

Cash and Compliance with Social Distancing in Ghana

Researchers: Dean Karlan Matt Lowe Robert Osei Isaac Osei-Akoto **Benjamin Roth** Christopher Udry Sector(s): Social Protection, Finance, Health Fieldwork: Innovations for Poverty Action (IPA) Location: Ghana Sample: 1,508 low-income households Initiative(s): Digital Identification and Finance Initiative in Africa (DigiFI Africa) Target group: Rural population Urban population Adults Families and households Outcome of interest: Communicable diseases Take-up of program/social service/healthy behavior Intervention type: COVID-19 response Unconditional cash transfers AEA RCT registration number: AEARCTR-0005861 Research Papers: Social Protection and Social Distancing During the Pandemic: Mobile Money Trans... Partner organization(s): United Kingdom Foreign, Commonwealth & Development Office, International Growth Center (IGC)

As coronavirus spreads in developing countries, an important question is how to improve the resilience of poor households to its economic ramifications, and facilitate their adherence to calls for social distancing. From this perspective, researchers aim to understand the role that digital cash transfers can play as a policy tool both to increase household resilience during the pandemic and to stem the spread of the disease by increasing adherence to social distancing in Ghana.

Policy issue

During the Covid-19 pandemic, many people experienced economic shocks–especially those working in informal sectors. To respond to heightened needs, governments in low- and/or middle-income countries had to design social protection programs within existing financial and institutional constraints while also promoting public health through social distancing.

Cash transfers through mobile money accounts can be a useful tool in crises given they are low-cost, rapid, and require minimal social interaction. While a common fear is that providing cash transfers causes people to work less, some evidence suggests that cash transfers may have no effect on productivity and may even cause people to be more productive¹, ^{,2}. However, during a pandemic or epidemic, enabling people to reduce work could help them avoid spreading illness. Can cash transfers increase social distancing? Furthermore, can they improve well-being outcomes like food security? This unique context requires further research on the effects of mobile money transfers, especially for vulnerable households in low-income countries, to inform future

Context of the evaluation

As was the case in many countries, once the first Covid cases were confirmed in Ghana, economic and social disruption affected large portions of the population. A large-sample, representative survey deployed after the onset of the pandemic in Ghana found that 84 percent of respondents reported a drop in income, 33 percent a drop in employment, 30 percent reduced access to markets, and 52 percent missing or reduced meals³. The Government of Ghana has used mobile money for social protection since before the pandemic. A national program, called the Livelihood Empowerment Against Poverty (LEAP) program, targets cash transfers to low-income and vulnerable households. The amount provided is usually less than ten percent of median food expenditure in low-income households. However, the scale of economic hardship as a result of the pandemic affected a broader population. Female-headed households, who made up 34.8 percent of the population of Ghana in 2019 by World Bank estimates, may have faced heightened vulnerability during the crisis⁴.

Pre-pandemic, in 2018, the population in this study spent on average GHS 132.17 (US\$27.72 in 2018) on food per person per month⁵. The level of psychological distress measured by the Kessler Psychological Distress Scale (which asks questions related to anxiety and depressive disorders⁶) averaged 10.31 on a scale from 0-30, where a higher score indicates a higher likelihood of psychological distress.



Photo Credit: Delali Adogla-Bessa / Shutterstock.com

Details of the intervention

Researchers partnered with Innovations for Poverty Action Ghana to conduct a randomized evaluation to test the impact of cash transfers on social distancing, income, and food security. The participants came from the bottom half of the income distribution using the Ghana Socioeconomic Panel Survey, which is nationally representative.

Researchers randomly assigned 1,508 households to one of two groups:

- 1. *Mobile Money Transfers* (771 households): Households in this group received eight mobile money transfers of GHS 90 (US\$15.40 in 2020) approximately every twenty days.
- 2. Comparison (737 households): Households in this group received one mobile money transfer of GHS 90 (US\$15.40 in 2020).

All transfers were calculated to be approximately 65 percent of each household's weekly food expenditure, as reported in the baseline survey. The transfers were unconditional, though households were told that transfers were to help cope with the economic impacts of Covid-19, and transfers were accompanied by messages about pandemic safety. At the end of the baseline survey conducted via phone in May to June 2020, households were informed of their assignment to the intervention or comparison group. After the baseline survey, the intervention group was informed they would receive more mobile money transfers at a rate of one per week. However, due to logistical constraints, these transfers were made anywhere from seven days to two months apart, and the period of transfers extended from June 2020 to January 2021.

The second survey—which occurred after notifying intervention households whether they would be receiving more transfers—allowed researchers to measure "anticipation effects," or how households adjust expenditures based on anticipation of future transfers.

Over the eight-month period that transfers were made to intervention households, the researchers measured the immediate effects of the cash grants through four surveys with both intervention and comparison groups. Then, seven to eight months after the final transfer, a final follow-up survey was conducted to examine how effects of these transfers persisted over time. These surveys gathered self-reported measures of income, work patterns, social distancing, expenditures, and psychological well-being.

Results and policy lessons

Overall, mobile money transfers increased food security and enabled households to social distance more without losing ground on economic well-being during the Covid-19 pandemic. Households in the intervention group spent more on food than comparison households, particularly female-headed households. Social distancing increased in intervention households as well, largely driven by staying at home, rather than decreasing work. The results also showed that anticipation of future transfers did not cause households to increase spending.

Income and Labor Supply: Households that received transfers (excluding one round of transfers that was delayed by two months) increased income by 66 percent or GHS 47 (US\$8.14 in 2020) compared on average to households that did not. When including the round of transfers delayed by two months, the effect is not statistically significant. Households' working hours did not change, and they did not switch to in-home work, with the exception of microentrepreneurs, who switched some of their out-of-home work to in-home work.

Social Distancing: By increasing the number of days they stayed home, intervention households were able to social distance .08 standard deviations more than comparison households. However, since intervention households also did not significantly change working hours or how much they worked from home, how did households increase days spent at home? Researchers postulate that they attended fewer informal social gatherings outside of the home.

Expenditure: Intervention households spent, on average, 8 percent more per week than the comparison group, or GHS 12.2 (US\$2.09 in 2020). Further, they spent more than 40 percent of these transfers on food. These results may be an underestimate, as surveys were delayed to roughly 20-40 days after the transfer and households may have spent more immediately after the

transfer. No effect on non-food expenditure was found. In the long run, as measured by the final survey, these effects on spending habits did not persist. Female-headed households increased spending on food more than other treatment households. *Psychological Well-being and Beliefs:* Psychological well-being and religious practices did not change due to the transfers. Impact on religious practices was also measured and no change was detected.

In conclusion, for governments preparing a rapid response to public health emergencies, mobile money transfers may offer support for food security and expenditure to households while enabling them to social distance more during the transfer program.

Banerjee, Abhijit V., Rema Hanna, Gabriel E. Kreindler, Benjamin A. Olken, 2017. "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs." The World Bank Research Observer 32, no. 2 (August): 155–184. doi: https://doi.org/10.1093/wbro/lkx002.

Banerjee, Abhijit V., Dean Karlan, Hannah Trachtman, and Christopher R. Udry. "Does Poverty Change Labor Supply? Evidence from Multiple Income Effects and 115,579 Bags." Working Paper, June 2020.

Karlan, Dean, Matt Lowe, Robert Darko Osei, Isaac Osei-Akoto, Benjamin N. Roth, and Christopher R. Udry. "Social Protection and Social Distancing During the Pandemic: Mobile Money Transfers in Ghana." Working Paper, July 2022.

Egger, Dennis, Edward Miguel, Shana S Warren, Ashish Shenoy, Elliott Collins, Dean Karlan, Doug Parkerson, et al. 2021. "Falling living standards during the COVID-19 crisis: Quantitative evidence from nine developing countries." Science Advances 7, No. 6. doi: https://doi.org/10.1126/sciadv.abe0997.

"Ghana Socioeconomic Panel Survey 2018-2019, Wave 3." Institute of Statistical, Social and Economic Research. Last modified August 15, 2022. https://datafirst.uct.ac.za/dataportal/index.php/catalog/885/datadictionary/F85?file_name=11a_foodconsumption_give.

World Bank. n.d. "Female headed households (% of households with a female head) - Ghana." Accessed August 10, 2023. https://data.worldbank.org/indicator/SP.HOU.FEMA.ZS?locations=GH.

Yiengprugsawan, Vasoontara, Matthew Kelly, Benjawan Tawatsupa. 2014. "Kessler Psychological Distress Scale." In Encyclopedia of Quality of Life and Well-Being Research, edited by Alex C. Michalos, 3469–3470. Dordrecht: Springer. doi: https://doi.org/10.1007/978-94-007-0753-5_3663.

1. Banerjee, Abhijit V., Rema Hanna, Gabriel E. Kreindler, Benjamin A. Olken. 2017. "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs." The World Bank Research Observer 32, no. 2 (August): 155–184. doi: https://doi.org/10.1093/wbro/lkx002.

2. Banerjee, Abhijit V., Dean Karlan, Hannah Trachtman, and Christopher R. Udry. "Does Poverty Change Labor Supply? Evidence from Multiple Income Effects and 115,579 Bags." Working Paper, June 2020.

3. Dennis Egger, Edward Miguel, Shana S. Warren, Ashish Shenoy, Elliott Collins, Dean Karlan, Doug Parkerson, et al. 2021. "Falling living standards during the COVID-19 crisis: Quantitative evidence from nine developing countries." Science Advances 7, No. 6. doi:10.1126/sciadv.abe0997.

4. World Bank. n.d. "Female headed households (% of households with a female head) - Ghana." Accessed August 10, 2023. https://data.worldbank.org/indicator/SP.HOU.FEMA.ZS?locations=GH.

5. "Ghana Socioeconomic Panel Survey 2018-2019, Wave 3." Institute of Statistical, Social and Economic Research. Last modified August 15, 2022. https://datafirst.uct.ac.za/dataportal/index.php/catalog/885/datadictionary/F85?file_name=11a_foodconsumption_give. 6. Yiengprugsawan, Vasoontara, Matthew Kelly, Benjawan Tawatsupa. 2014. "Kessler Psychological Distress Scale." In *Encyclopedia of Quality of Life and Well-Being Research*, edited by Alex C. Michalos, 3469–3470. Dordrecht: Springer. doi: https://doi.org/10.1007/978-94-007-0753-5_3663.