

# Infrequent Payments as Saving Device: Evidence from Kenyan Dairy Farmers

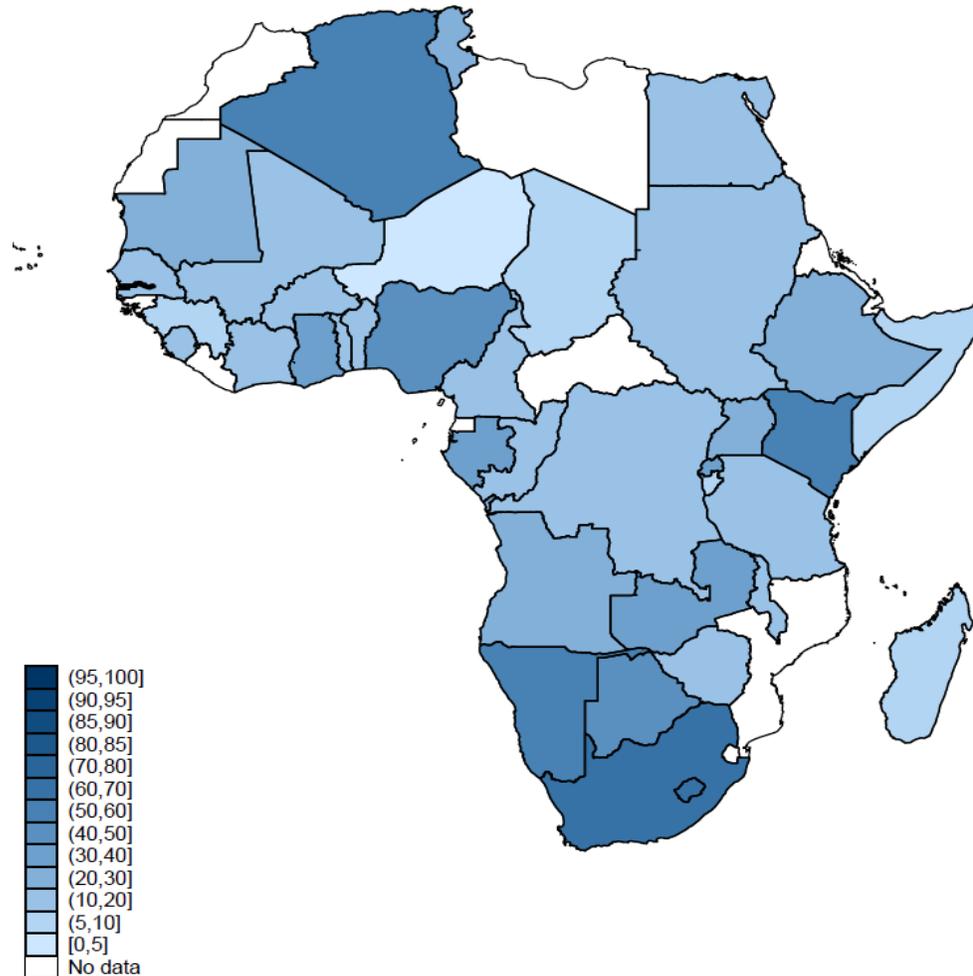
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# Motivation: Access to Finance

*Share of people with account at a financial Institution  
(2016)*

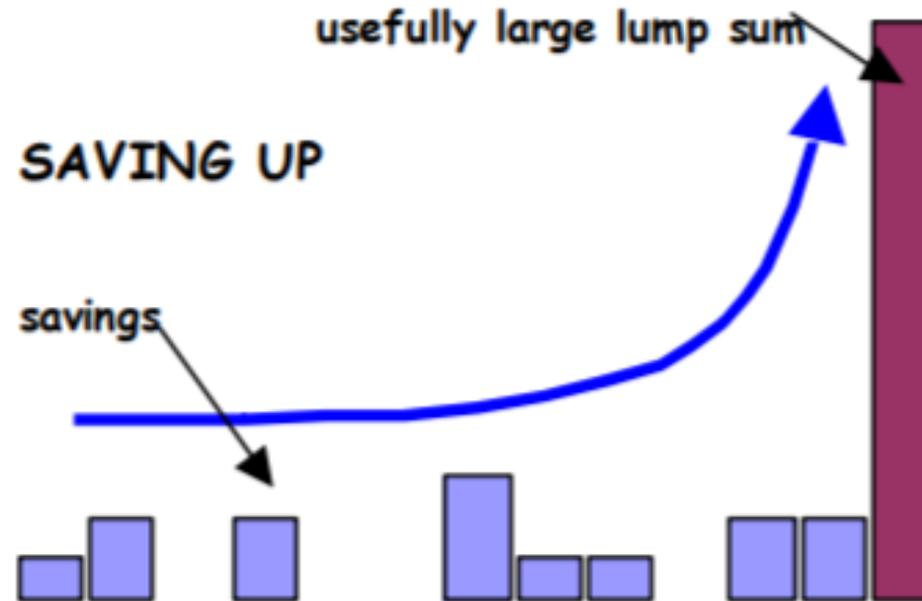


- vs. 90% in OECD



# Barriers to Savings

- Why do people want to save? Many reasons: risk management, **lump sum expenses...**



- **Barriers to Savings:** bank access, safety, pressure from family, lack of *self control*
- How do farmers overcome these barriers? *Apparently* inefficient saving tools (e.g. *susu*)



# Infrequent Payments as a Saving Device

- Kenyan Dairy Farmers
  - Produce and sell milk every day. Need to save for lumpy expenses (e.g., bag of cow feed)
- A milk buyer can pay farmers for their milk at different frequencies
  - Payment **every day** the farmer sells milk...
  - ... or paying in *a lump sum* **once at the end of the month**
- **Idea:** by combining many small payments in one lump sum, infrequent (e.g. monthly) payments can provide “commitment” to save for lumpy expenses



# Three Main Findings

1. Dairy farmers are willing to accept a 15% lower price per liter to receive payments from the milk buyer at the end of the month, rather than daily
2. **Why?**
  - They don't trust themselves to save daily payments as much as they would like
3. **Who can meet farmers' demand for monthly payments?**
  - Only a restricted number of trustworthy milk buyers: farmers must trust the milk buyer will not run away with the due amount.



# 1. Do Dairy Farmers Want Monthly Payments?

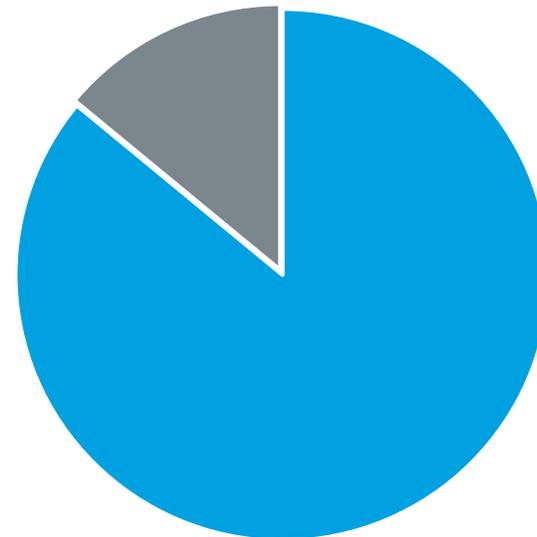
- Experiment with a *large* milk buyer, who offers farmers two options of payments for their milk
  - **Daily payments** (1.6 Cedis per liter of milk)
  - **End-of-month payments** (1.35 Cedis per liter of milk)



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Farmers' Choices



■ Monthly Payments ■ Daily Payments

Farmers are willing to incur a large cost to get infrequent payments!



## 2. Why Do Farmers Want Monthly Payments?

- **Survey:** farmers report that:
  - Monthly payments help reach their saving goals
  - They do not trust themselves handle the cash
  
- **Additional Experiments:** farmers are worried about self-control problems



### 3. Which Milk Buyer Can Provide Monthly Payments?

- Large buyers vs. small, itinerant traders
  - Low competition in monthly payments supply
  - *Hypothesis:* small, itinerant traders are **not credible**
- **Experiment:** in some transactions, we guarantee trader's end-of-month payment to farmers
  - Experimenter purchases milk from traders
  - In the “guaranteed” transactions, farmer's due amount is deducted from trader's payment



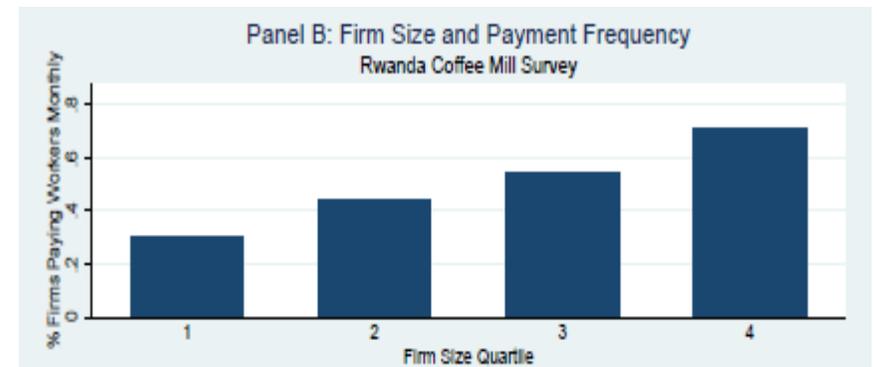
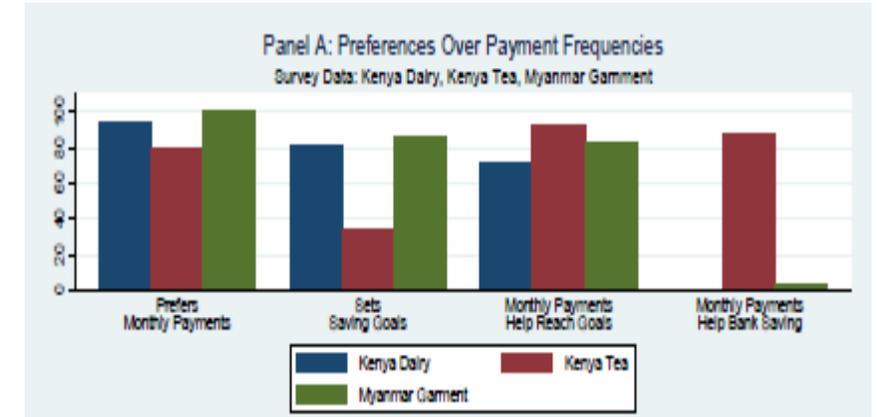
# Relevance of These Findings in Other Settings

## 1. Farmers & workers value infrequent payments as a “real world” saving commitment device helping for self-control problems

- Strong demand for infrequent payments in among: i) Kenyan tea farmers; ii) Rwanda coffee workers; iii) Myanmar factory workers

## 2. Larger, more credible buyers and employers are better suited to provide infrequent payments

- Evidence from Rwanda coffee processors



# Policy Implications/Questions

1. Promoting infrequent payments in agricultural value chains, labor contracts, or cash transfers can foster saving and investment.
  - How to optimally structure payments to both help fund lumpy expenses and ensure balanced daily consumption (smoothing)?
2. Importance of **access to markets**
  - Access to credible buyers, who can provide infrequent payments
  - An additional benefit of *large* buyers?
3. Improving contract enforcement and trust may favor competition among buyers in provision of infrequent payments



**Thank you**