# The Impact of Mobile-Linked Savings Accounts in Sri Lanka

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**Sector(s):** Finance

**Fieldwork:** Kandy Consulting Group

**Location:** Sri Lanka

**Sample:** 2,006 individuals

**Target group:** Adults

**Outcome of interest:** Savings/deposits

**Intervention type:** Digital and mobile Savings Pricing and fees

**Research Papers:** Can Mobile-Linked Bank Accounts Bolster Savings? Evidence from a Randomized Con...

**Partner organization(s):** International Growth Center (IGC), International Initiative for Impact Evaluation (3ie), University of Chicago

Mobile-linked financial services can dramatically reduce transaction costs that are associated with using a formal bank account (e.g. distance and travel to the bank) and that may hinder low-income clients from saving in an account. Researchers evaluated the impact of bank accounts that allowed mobile deposits on savings behavior in Sri Lanka. Few account holders used the service frequently, even when offered for free. Mobile-linked accounts increased savings deposits with the partner bank and formal banks more generally but had no impact on total savings. Overall, these results imply that deposit transaction costs may not be a significant barrier to increasing savings, limiting the potential of mobile-linked savings products to expand financial inclusion.

## Policy issue

Evidence suggests simply reducing the cost of opening a bank account is not enough to encourage people to use it. One reason may be that costs associated with using the accounts, such as distance and time to the bank, remain high. For low-income savers, who often make small deposits, the time and costs of travelling to the bank may make using formal savings accounts impractical. Mobile-linked bank accounts—accounts that allow individuals to make deposits through their mobile phone—have the potential to reduce these costs, as there are many more mobile phone agents than bank branches. Can mobile-linked bank accounts increase access and usage of formal savings accounts?

## Context of the evaluation

Though bank account ownership is high in Sri Lanka (83 percent of people own a formal bank account), people often do not save in these accounts (31 percent of Sri Lankas saved in a formal account). Likewise, 88 percent of participants in this study owned a bank account, while only 12 percent reported using their account more than once a month. A previous study evaluating the impact of deposit collection services in Sri Lanka found that while there was demand for formal banking services, transaction

costs may be an important barrier to formal savings. This was also the case for participants in this study, as there was a negative relationship between how long it takes to go to the bank and how much people saved, both formally and overall. On average, participants spent 16 minutes travelling to the closest bank and 21 minutes making a deposit, with travel costs totaling 9 LKR (US$0.08 at the time of the evaluation).

While mobile phones are common in Sri Lanka, electronic financial services (e.g. ATMs) are much more limited. Though 89 percent of participants owned a mobile phone, only 19 percent had visited an ATM to withdraw funds in the previous year. Mobile phone agents are also more accessible than banks: 72 percent of participants were able to access a mobile phone agent within 200 m to add cellular minutes to their mobile phone, while only 44 percent lived within 2 km of a bank.

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## Details of the intervention

Researchers conducted a randomized evaluation to test the impact of mobile-linked bank accounts on savings behavior in Sri Lanka. Working with a large mobile phone operator and small software company in Sri Lanka, researchers developed a new savings product that would allow individuals to make deposits via mobile phone into a savings account with a large, government-owned partner bank. Customers could deposit funds into their bank account by purchasing mobile phone “scratch cards” through a similar process as adding cellular minutes. Scratch cards were available in multiple denomination, ranging from 50 LKR to 1,000 LKR (US$0.45 to US$9.09). Users dialed a number, entered the serial number on the scratch card, and deposited the amount on the card into a mobile wallet. They could then enter their security PIN and transfer money from the mobile wallet to the linked savings account.

Beginning in December 2011, researchers sent letters to 1,625 randomly selected individuals offering them mobile-linked accounts. Additionally, researchers randomized the fee charged to make deposits through the mobile phone: 0, 2, 4, or 8 percent. Individuals could accept the offer by visiting a partner bank branch during a designated time slot to open an account. The comparison group consisted of 381 individuals not offered any intervention.

Because the mobile operator launched the new product without advertisement or other promotions, researchers took additional steps to encourage the treatment group to take up and use the service. First, they worked with the mobile operator to train customer service representatives so that someone knowledgeable about the product was always available at the service call center. Second, they offered participants a basic phone and SIM card for free. Third, they helped participants open a savings account linked to the phone, including by covering the minimum balance of 500 LKR (US$ 4.55) required to open the account. Fourth, researchers also organized demonstrations on how to use the product at the customer's house, which included making two deposits of 50 LKR (US$ 0.45) into each individual's account. Finally, researchers held a prize lottery of 5,000 LKR (US$ 45.5) for two months in each municipality, with each deposit increasing the chances of winning.

To measure savings behavior, researchers conducted two baseline surveys in 2010 and three follow-up surveys each year from 2011 to 2013. They also conducted monthly surveys over 25 months for a sub-sample of respondents in the treatment and comparison groups, in addition to utilizing data from the mobile operator.

## Results and policy lessons

Few account holders used the mobile-deposit service frequently, even when offered for free. Mobile-linked accounts had no impact on total savings, despite increasing savings deposits with the partner bank and formal banks more generally. Overall, these results imply that deposit transaction costs may not be a significant barrier to increasing deposits and that mobile-linked savings products may have limited potential to expand financial inclusion.

*Many individuals opened a mobile-linked account, but few used it.* Most participants offered the account opened one (91 percent) and completed the demonstration (80 percent). Yet, few individuals used the mobile-linked bank accounts, even when deposits were free of charge. Of those offered free deposits, 26 percent made at least one deposit and only 7 percent made ten or more deposits. Surveys suggest that individuals understood the benefits of the mobile-deposit service but struggled learning how to make mobile transactions.

*Mobile-linked bank accounts increased savings in the partner bank and formal banks generally but had no impact on total savings.* Individuals offered mobile-linked deposits for free increased monthly savings deposits with the partner bank by 44 percent and in formal banks more generally by 13 to 29 percent. However, there was no increase in total savings; instead, mobile-linked accounts likely shifted savings towards the partner bank. Though the account did not impact other welfare outcomes like income or consumption, the shift towards formal savings may have had other benefits, like increased security and ease.

*Women, those living some distance from formal banks, and those already owning a mobile phone were more likely to use the mobile-linked accounts.* Across all deposit fee rates, women were on average 8 percentage points more likely to try the service and deposited 40 percent more through the mobile-deposit service compared to men. Women may have valued the service more than men because they saved smaller amounts and made deposits more frequently, in addition to their potentially limited mobility and control over financial resources. Likewise, those who lived an intermediate distance (2 to 5 km) from the nearest bank branch or who already owned a mobile phone both were more likely to use the service (9 and 7 percentage points increase, respectively) and deposited more through it (70 and 58 percent, respectively). There is some evidence that women and those living at intermediate distances from the bank also increased total savings.

*The price of mobile deposits had little impact on if people used the service.* Increasing the fee for mobile transactions had no impact on deposits into the account, formal savings, or total savings. For deposit fees at the lower levels, i.e. 2 and 4 percent, people used the service the same regardless of the increase in price. Charging an 8 percent deposit fee reduced deposits made via mobile

phone but had no effect on overall deposits in the partner bank. This suggests that at the higher fee, people were still interested in savings with the partner bank but avoided using the mobile-deposit service.

Taken together, these results suggest that deposit transaction costs are unlikely to be a major barrier to saving. Reducing deposit transaction costs further with mobile savings seems unlikely to increase saving, especially in contexts where well-developed and low-cost banking options already exist. However, behavioral constraints and withdrawal transaction costs may remain important barriers to saving and are areas for future research.

Based on these results, the implementing partners suspended the mobile-linked bank accounts after the evaluation. They did not see the usage rates as commercially viable to offer at a larger market-scale.