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**Timeline**

2016-2018

**Sample Size**

240,000 (treatment) and 150,000 (control) BEPS account holders

**Research Implemented by IPA**

Yes

# Increasing Voluntary Contributions to Retirement Savings in Colombia

## Abstract

In Colombia, as in many other countries, workers face many barriers to saving for retirement. The situation is much worse for informal workers, who make up about 65 percent of the total workforce in Colombia. To investigate ways to increase voluntary retirement contributions, Innovations for Poverty Action collaborated with Colpensiones, the public defined-benefit provider, and the Inter-American Development Bank to conduct three waves of rapid-fire randomized evaluations that measured the impact of text messages on retirement savings behavior. Researchers conducted [related research](#) in Mexico on the impact of different messaging strategies on savings contributions to retirement savings. Preliminary results suggest that the text messages were effective at increasing the savings amounts of users who were actively saving before receiving messages, but were not as effective at moving people from not saving at all to saving some.

## Policy Issue

While saving for retirement is essential for the future well-being of working age people, saving for the future is difficult and voluntary contribution levels tend to be low across the

world. Research has shown that barriers to saving are wide-ranging: they include transaction costs (both monetary and non-monetary), a lack of information or knowledge, social constraints, a lack of trust in the financial system, ill-designed regulation, as well as human tendencies that hinder good decision-making (“behavioral biases”).<sup>1</sup>

Behavioral biases are now considered a significant, but often overlooked, contributor to the problem of under-saving. Research suggests that even those with access to convenient and trusted financial products and a thorough understanding of financial concepts still face significant behavioral barriers to following savings plans. In spite of their best intentions, individuals tend to spend on day to day consumption, giving in to temptation or more immediate needs, rather than prioritizing saving for future needs that are less salient.<sup>2</sup> In developed countries, interventions aimed at overcoming these behavioral biases have been found to be successful in increasing employee savings for long-term retirement fund products.<sup>3</sup> However, there is a need for more evidence on the use of behaviorally-informed tools to promote retirement savings in the developing world, and in Latin America in particular.

## Context of the Evaluation

In Colombia, retirement savings levels are low. Although 16 percent of an employee’s salary must be deposited in a public defined-benefit plan or in a private defined-contribution plan, only 13 percent of those with a public plan and 25 percent of those with a private plan are projected to reach the minimum savings necessary to receive a pension from these plans.<sup>4</sup> The situation is even more dire for informal workers—estimated to be 65 percent of the total workforce.<sup>5</sup> To protect this sector of the population, in 2015 the Colombian government launched the Beneficios Económicos Periódicos (BEPS) program, an alternative and voluntary saving system that provides annuities to workers in the informal sector once they reach retirement age.

This research builds upon [previous evidence](#) of the impact SMS reminders can have on savings and on a pilot study that IPA conducted with Colpensiones, the public defined-benefit provider, and the National Planning Department’s Office of Monitoring and Evaluation of Public Policies (DNP-DSEPP) in late 2016, which examined the impact of using text messages to increase savings behavior. While preliminary results from the pilot indicated that messages can improve savings behaviors, IPA worked with Colpensiones and the IDB’s Labor Markets Unit to further investigate the impact of a variety of messaging strategies on retirement savings behavior.

## Details of the Intervention

Researchers partnered with Colpensiones and the IDB’s Labor Markets Unit to conduct a series of randomized evaluations on the impact of various messaging strategies on retirement savings behavior. Researchers conducted three rapid fire randomized evaluations over one year, each lasting five months, which each addressed different behavioral barriers to saving for retirement compared to a standard savings message. During each wave,

individuals enrolled in BEPS received a total of nine SMS messages, sent every other week. This iterative research design enabled researchers to optimize the messages tested and quickly inform Colpensiones on the most effective and lasting strategies for improving savings behavior.

**Behavioral messages:** The first wave tested the effectiveness of three different behavioral-based messaging strategies. Among the 690,000 BEPS eligible account holders, 390,00 users were randomly sampled to participate in the study. From the study population, 240,000 users were randomly selected to receive one of the messaging strategies while 150,000 users did not receive any messages and served as a comparison group. The specific language used in the messages varied depending on the age of the recipient. Furthermore, each message included a different behavioral framing, which built upon a framework identified by Ideas42<sup>6</sup>: making retirement feel vivid and present, making retirement visible and common, and reducing the sense of loss associated with saving.

**Savings goal messages:** The second wave tested the effectiveness of setting different levels of annual savings goals for users. High, medium, and low saving goals were assigned based on an individual's savings behavior the previous year. After establishing the goal, subsequent messages informed users about their progress towards accomplishing their goal with some users receiving the goal framed as a monthly goal and others receiving goal framed as an annual goal. Among the 240,000 users in the behavioral messages treatment group, 155,000 users were randomly selected to receive the savings goal messages in the second wave. The remaining 85,000 users stopped receiving any messages.

**Long-term impacts:** The third wave focused on measuring the persistence of effects observed in the first and second waves over five, ten, and fifteen months following the intervention. During this wave, among the 155,000 users that received savings goal messages, 60,000 users were randomly selected to continue receiving messages, and the remaining 95,000 users stopped receiving messages after the second wave. The messages were designed based on the best performing strategies identified in the previous waves.

**Activating inactive users, boosting the messaging effect:** In addition to the messaging strategies, 80,000 users who had never completed a transaction in BEPS were randomly selected to receive a simple phone call during the third wave informing them about their saving account. Four types of calls were tested: human interactive, human rigid, prerecorded interactive, and prerecorded rigid.

The research team collected transaction-level administrative data to measure the impact of these different messaging strategies on the number of savings transactions and savings account balances of the BEPS account holders.

## Results and Policy Lessons

*Researchers are still analyzing data for a complete analysis — all results reported below are preliminary.*

Overall, the text messages were effective at increasing the savings amounts of users who were actively saving before receiving messages but were not as effective at moving people from not saving at all to saving some. The impacts on saving were the same regardless of gender or location but were significantly higher for account holders with a higher income, who were older, or who had opened accounts more recently.

**Behavioral messages:** Messages that were designed to help people overcome common behavioral barriers did not outperform the standard savings reminder.

**Savings goal messages:** Participants who received savings goal messages saved significantly more than the comparison and behavioral messages group. The results suggest that lower goals were more effective at increasing the number of savings deposits while higher goals were more effective at increasing the amount deposited. Also, messages that framed the goals as monthly performed significantly better than messages with annual framing.

**Long-term impacts:** The impact of messaging reminders, regardless of content and duration, dissipates once messages are turned-off. However, the impact of the savings goal messages, once turned off, dissipated much more slowly suggesting that messages with numeric goals may be more effective at developing longer-term savings habits than generic savings reminders.

**Activating inactive users, boosting the messaging effect:** Making phone calls increased the number of account holders who made at least one transaction regardless of prior messaging treatment. Interactive calls (both human and prerecorded) were most effective. Given the relatively inexpensive nature of prerecorded calls, this suggests that calls could be a cost-effective intervention to activate inactive users.

**Cost-effectiveness:** For active account holders, each dollar spent on five, ten, and fifteen months of messaging led to an increase in retirement savings of \$10.71, \$17.36, and \$15.87, respectively. These results suggest that for active account holders after 10 months of messaging, investments in additional messages did not lead to additional gains in amounts saved. For inactive account holders, messaging was not shown to be a cost-effective way to increase retirement savings. In the best case tested, each dollar spent on (ten months) of messaging led to an increase in retirement savings of \$1.

## Sources

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[3] Thaler, Richard, and Shlomo Benartzi. (2004). "Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy*, 112(S1): S164-S187.

[4] Montenegro, S., Jiménez, L., Ramírez, S., Nieto, A., & Hurtado, C. (2013). Distribución de ingresos en el sistema pensional y el impacto de algunas medidas de flexibilización (No. 011461). Documentos cede, 32.

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