Remitting Against Poverty: Eight-year Evidence on Digital Remittances and Rural Poverty

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Motivation

- Migration has re-shaped low- and middle-income economies as workers move to seek higher pay, often moving from villages to cities
- Like microfinance and "graduation" programs, the migration & remittance strategy can bring large sums into poor rural areas
- Migrants and their families can thus potentially benefit from cheap and safe ways to send money home, and mobile money has become a leading approach (Suri and Jack, 2016)

Key Research Question

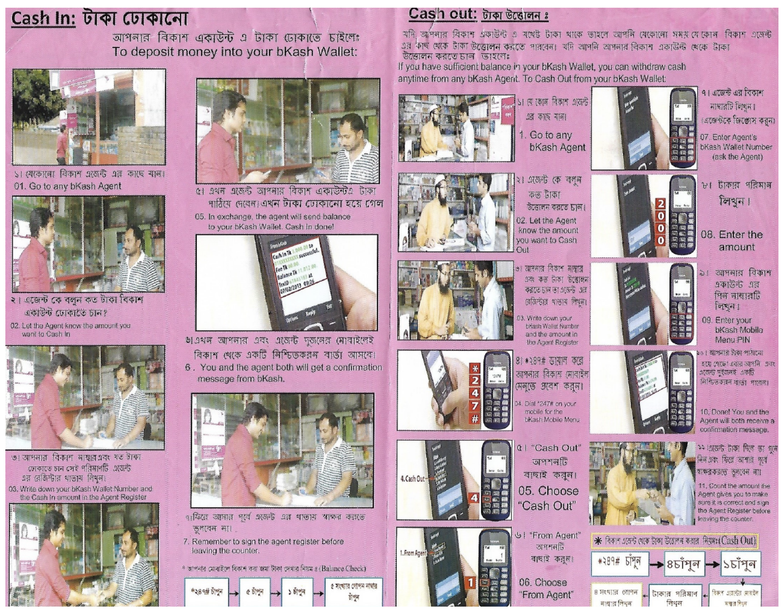
What are the long-run impacts of mobile money for urban migrants and rural households?

Contribution to Literature on Impact of Mobile Money

- Evidence from Mozambique (Batista and Vicente 2020, 2025), Tanzania (Riley, 2018), Kenya (Jack and Suri 2014, Suri and Jack 2016), Uganda (Munyegera and Matsumoto, 2016)
- **Randomized control trial** connecting migration, remittances via mobile banking, and poverty reduction
- **8-year impacts** for both rural households and urban migrants

Context and Intervention

- 815 rural household-urban migrant pairs in the Rangpur Division in Northwest Bangladesh and Dhaka
- The intervention aimed to reduce the main barriers to adoption of mobile banking (bKash)
- We randomly selected half of a sample of migrant families to receive a **30- to 45-minute session on how to sign up for and use the mobile money service**
- Covered basic steps and protocols of bKash use, provided practical, hands-on experience, sending transfers at least five times to establish a degree of comfort

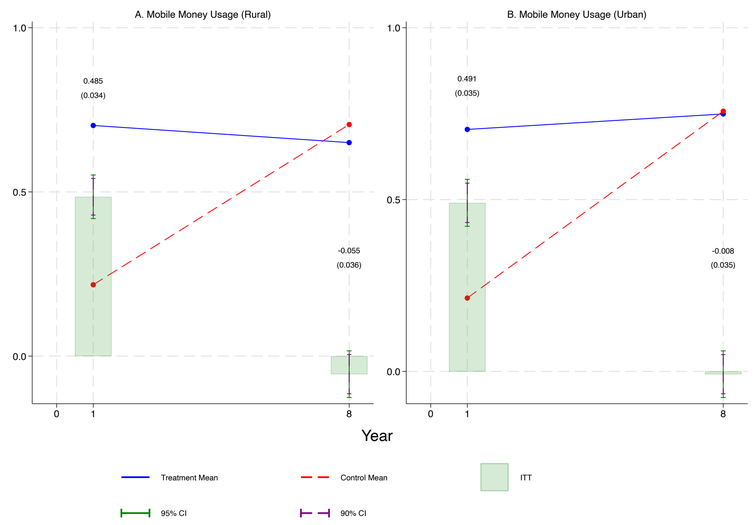


Data

- 8-year follow-up survey conducted from July-September 2023
- Re-surveyed 82% of baseline rural sample and 77% of baseline migrant sample
- **Follow-up rates compare favorably with long-run follow ups** of the deworming intervention in Kenya conducted by Baird et al. (2016) & graduation intervention studied by Balboni et al. (2022)
- Conducted a short phone resurvey of the rural sample in May 2024 to understand housing conditions

First Stage

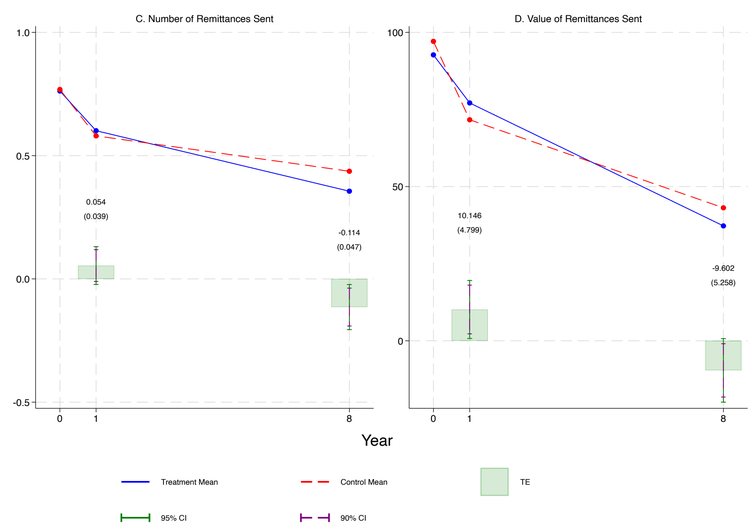
Control group caught up in mobile money usage eight years later. The intervention generated large short-term effects: by year 1, mobile money usage increased by 48.5 pp in rural areas and 49.1 pp in urban areas. By year 8, however, usage rates in the control group equaled those in the treatment group: 71% vs 65% rural and 76% vs 75% urban (differences not statistically significant).



The differential gap in Year 1 usage completely closed as the control group started to use mobile money on their own over the subsequent seven years.

Remittances

The gap in remittances closed eight years later. Both the treatment and control groups experienced declines in remittances from baseline (0.77 remittances per month worth $97 in 2015 PPP), but the control group declined less.



By year 8, migrants in the control group sent 0.44 remittances per month compared to 0.36 for treatment ($p<0.05$), with corresponding values of $43 vs $37 (2015 PPP, $p<0.1$). Notably, return migration and controlling for multiple migrants within a household do not explain the differential decline in remittances between treatment and control.

Gains from Early Adoption: Rural Asset Accumulation

Treatment households accumulated significantly more assets eight years later. The asset index increased by 0.247 SD at year 8 ($p=0.1$), driven entirely by productive assets, specifically land value.

Productive assets increased by 33%. Treatment households accumulated $2,794 more in productive asset value ($p<0.05$, 2015 PPP), representing a 33% increase relative to the control mean of $8,444. Land values increased by $3,142 ($p<0.10$), an 18.5% increase. We did not find any treatment effect on non-productive assets.

	(1) Non-Productive Asset Value	(2) Productive Asset Value	(3) Land Value
bKash Treatment	592	2,794**	3,142*
	(865)	(1,299)	(1,738)
Control Mean	9,639	8,444	16,972
Observations	662	662	662

Housing Improvements

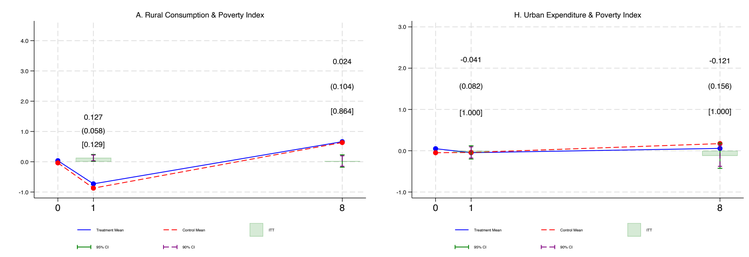
Treatment households upgraded housing quality. By year 8, treatment households were 7.8 percentage points more likely to live in brick houses ($p<0.10$), a 13% increase relative to the control mean of 62%.

	(1) Brick House	(2) Pukka Toilet	(3) No. of Rooms
bKash Treatment	0.0783*	0.0112	0.00766
	(0.0406)	(0.0419)	(0.0852)
Control Mean	0.62	0.59	2.22
Observations	542	542	542

No significant effects were observed on toilet quality (pukka toilets) or the number of rooms. Housing data from May 2024 phone resurvey (n=542, 82% of long-run follow-up sample).

Consumption & Poverty: Fading Effects

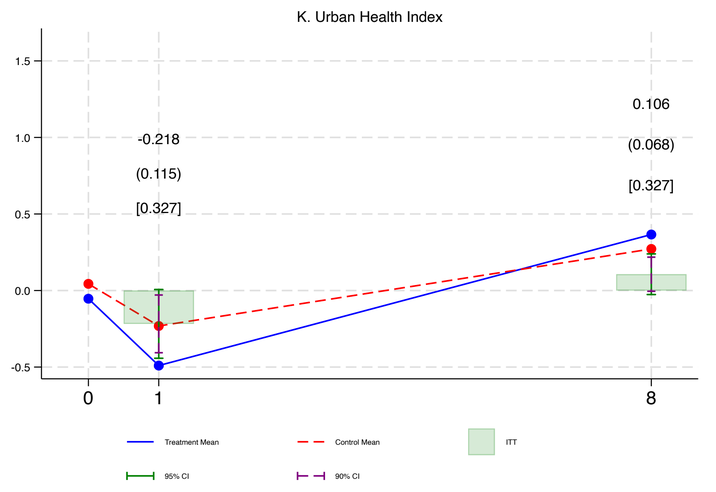
Rural: Short-run gains were no longer detectable eight years later. The year 1 improvements in consumption and poverty (0.127 SD, $p<0.05$) were no longer seen by year 8 (0.024 SD, q-value=0.864).



Urban: No treatment effects detected. Migrant expenditure and poverty showed no significant treatment effects at year 1 or year 8.

Migrant Health: Negative Effects Faded

Initial health costs for migrants were no longer seen eight years later. At year 1, the treatment showed a negative effect on migrant health (-0.218 SD, q-value=0.327), reflecting the strain of increased remitting. By year 8, this effect reversed to a small positive 0.106 SD (q-value=0.327).



The year 8 null effect suggests that as remittances declined and adoption became universal, the financial and psychological burden on migrants eased. The early health costs of facilitating remittances did not persist over the long-run.

Discussion

- The control group catch-up led to a fade-out of some effects observed in the short-run. By year 8, 71% of control households had adopted mobile money on their own. This catch-up closed the gap in treatment effects on remittances, consumption, poverty, and migrant health - mirroring the "fading effects" found by Barker et al. (2024) in Ethiopia's graduation program.
- **Yet, we observe an accumulation of productive assets.** Treatment households maintained a 33% advantage in productive assets ($2,794, $p<0.05$), yielding a **benefit-cost ratio of 85:1** from the initial intervention.
- **Policy implication:** Extending mobile money access in low-income migrant communities can generate substantial long-run returns relative to modest initial investments, even when control groups eventually adopt.
- To determine how far results can be generalized, ongoing work to replicate the original intervention is taking place in six new sites in India, Bangladesh and Pakistan, following a methodology for site selection developed in Gechter et al. (2024).

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