Digital Credit Observatory (DCO) Results Brief

Access to Digital Credit and Its Spillover Effects in China

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Country: China

Policy Issue

In 2016, several Internet companies in China announced their intentions to offer digital credit in rural areas. Digital credit has the potential to decrease operational costs and in turn, interest rates, by automating routine operation and exploiting existing digital records. The Chinese companies promised an annual interest rate of around 9%, significantly lower than the Asian median (21%)[1]. Because digital credit is a relatively recent invention, there is very limited research evaluating its impacts on consumers.

Study Summary

This pilot study aimed to work with an anonymous company in China to evaluate the impacts of their new digital loan product on credit-constrained households in rural areas.

Unfortunately, one month after the product launch, the company suspended their digital credit program indefinitely; a new regulation from the China Banking Regulatory Commission greatly limited the scope of services that a financial technology company without a commercial banking license could provide. Due to the indefinite suspension of the company's digital credit product (and lackluster demand), the research team shifted their research design to study a separate husbandry loan product that could only be used to buy animal feed.

Wang helps a family shovel wheat seed while discussing their business.

For this loan, households requested a certain amount of animal feed and the company determined if the request was reasonable with a statistical model. If the request was deemed reasonable, the system automatically disbursed the money within 30 minutes. If the request deviated from the company's estimation of a reasonable request, the system suspended the transaction and assigned an agent to verify the transaction.

During summer 2017, PhD student Zenan Wang visited chicken and duck farms in Shandong and Hebei provinces in order to conduct qualitative interviews with husbandry loan recipients and observe their businesses.

[1] Rosenberg et al., 2013

Takeaways

In these qualitative interviews, the researchers found that:

Recipients liked the husbandry loan product

The recipients of the husbandry loan expressed satisfaction with the loan. They liked that it was easy to withdraw funds and that the loan had a lower interest rate than local commercial banks.

The recipients did not like all of the loan's features, however

Rural households in Sihong find it difficult to access national bank loans but are able to borrow from local commercial banks. However, local banks have higher interest rates than their national counterparts. While this company's loan product offered a lower interest rate than the local commercial banks, it struggled to compete in other aspects that are relevant to consider when designing future products.

- The online application for the loan product was daunting compared to the familiar local banks' loan applications.
- Risk management model used to automate loan decisions was very conservative; loan recipients complained that the awarded loan-size was much smaller than what they requested and also smaller than what local banks would have offered.

Lessons about loan design

- **Withdrawal limit** – The loan did not disburse all at once, but instead in smaller amounts at the recipients' request. This withdrawal limit imposed by the company may serve as a commitment device for borrowers to better manage their farm. The convenience of receiving frequent small loans, if combined with smart contract design, could lead to an improvement for both borrowers and lenders.

- **Fraud detection tools** – Adding fraud detection tools can help reduce the risk the company faces, therefore enabling a more competitive interest rate. For borrowers, this will mean lower interest rates.

Policy Relevance & Implications

The suspension of the digital loan product hindered the research team's ability to evaluate the impacts of the product on credit-constrained households in rural China. However, understanding the constraints which keep households from applying to loans can assist in the design of new policies aimed at improving loan take-up rates for the credit-constrained. Findings from this study also have the potential to effect discussions with Chinese commercial banks interested in designing a loan product with a commitment contract and small and frequent disbursements.