Researchers
Russell Toth
University of Sydney

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2019-2021

Sample Size
5,400 Mobile Money Agents

Research Implemented by IPA
Yes

The Impacts of Liquidity Loans to Mobile Money Agents on Business, Household, and Women’s Empowerment Outcomes

IN THIS IMAGE Women making a mobile payment at a local vegetable market in Bagan, Myanmar. © 2019 silentwings_M_Ghosh / Shutterstock.com

Abstract

What's the impact of digital credit on micro, small and medium enterprises? Are there differential effects on enterprises owned by women? If so, why? To help answer these questions, researchers studied the effect of a liquidity loan available to mobile mobile agents (the majority of whom were women) on agents' business and transaction behaviors, household welfare outcomes, differential effects between male and female agents, and their potential role in promoting women's economic empowerment among their customers and community.

Policy Issue

Across developing and advanced economies alike, low-income households need effective and affordable tools to save and borrow money, make and receive payments, and manage risk. In recent years, access to financial services has increased thanks to the expansion of digital finance and the efforts of service providers and governments to reach the unbanked. Digital financial services offer several benefits to clients and society alike, including cost savings through economies of scale and speed, transparency and security, and inclusive growth through enhanced financial inclusion.[1]

Despite significant research around optimal design of digital financial services (DFS) for clients in developing markets, such as mobile money wallets and digital credit products, there is a lack of rigorous empirical work on the financial management of the mobile money agent networks that deliver these services to users. Even the best-designed services will fall short if agents at the local level lack sufficiently flexible and effective ways to manage their cash flow (their “float”) to meet their clients’ liquidity needs. Indeed, there is evidence that liquidity challenges, and transaction costs of rebalancing float and cash, are significant,[2] which can hamper the user experience, as agents may be unable to process transactions for their clients.

In addition to the role that mobile money agents play in attending to their clients through effective cash flow management, the agents themselves can also play a role in advancing economic empowerment. For example, agents could deliberately manage floats to accommodate the needs of certain users, due to factors such as seasonality, unexpected shocks, etc. However, the literature on women’s financial empowerment through digital financial services largely focuses on the individual and household level, and leaves many understudied questions by overlooking the potential role that female agents can play in financial inclusion.

Context of the Evaluation

In recent years, Myanmar has experienced one of the fastest scale-ups of mobile money in the developing world. A massive telecom expansion in 2015 allowed the country to leapfrog to widespread, low-cost internet access on smartphones, with mobile money providers quickly scaling in tandem with connectivity growth. One of the largest mobile money providers in the country, has agents in more than 295 out of 330 townships, is used by nearly 38 percent of the population, and manages a capital volume equivalent to close to 11.5 percent of Myanmar’s GDP. As of July 2020, the provider managed more than 57,000 agents (typically micro and small business owners) across urban and rural areas, 80 percent of whom are female.

In November 2018, in partnership with a leading commercial bank, the mobile money provider made the bank’s existing value chain digital loan product available to the company’s agents to help them better manage their liquidity and cash flow needs. This innovative loan product uses agents’ previous transaction volumes to assess whether they qualify for a liquidity loan, and then instantly provides a loan offer for qualifying agents based on a formula. There are no requirements regarding how agents make use of the product, and they can exercise significant autonomy in administering the loan. Given that the large majority of agents operate micro, small, and medium enterprises such as grocery stores, hair salons, pharmacies, and mobile phone shops in addition to their mobile money business, there is significant scope for the loans to relieve credit constraints to investment beyond mobile money. The loans range in size from 100,000 Myanmar kyat (about 75 USD) to 10 million Myanmar kyat (about 7,500 USD), with average loan size around 2.5 million Myanmar kyat (about 2,000 USD), so the loans are of interest to a range of MSMEs.

The introduction of this innovative loan product to the mobile money provider's agent network presents a unique opportunity to understand the effect of additional liquidity in an agent's financial management, the broader impacts of access to finance on MSMEs, and the role, if any, that female agents play in promoting female economic empowerment.

Details of the Intervention

This study uses two variations in an observational setting to study the impacts of the loan product on mobile money activity, business investment and outcomes, household outcomes, and women's economic empowerment. These variations (natural experiments) are based on policy changes and notches in the design and modification of the loan product.

The first setting leverages a change in the generosity of the product, as an agent's first loan offer was doubled about 7 months after the product was initially offered. The researchers compare agents with similar mobile money transaction volumes who engaged in loans just before and just after this unexpected policy change.

Second, the researchers leverage a regression discontinuity design (RDD) to estimate the impact of the loan product. The bank utilizes a standard cutoff score to determine loan eligibility. Researchers utilized the cut-off to compare outcomes across two groups: agents who were eligible for the loan and a comparison group of agents who were very close to, but below, the cut-off that did not receive a loan.

In addition to direct effects on all mobile money agents, the researchers study differences between male and female agents, as about half of loan recipients in the sample are women. Researchers are studying a range of outcomes, from differences in impacts on mobile money, broader business investment and performance, to how agents leverage liquidity to meet broader needs in their community, and whether it might empower women within their households.

To measure impacts, researchers use administrative data from the bank and mobile money provider on all of the agents, on the agents' mobile money activity, as well as data from a phone-based survey of 5,400 agents to assess additional business, household, and women's empowerment outcomes. The team also complemented administrative and phone data with qualitative focus groups and in-person surveys with 200 participants. The team used leading guidance on measuring female empowerment to assess the above outcomes.

Results and Policy Lessons

Forthcoming

Sources

1. Better than Cash Alliance. (2020). Why Digital Payments? Retrieved October 20, 2020 from https://www.betterthancash.org/why-digital-payments

2. Jumah, 2015; Francis et al, 2017; Unnikrishnan et al, 2019

3. Glennerster, R., Walsh, C., & Diaz-Martin, L. (2018). A Practical Guide to Measuring Women's and Girls' Empowerment in Impact Evaluations. Retrieved October 20, 2020, from https://www.povertyactionlab.org/practical-guide-measuring-womens-and-girls-empowerment-impact-evaluations

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