# Deferring Wages and Labor Supply in Malawi

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**Sector(s):** Finance, Labor Markets

**Fieldwork:** Innovations for Poverty Action (IPA)

**Location:** Malawi

**Sample:** 870 workers

**Target group:** Rural population

**Outcome of interest:** Earnings and income Savings/deposits

**Intervention type:** Commitment devices Digital and mobile Financial literacy Information Savings

**AEA RCT registration number:** AEARCTR-0001554

**Dados:** ICPSR

**Research Papers:** Pay Me Later: Savings Constraints and the Demand for Deferred Payments

**Partner organization(s):** Lujeri Tea Estates, Innovations for Poverty Action (IPA), Gates Foundation

Saving for the future tends to be particularly challenging in developing country contexts, where many people lack access to formal saving tools. Researchers partnered with a tea company in Malawi to study the effects of a savings product that allowed workers to defer payment of a part of their wages. The deferred wages program was generally popular and increased savings; in the longer run, it helped workers improve their houses. This suggests that these workers tended to otherwise lack safe and convenient ways to save.

## Policy issue

Saving money is hard for many people—it is difficult to postpone purchases now in favor of longer-term goals. When people lack access to secure and convenient savings options, putting aside money can be even harder. Withholding payment of a portion of workers' salaries may function as a reliable savings option for people who otherwise struggle to save. This might allow people to accumulate the sum of money needed for making bigger purchases for their home, making business investments, or buying things like food in bulk. There is limited evidence to date on people's demand for, and the impact of, such deferred wage payments.

## Context of the evaluation

This study takes place in Malawi in partnership with Lujeri Tea Estates, a large agricultural firm in Malawi. Workers who pick tea are paid piece-rate wages during the main harvesting season, which lasts from December to April. Wages in the off-season are lower because tea growth is limited. Workers tend to have higher demand for savings during the main harvesting season to

support their households during the off-season when income is lower, but also to save up for bigger purchases such as household materials or school fees.

Around half of Lujeri workers participate in informal rotating savings groups (ROSCAs) during the main agricultural season. Members of the group take turns receiving the regular contributions of all other members. Workers who are not members cite lack of trust as a major reason for not participating. Deferred wages may be seen as a more secure savings mechanism than these groups.



Two women harvesting tea.

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## Details of the intervention

Researchers partnered with Lujeri Tea Estates to implement a randomized evaluation to study the effects of offering deferred wages on workers' investments, consumption, well-being, and productivity at work.

Researchers randomly assigned 870 workers into one of two groups.

1. *A treatment group* had the option to delay receiving part of their wages (they could pick the amount) until the end of the harvesting season, in May 2017.
2. *A comparison group* of workers continued to receive their full wages at the regularly scheduled biweekly paydays.

Using survey and administrative payroll data, the researchers examined whether workers in the treatment group saved more during the agricultural season, spent more on larger purchases at the end of the season, were more productive at work, or consumed more during the off-season. Researchers offered the treatment-group workers the option to re-enroll for the

subsequent offseason and next main season. To measure effects on asset accumulation, they conducted a follow-up survey four months after the payout, when the scheme had completely ended, and another follow-up survey over two years after the start of the first round of the deferred payments program (ten months after the last round).

Researchers also conducted a set of additional interventions to understand what made workers want to delay receiving some of their pay. They used new samples of workers who were not involved in the initial intervention and had never been offering the savings program. In one intervention, they randomized offers to enroll in either a) the original scheme, which automatically delayed the payment amount the worker had selected or b) a version in which workers had to make savings deposits manually by handing cash to a project employee stationed next to a payroll site.

In another intervention, they studied preferences in a different sample of workers over enrolling in a) the original scheme, in which workers participating in delayed payments received the sum of the delayed payments at once, at the end of the harvesting season; or b) a version of the program where the savings were paid out gradually six times every two weeks instead of all at once; or c) a version of the program where they relaxed the restrictions on accessing savings during the scheme, so workers knew that they could access the savings at any time.

## Results and policy lessons

Overall, the deferred wages savings program was popular and led people to save more.

*Take-up and savings behavior:* Fifty-one percent of workers signed up for the program, and participants opted to save 14 percent of their regular wages on average. The program raised overall savings rather than exclusively replacing other forms of savings. When offered the option to re-enroll in additional rounds of the savings scheme, 81 percent of workers enrolled for a round during the subsequent offseason, and 78 percent enrolled for a round during the next main season. The popularity and effectiveness of the deferred wages savings program implies a lack of safe and convenient existing alternative savings options.

*Worker productivity:* Workers who were offered the savings program were on average 4.2 percent more productive. Researchers think this was driven by the program reducing the cost of saving.

*Spending and durable assets:* Much of the money saved was spent in the two weeks immediately after the payout, primarily on larger purchases. This was driven by durable purchases related to housing investment. Four months after the end of the program, the value of participants' durable assets, such as sheets of metal roofing for their houses, increased by 10 percent. These results persisted two years after the initial round of the program (and ten months after the last round), when treatment-group workers were 7.6 percentage points more likely to have metal roofs on their homes.

*Manual deposits:* When researchers varied whether deposits were made automatically or manually, they found that the manual deposits scheme resulted in substantially lower savings. This reduction was driven by workers who reported having self-control problems. At the same time, workers who did not report self-control problems contributed just as much with manual deposits (relative to having automatic deposits). This suggests that those workers valued the scheme for reasons other than self-control, such as having a safe place to store money.

*Program design preferences:* In the follow-up study that measured preferences for different design features of the savings program, 56 percent of workers who were offered it took up the original version of the program. Fifty-one percent who were offered the version with relaxed restrictions on accessing savings during the program took it up. Hence the additional commitment of restricting access to the savings in the original program did not strongly influence its popularity. However, only 36 percent took up the version where the savings were paid out in smaller amounts every two weeks. This suggests that the workers valued getting larger payments at once.