Pay Me Later:
A Simple Strategy for Helping People Save Money

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People often want to get paid later

- Developing-country farmers actually take price cuts to receive pay in delayed lump sums (Casaburi and Macchiavello 2019)
- In rich countries, millions of people intentionally overwithhold their taxes (Thaler 1994; Neumark 1995; Fennell 2006; Jones 2012)

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- On its face, this choice is confusing
  - If there are no storage costs or behavioral constraints, people should always want money *sooner*

Deferred payments do have benefits, especially in developing world

- Generate lump sums that poor people need (Collins et al. 2009)
  - Many important investments are indivisible: school fees, physical assets, subsidized agricultural inputs
- Safe storage of money (Dupas et al. 2014; Karlan et al. 2014)
  - Formal banking is inaccessible & low-quality
  - Informal methods are risky
- Help address self-control problems (Laibson 1997; Ashraf et al. 2006; Bryan et al. 2010

Saving money is hard in developing countries

For example, in a sample of workers we studied in Malawi:

- 29 percent reports having lost money from savings **in the past month**
  - 3 percent due to floods
  - 8 percent due to theft
  - 21 percent due to losing money being held on their person
- People lost an average of MK4544, or about 2/3 of weekly income
  - 16 percent of overall income for the month
  - Among those who lost money, lost an average of two weeks' earnings

A possible solution to these challenges: *Pay Me Later*

- Savings scheme lets workers defer part of their wages over the course of 6 biweekly paydays (3 months)
- Lump sum payout of savings at 7th payday
- Workers choose:
  - Minimum income at payday
  - Maximum amount to be deducted
- "Emergency exit" option
- Piggybacks on existing payment infrastructure
  - All deductions handled through firm's payroll system
  - Payments are in cash through standard payday procedure

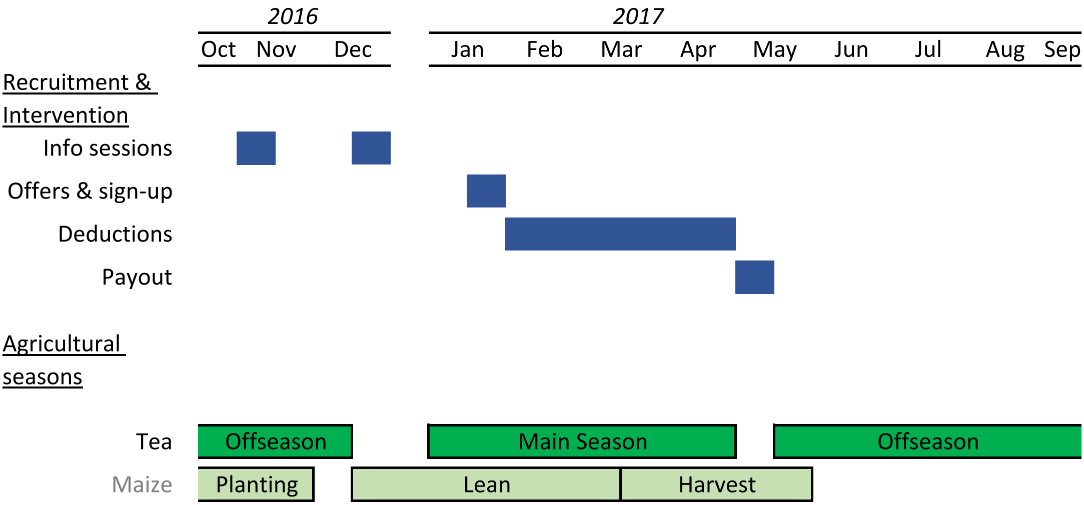
We studied this savings scheme at the Lujeri Tea Estate

- Sample is all workers at the tea estate, which is in Southern Malawi
  - 38 percent of workers are female
  - Average age is 38 years
- 79 percent of the sample are piece-rate workers; remainder receive fixed daily wage
- Average daily income during main season: $\approx$ \$1.55
- Seasonal variation in wages, esp. for piece rate workers
- Payday occurs every two weeks
- At baseline 7 percent save at a bank, 83 percent are in a ROSCA

Experimental design

- Initial sample is all permanent full-time employees at the firm
- Info sessions to explain product and determine who is interested
- Baseline survey with interested workers
- Return to all workers from baseline to make product offers
- Workers who want to sign up are randomized to treatment or control on the spot

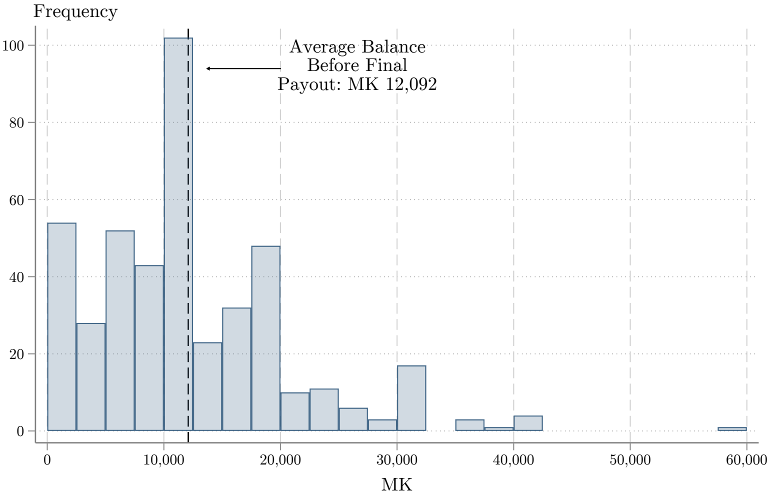
Study was conducted during the 2017 main tea season



Getting paid later is very popular

- Nearly half of workers sign up
  - 65 percent express interest at info sessions
  - 80 percent of those actually enrolled
  - Some of the failure to enroll was due to joining ROSCAs
- Enrollees save 14 percent of earnings on average
- Scheme raises *net* savings by 24 percent
  - Some substitution away from informal savings methods
- Work output increases by 4.6 percent

Savings in the scheme are nearly two weeks of wages on average

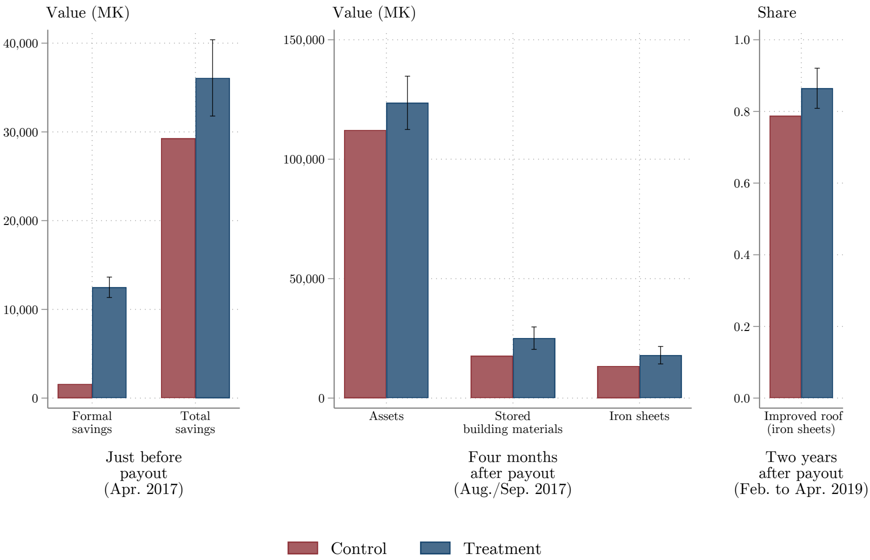


MK 12,092 is about USD $16 at market exchange rates

Treatment group was allowed to enroll in scheme two more times

- Additional savings schemes were in the 2017 offseason and 2018 main season
  - Enrolled on the spot during fourth follow-up survey
  - Sign-up rate about 80 percent for each
- Control group could enroll too, but had to go to payroll office
  - 10 percent signed up for offseason, 19 percent for next main season

Substantial downstream effects on savings, assets, and roofing material



Key mechanisms: lack of safe storage and behavioral constraints

Conducted a follow-up experiment with a separate sample of workers

- Randomized offers of either original scheme or modified version where deposits have to be made *manually*
- Manual deposit requirement does not affect sign-up but decreases deposits by 50 percent
  - Declines in deposits concentrated among workers who report self-control problems
- Sign-up for both products is high even for workers with no self-control issues $\Longrightarrow$ lack of safe storage may also be important

Summary of findings

- Saving by deferred wage payment is an attractive technology
  - Simple, cheap strategy. No additional financial intermediation.
  - High-take up, welfare-enhancing
  - Workers sign up more than once
  - Important downstream impacts on wealth
- Key mechanisms behind product's impacts
  - Relieves behavioral constraints
  - *Provides a safe place to keep money*

This approach can be used in a wide variety of settings

- There is nothing special about workers and wages that makes this work
- Could be applied in any context where people are getting money
  - Other firms
  - Workfare schemes (MGNREGA)
  - Government social support programs (Social Security, Bolsa Familia)
  - Cash transfer programs (GiveDirectly)
  - Remittances/mobile money
- Critical feature: ability to change the timing of when money arrives
  - Digital payments make this much easier
  - Must be able to figure out when people want money and alter payment stream to match

Important considerations

- Protecting recipients
  - Must ensure that payment recipients actually get the money (consistent with wage theft laws)
  - Local laws may also dictate that deferred wages be paid with interest
- Overborrowing?
  - Workers might borrow too much to compensate for reduced liquidity
  - No evidence of this in our study
  - Important outcome to monitor
- Alternative solutions?
  - Would labeled savings accounts work instead? Limited evidence for this
  - Equal demand for a version of the scheme where people can opt out any time
  - Possible mental accounting effect: easier to save when the money isn't "yours" yet

Extensions: Pay Me Smoother?

- The Pay Me Later scheme gives people *control* over their income stream
  - Not everyone signs up
  - Even those who sign up only defer around a sixth of their income
- If payment streams are lumpy, some people may benefit from smoothing them out
  - Easier to smooth consumption Hastings and Washington 2010
  - Lower psychic/financial strain Kaur et al. 2021
- Common theme is letter people choose the timing of their income
  - Financial benefits, but also recipient agency/dignity

Upshot: giving recipients more control over their payments is good

If you / your organization are involved in paying people, we encourage you to try this out—and we are more than happy to help make it happen.

Questions/comments/thoughts?