

# What Drives Farmers to Repay Loan? RCT on Restructuring, Lottery and Ease of Payment

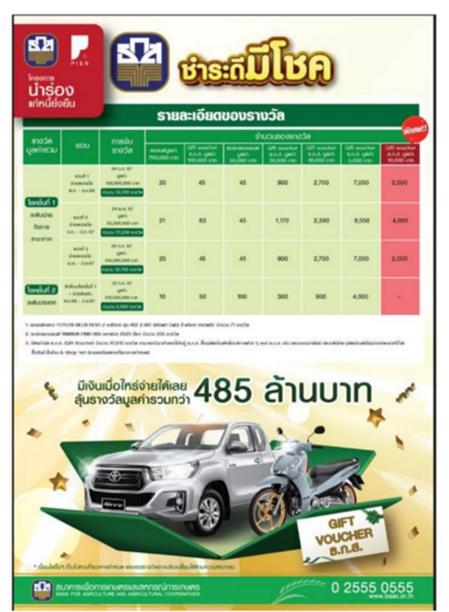
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#### **Motivations and Contributions**

- Majority of Thai farmers trapped in persistent debt with low repayment, barely cover principle.
- Effective interventions to stimulate deeper repayment crucial to avert debt (and development) trap.
- This paper implemented a large-scaled RCT with the BAAC branches nationwide to test three types of interventions designed to address key impeditions to loan repayment: (1) low ability to repay, (2) low willingness to repay and (3) repayment frictions.

## Intervention Design







# (1) Debt restructuring (DR) to resolve low ability to repay principle through "flexible debt moratorium (DM)"

- Launched nationwide (3 yrs from mar2024, most elgible farmers with less than 300,000 baht loan opted in) with low awareness of key feature: interest fully paid by gov, the first baht repay go to deduct principle.
- Encouragement design: BAAC hold monthly group meeting to educate/remind farmers in DM of DR feature

# (2) Repayment lottery to incentivize repayment and solve mismatching problem through "Lucky repay program"

- Launched nationwide (Mar-Jul 24) with low awareness, prizes comparable to lottery, draw quarterly to stimulate repay everytime when have money.
- Encouragement design: BAAC hold monthly group meeting to educate/remind farmers, Lucky repay booklet

#### (3) Mobile debt collection to make repayment easy/low cost

 BAAC hold monthly group meeting and bring mobile unit to collect repayment in village at specific place/time

# Randomized Experiment

Clustered randomization with 120 BAAC branches in 12 agri prov, 14,400 farmers

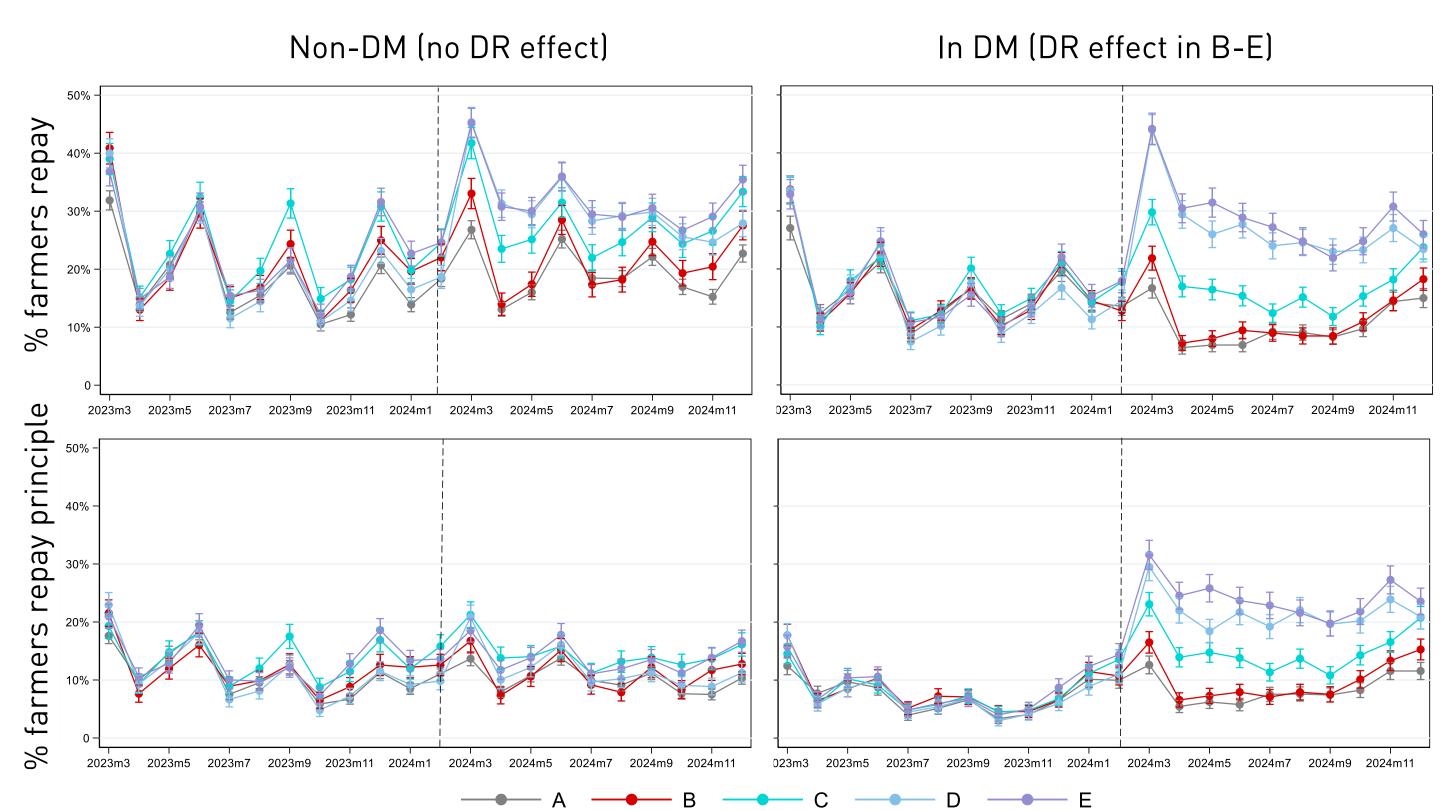
- 1. Randomize 10 BAAC branches in each province into 5 groups:
  - A. Control (24)
  - B. DR (24)
  - C. DR + Lottery (24)
  - D. DR + Mobile collect (24)
  - E. DR + Lottery + Mobile collect (24)
- 2. Randomly select 10 organized BAAC groups from each branch (10-20/group)
- 3. Implement from Mar-Dec 2024

#### Data

- (1) Pre-Post survey (3,840 farmers, 30% of admin)
- (2) Administrative data: BAAC+Farmer registry (14,400 farmers)

### Loan repayment pre and post interventions

- More farmers repay in post-treatment months especially in D,E: 20-30% (at and before due dates), effects persist and more in DM group with general declining repayment during DM.
- More farmers repay deep to principle only in DM group with DR effect: 10-20% (sig.) but no effect in non-DM group.



## Loan repayment effects (post-pre yr)

• D,E most effective in stimulating 20-30% farmers (DM,non-DM) to repay more often, small % farmers repay more often Δ Repay freq (mnts)

sig. effect of C but no sig. effect of encouraged DR in B in DM group. No sig. added effect of lottery in E.

Non-DM

In DM

repayment

RCT branches

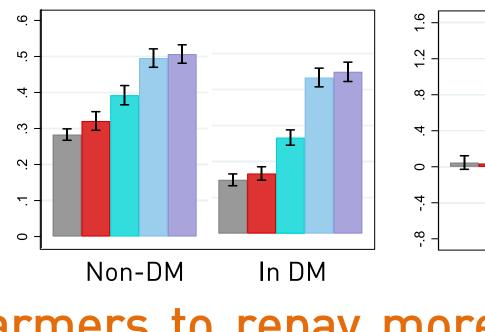
▲ B: DR

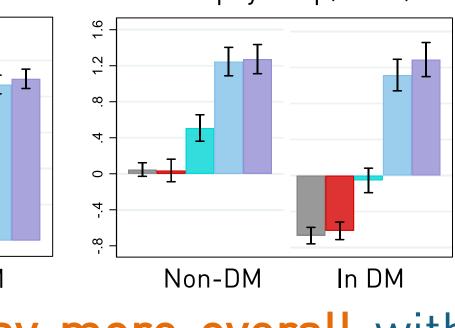
• A: Control

◆ C: DR + Lottery

+ D: DR + Mobile

★ E: DR + Lottery + Mobile





Non-DM

In DM

But limited in stimulating farmers to repay more overall with some effect of D,E in DM group and small effect in non-DM. No intervention stimulate more repayment (baht) in both DM, non-DM.

Non-DM In DM Non-DM In DM

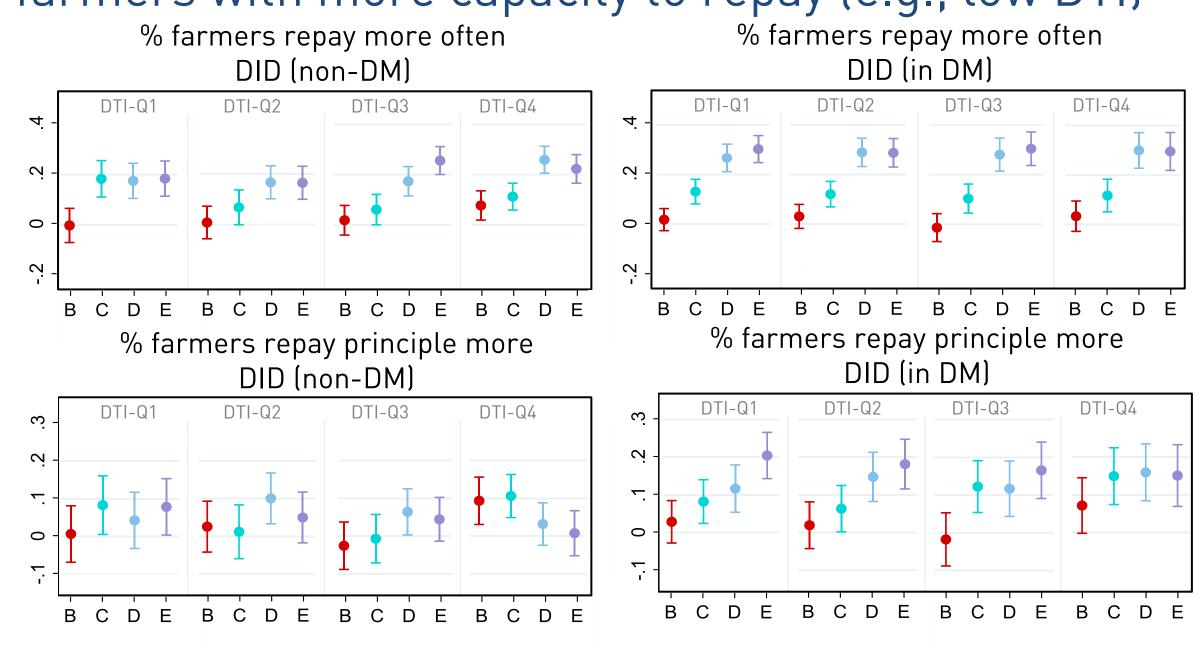
Only sig. effect of C,D,E in stimulating deeper repay to principle in DM group. % farmers repay principle in post, not pre DR critical to ensure deeper

# Effects conditional on capacity to repay (DID)

Non-DM

In DM

D,E more effective in stimulating deeper repay among farmers with more capacity to repay (e.g., low DTI)



# Implications and next steps

- Attending to "last mile" by making repayment easy should be prioritized as a critical first step towards stimulating repayment and implementing critical debt policy, e.g, DR
- Next step: spillover effects, impact heterogeneity