Is Mobile Money Changing Rural Africa?
Evidence from a Field Experiment*

Cátia Batista† and Pedro C. Vicente‡
December 2018

Please click here for the most recent version of the paper.

Abstract

What is the economic impact of newly introducing mobile money in rural areas underserved by financial services? This study is the first to use a randomized control trial to answer this research question. Using a sample of rural communities in Southern Mozambique, our experimental results show that the availability of mobile money translated into a clear adoption of these services, measured through administrative data on mobile money transactions. We find that introducing mobile money smoothed consumption of treated households in rural areas by making them less vulnerable to adverse weather and self-reported shocks, but we also measure reduced investment, especially in agriculture. We observe increases in the number of migrants in a household and in the migrant remittances received by rural households particularly in presence of adverse shocks, while no clear effects on savings are discernible. We interpret these results as evidence that, by drastically reducing the transaction costs associated with migrant remittances, mobile money acted as a facilitator of migration from rural to urban areas.

JEL Classifications: O12, O16, O33, F24, G20, R23.

Keywords: mobile money, technology adoption, insurance, consumption smoothing, investment, remittances, savings, migration, Mozambique, Africa.

* We wish to thank Simone Bertoli, Joshua Blumenstock, Taryn Dinkelman, Christian Dustmann, Xavier Giné, Joe Kaboski, Billy Jack, Isaac Mbiti, Pedro Pita Barros, Imran Rasul, Alessandro Tarozzi, Lore Vandewalle, Kate Viborgy, Dean Yang, Chris Woodruff, Andrew Zeitlin, and Jon Zinman for helpful suggestions. We are particularly indebted to Nadean Szafman, Abubacar Chutumia, and their team at Carteira Móvel for a fruitful collaboration. We are grateful to our main field supervisor Inês Vilela for her outstanding work and dedication to the project. We would also like to thank Matilde Grácio, Stefan Leeffers, and Julia Seither for excellent field coordination, and to the many other people who made this project happen in the field. We thank comments made on earlier versions of the paper by participants at the AEA Meetings, North American Winter Meetings of the Econometric Society, Barcelona GSE Summer Forum, IPA Researcher Gathering on Financial Inclusion, IZA GLM-LIC Conferences at Oxford University, the World Bank, and University of Michigan, NEUDC, NOVAFRICA/Bank of Mozambique/International Growth Center Workshop on Mobile Money (Maputo), as well as in seminars at Autonoma Barcelona, Carlos III, CERDI, East Anglia, Georgetown, Louvain, Notre Dame, Paris I – Sorbonne, Navarra, World Bank Research Department, and NOVAFRICA for useful comments. We wish to gratefully acknowledge financial support from the UKAid-funded IGC, the Portuguse Fundação para a Ciência e Tecnologia (Grants PTDC/IIM-ECO/4649/2012 and UID/ECO/00124/2013), the UKAid/IZA GLM-LIC program, and NOVAFRICA at the Nova School of Business and Economics. All remaining errors are the sole responsibility of the authors.

† Nova School of Business and Economics - Universidade Nova de Lisboa, CREAM, IZA and NOVAFRICA. Email: catia.batista@novasbe.pt.
‡ Nova School of Business and Economics - Universidade Nova de Lisboa, BREAD, and NOVAFRICA. Email: pedro.vicente@novasbe.pt.