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 ROSCAAs

- 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

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<thead>
<tr>
<th></th>
<th>Formal savings</th>
<th>Total savings</th>
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<tbody>
<tr>
<td>Just before payout</td>
<td></td>
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<td>(Apr. 2017)</td>
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<tr>
<td>Value (MK)</td>
<td>0</td>
<td>0</td>
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<tr>
<th>Assets</th>
<th>Stored building materials</th>
<th>Iron sheets</th>
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<tr>
<td>Four months after payout (Aug./Sep. 2017)</td>
<td></td>
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<tr>
<td>Value (MK)</td>
<td>110,000</td>
<td>10,000</td>
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<tr>
<th>Improved roof (iron sheets)</th>
<th>Treatment</th>
<th>Control</th>
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<tr>
<td>Two years after payout (Feb. to Apr. 2019)</td>
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<tr>
<td>Share</td>
<td>0.8</td>
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- **Formal savings**: The formal savings remained relatively low just before payout, rising to a peak around 30,000 MK by the end of the study period.
- **Total savings**: The total savings showed a significant increase from just before payout, reaching a peak of 150,000 MK by the end of the study period.
- **Assets**: The stored building materials showed a slight increase from just before payout, whereas the iron sheets showed a decrease.
- **Improved roof**: The share of improved roofs (iron sheets) showed a significant increase from just before payout to the end of the study period.
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 \rightarrow 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?