

**Authors**

Xavier Giné  
World Bank

Jessica Goldberg  
University of Maryland

Dean Yang  
University of Michigan

IPA CASE STUDY | LEARNING SERIES

## Fingerprinting in Malawi: The Challenges of Scaling Up a Complicated Technological Solution in a Resource-Constrained Setting



Convincing lending institutions to provide credit to the poor can be a challenge given that poorer clients often have limited to no credit histories and are therefore deemed high risk. A pilot study in Malawi showed that using fingerprints as unique IDs to track credit histories increased repayment behavior of microfinance borrowers, holding promise as a way to help more poor borrowers access credit. With support from USAID's [Development Innovation Ventures](#), researchers collaborated with lenders and a centralized credit data repository in Malawi to evaluate the impact of this approach prior to its transition to scale. The implementation of the scale-up faced many challenges and researchers saw relatively low adoption of fingerprint identification by local microfinance institutions. These results highlight the challenge of scaling up a complicated technology in a resource-constrained setting, and the broader importance of evaluating interventions beyond the pilot scale before expanding them to reach larger populations.



### The Challenge

Credit enables small-scale farmers and business owners in developing countries to finance crucial inputs such as fertilizer, improved seeds, and business assets, but in Sub-Saharan Africa, fewer than a quarter of adults have access to formal financial services<sup>1</sup>. Formal lenders may be discouraged from lending to the rural poor due to difficulties in ensuring repayment from borrowers who lack adequate collateral or verifiable credit histories. Obtaining reliable information on individual credit histories can be difficult in countries without unique identification systems, like social security numbers or government-issued photo identification. Borrowers can avoid sanctions for past default by simply applying for new loans under different names

or from different institutions. When lenders are unable to sanction unreliable borrowers or reward reliable borrowers, they respond by limiting the supply of credit, which may hurt poor borrowers.

Malawi is a country facing this challenge, as few rural households have access to credit for business and agriculture. According to the International Monetary Fund only 11.7 percent of the population has access to loans and among these loans only 40.3 percent were from formal lenders<sup>2</sup>. In the *World Bank's Doing Business Report*, which ranks countries on the ease of starting and operating a local business, Malawi ranked 109 out of 129 countries in terms of the supply of private credit.

<sup>1</sup> Demographic, ARI, and Labor Report: Measuring financial inclusion. The global findex database. The World Bank, 2013.  
<sup>2</sup> International Monetary Fund, 2010, "Malawi: Selected Indicators" IMF Staff Country Reports 10/240, 5. <http://pubs.imf.org/10.5089/978101322766002>.

<b>RESEARCHERS</b> Xavier Giné (World Bank), Jessica Goldberg (University of Maryland), Dean Yang (University of Michigan)	<b>TIMELINE</b> 2014-2016
<b>SECTOR</b> Financial Inclusion	<b>PARTNERS</b> Development Innovation Ventures (DIV) at USAID, Malawi Microfinance Network, Credit Data Malawi, and CIB Africa
<b>TOPICS</b> Access to Finance	<b>IPA STAFF</b> Thomas Marshall, James Muenzi, Carly Conner
<b>COUNTRY</b> Malawi	

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