Can Mobile Money be Used to Promote Savings?
Evidence from Northern Ghana

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In the remote areas of sub-Saharan Africa, less than 20 percent of the population has access to any type of formal financial institution. Yet access to financial services is a key aspect of development, as credit and savings allow households to invest, save and respond to shocks. Households in such contexts typically share risk by self-insurance (savings), including “at home savings” (i.e., under a mattress), saving with collectors (i.e., susu) or “rotating savings clubs”. In addition to savings, rural households often use migration to urban areas as a means of diversifying household income. While these strategies are important risk-sharing mechanisms for rural households, they are also subject to risks, including theft (in the case of the mattress), restricted access at relevant times (in the case of the savings club), fees (to the susu collector) or high transaction costs (in the case of remittances).

Since 2005, a new technology—mobile money—has become available in over eighty countries worldwide. Mobile money (m-money) is a product that allows clients to use text messages to store value in an account accessible by the handset, convert cash in and out of the stored value account, and transfer value between users (Aker and Mbiti 2010). As compared with the traditional means of sending and receiving money within many developing countries, such as Western Union and MoneyGram, the postal service or delivery by friends or family, m-money substantially reduces the costs of transferring money.

M-money offers a new potential mechanism for increasing the financial inclusion of the world’s poor. First and foremost, since m-money can reduce the costs associated with money transfers, it can allow households to send or receive money when it is needed, thereby improving households’ ability to share risk (Jack and Suri 2013, Blumenstock, Eagle and Fafchamps 2012). Beyond money transfers, m-money could also be used to create a secure pseudo-savings account, where individuals can deposit smaller savings amounts for more immediate needs (Mas and Mayer 2012). As the “account” is password-protected, the m-money savings channel could offer greater security (as compared with savings under the mattress) while having increased access (as compared to the annual “share out” of savings clubs). In addition, m-money could encourage individuals to save for particular objectives.

This research seeks to understand whether and how m-money can promote financial inclusion of the world’s poor, particularly those living in rural areas. In particular, the purpose of this research is to address some of the potential barriers to m-money adoption and usage in Ghana, with a goal towards providing insights into whether m-money services could be used to: 1) provide cash transfers to extremely vulnerable populations; 2) facilitate savings within rural areas, either by allowing individual members of savings groups to save, facilitating savings among different savings or promoting savings objectives; or 3) allow households to receive remittances from migrants.

This location of this research is in northern Ghana, which was chosen for four primary reasons. First, despite a relatively stable economy and a number of formal financial institutions, there is still limited access to formal credit and savings institutions, particularly in rural areas. Second, there is a long history of informal savings in Ghana, either via susu collectors or through rotating village savings clubs.
Third, while mobile phone coverage is substantial in Ghana, m-money is a relatively recent phenomenon, although there are numerous m-money providers. And finally, households engage in a substantial amount of migration to diversify income sources and smooth risk.

There are several potential barriers to the adoption and usage of m-money in Ghana (CGAP 2011, Dzokoto and Mensah 2011). In an effort to build upon that earlier work, this study conducted “action-oriented research”, providing services designed to address some of the constraints to m-money adoption. Working with savings groups members in 12 rural villages in northern Ghana, we conducted several different interventions, including: 1) a mobile phone raffle for a subset of savings group members; 2) a sensitization campaign, including a video and posters on mobile money; and 3) a combination of the two. Each village received a visit from a mobile money operator. We then observed how individuals responded to these services in terms of their adoption and use of mobile money.

Overall, we found that rural populations’ interest in adopting m-money was extremely high. In the first phase of the research, all of the savings group members in our study registered for the product, which required attending a village meeting, providing a form of formal identification to register and waiting for the account to be activated. While the SIM cards were provided free of charge, the wait time was non-trivial: Individuals had to wait at least 2-3 hours for the registration process, and in some cases had to provide their ID cards to the m-money agent so that he could complete the registration in the nearby urban center, a wait time of 1-2 weeks.

Three months after the initial intervention, m-money usage increased to 26 percent of households, with 86 percent of users receiving money transfers and 70 percent of users saving on their mobile phone. Usage was relatively higher among individuals living in the villages where a mobile phone raffle was conducted (as compared with the sensitization campaign or both), and was highest among those who either had a mobile phone (before the intervention), who won a mobile phone in the raffle or who had attended school. Sensitization was primarily important for usage among those who had access to a mobile phone.
Usage of the product was affected by several factors: 1) there were significant delays in activating the m-money service, due to limited mobile phone coverage and the m-money agent’s ability (and willingness) to travel to rural areas; 2) the time frame between initial registration and the follow-up visits may not have been sufficient for individuals to start using the product, especially for savings; or 3) households’ might have had limited demand for using service after registering, either due to difficulty in using the service or lack of trust in its viability. According to the qualitative data collected, respondents stated that the delays in registration were the primary reason that they had not used the service by the time of our visits.

Given the small sample size and limited time frame of this intervention, none of the observed differences between the different treatments can be interpreted as causal, and we cannot use these results to predict whether similar outcomes would be observed in other rural contexts. Nevertheless, this research suggests that a subset of poor rural households may demand mobile money, primarily for money transfers, which can help households to cope with agricultural and health shocks, such as drought, illness and death, and as a commitment savings device. Perhaps most importantly, these results suggest that overcoming the barriers to m-money adoption may be quite simple and cost-effective. Additional research is required in a larger number of villages, and with greater collaboration with mobile phone operators, to further explore these results.