July and November 2015, spaced approximately four weeks apart. Researchers measured whether recipients opened a savings account at a Banco Unión branch.

## **Saving**

In the second evaluation, researchers partnered with Banco Unión to test the impact of SMS reminders on savings behavior.

Researchers selected 2,087 clients who already held a remittance savings account with Banco Unión and randomly assigned half to receive one SMS message per month that reminded them of a previously stated personal savings goal, if the information was available or a general prompt to save. The other half served as the comparison group and did not receive any SMS messages.

Messages were sent between July 2015 and February 2016, spaced approximately 4 weeks apart. Researchers measured the number of transactions and net deposits that participants made in their Banco Unión accounts for the duration of the evaluation.

## **Results and policy lessons**

SMS messages did not increase the number of savings accounts and led participants to transact less than participants who did not receive any messages.

*Account Opening:* Participants who received SMS messages did not open more savings accounts than participants who did not receive SMS messages. Researchers hypothesize that a previous campaign had already targeted the same population of Banco Unión clients. Participants who did not have savings accounts before this evaluation may have been the participants least likely to want to open an account. It is also possible that the SMS messages failed to suggest a value for the accounts that was attractive enough to motivate clients to open an account.

*Saving:* Within a four-week window, participants who received messages transacted US\$13.91 less than the comparison group who transacted about US\$41.45, which represents a 33 percent decline in transaction amounts. SMS message recipients were also about 25 percent less likely to make a transaction than the comparison group in a four-week window (a reduction of about 1.5 percentage points from a base of 7 percent in the comparison group). This decline in both number and volume of transactions was split evenly across deposits and withdrawals, so the overall balance did not change within a four-week window.

Participants who were sent messages about a previously set goal had fewer transactions over a four-week window. Researchers hypothesize that the content of the SMS messages discouraged saving by reminding clients of a goal that seemed out of reach. Evidence from other areas supports this hypothesis, though researchers did not test this directly<sup>2</sup>.

Additionally, focus group discussions revealed that it was common for participants to hold accounts in multiple institutions for different needs. While they did not directly test for this, researchers conjecture that participants may have been encouraged to save but did so outside of their Banco Unión account.

---

1. Karlan, Dean, Margaret McConnell, Sendhil Mullainathan, Jonathan Zinman. 2016. "Getting to the top of mind: How reminders increase saving." *Management Science*. 62(12): 3393-3411

2. Rogers, Todd and Avi Feller. 2016. "Discouraged by peer excellence: Exposure to exemplary peer performance causes quitting." *Psychological science*. 27(3): 365-374