Banking the Poor Via Savings Accounts: Evidence from a Field Experiment in Nepal

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Facts on Access to Formal Savings Accounts

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- Informal devices, however, are usually associated with liquidity and reliability issues and bear a higher risk than bank accounts.

- The majority of the world’s poor generally lack access to formal banking services of any kind (Banerjee and Duflo, 2007). A consistent finding in household surveys in developing countries is that less than 20% of households has a bank account.
Prior Evidence on Access to Savings Accounts

- Experimental research so far has focused on micro-entrepreneurs:
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  - Relatively low usage rates
  - Infrequent but large deposits (equivalent to about 25% of their weekly income)
  - Savings mostly used for micro-entreprise development
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  Yet, not all households are involved in entrepreneurial activities, or have an active business all year.

- Savings motives, needs, and interest in accessing the banking system may differ greatly among households.
Research Questions

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I address these questions via a randomized field experiment that consider a large and diverse sample of households, including both micro-entrepreneurs and non-entrepreneurs.
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Slums
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  - Accounts are fully flexible and operate without any commitment to save.
  
  - Account holders freely deposit and withdraw during established business hours.
    - Twice a week for three hours in the local bank-branch office in the slum
    - Any day during regular business hours at the bank’s main office, downtown
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Endline survey (June 2011): Allows me to compare assets, expenditures and income of households with and without access to a savings account.

Administrative data on savings account's usage for an entire year: Allows me to study account take-up, usage (deposits and withdrawals).
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- The poor do save:
  - High usage rate: average of 0.8 deposit a week
  - Average weekly amount deposited is 8% of weekly income
  - 4 withdrawals on average of the course of a year
  - Average withdrawal size is slightly more than a week of household income.
A comparison

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  - High fees may indeed discourage usage (Banerjee and Duflo, 2011; Dupas, Green, Keats, and Robinson 2011).
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  - Local bank-branch proximity
    - 99% of transactions took place in the slums (despite the limited hours)
    - Most valued account feature: ability to access the account any time
      3hrs a day twice a week is a good approximation!
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- Impacts are larger for those:
  - At the bottom and middle of the distribution
  - With no access to the financial system
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- Access to a savings account reduces income volatility (when hit by a shock)

- Households perceive to be better off financially.
Conclusion

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What are the mechanisms at play?

- A savings account that fits the needs of the poor allows them to save small amounts that would otherwise likely be spent (Mullainathan and Shafir, 2009).
  - Stronger effect for the poorest and for those not linked to the financial system.
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   - Stronger effect for the poorest and for those not linked to the financial system.

2. The money saved in the account is available, but not available at arm’s reach.

3. Some kind of mental accounting and habit formation effects might be at work.
   - When the money is put in the account might be mentally allocated towards certain expenditures.
   - Local bank-branches are opened on pre-established days.
IMPACT OF VILLAGE SAVINGS AND LOAN ASSOCIATIONS

FINDINGS FROM GHANA, MALAWI AND UGANDA

BRAM THUYSBAAERT
WITH DEAN KARLAN (YALE) AND CHRIS UDRY (YALE)
Motivation

- Most of the world’s poor lack access to formal financial services
  - According to one World Bank estimate, 2.5 billion people don’t have access to formal financial services

- Lack of access to reliable financial services may negatively affect welfare
  - Economic or health shocks -> severe setbacks
  - People may be unable to get sufficient capital together to invest in profitable economic activities

- Of course, informal savings tools exist
Motivation

- Saving at home
  - Issues:
    - Theft
    - Social pressure
    - Self-control
- Rotating savings and credit associations (ROSCAs)
  - People meet regularly, make contributions and one person takes home the entire pot
    - Safer
    - Commitment feature
  - But ROSCAs lack flexibility
    - One pay-out
    - Timing often set at beginning
The intervention

- Village savings and loan associations (VSLA) aim to improve upon ROSCA model

How do VSLAs work?
- Around 25 members meet weekly (mostly women)
- At every meeting members make savings contributions (commitment)
- Members can take loans and repay with interest, providing interest on savings – loans are typically repaid after 1 to 2 months with 10% interest rate
- At end of 10 to 12 month cycle, fund is shared out in proportion to contributions
- Most VSLAs also have a social fund that provides either transfers or interest-free loans to members in need
The intervention

- **Main advantages**
  - Compared to saving at home
    - Safety
    - Commitment
  - Compared to ROSCAs
    - More flexibility
    - Allows to save up lumps sums and creates pool for risk sharing
  - Cheap in terms of implementation
    - No external capital
    - Training in first cycle – self-reliant afterwards
    - Self-replicating through village agents

- Developed by CARE in 1991 in Niger and has spread to 58 countries with 6 million participants – mostly in Africa but also in Asia and Latin America
The intervention
The intervention
Theory of change

The hypotheses we test:

- **H1:** If VSLAs meet unmet demand for financial services, the intervention will increase financial *savings* and the use of *credit*

- **H2:** Through access to loans and the social fund, members will be able to cope better with unforeseen *shocks* and improve food security

- **H3:** Through loans and share-outs, VSLAs will spur *investment* in livestock, agriculture, small businesses and human capital

- **H4:** Participation in VSLAs renders women more *powerful* within the household and increases their involvement and influence within their communities

- **H5:** In the long run, VSLAs increase consumption levels and reduce *poverty*
The evaluation

- IPA is conducting large-scale, randomized evaluations of VSLAs in four countries to investigate impacts on households
  - Uganda, Malawi and Ghana with CARE
  - Mali with Oxfam (Saving for Change)
- Focus here is on Uganda, Malawi and Ghana
  - Analysis for Mali still underway – results soon!
- Since implementation is at the village level, so is the randomization (or cluster of villages)
- Two rounds of household surveys
  - Baseline survey in 2008 in Ghana and in 2009 in Malawi and Uganda
  - Endline surveys in first half of 2011
  - Information on health, education, income-generating activities, consumption, use of financial tools, social capital, etc.
- Sample of over 15,000 households in almost 950 rural villages
Take-up

What percentage of women join a VSLA?
- 2 to 3 years after baseline
  - 32% joined a VSLA in treatment villages
  - 6% in control villages
  - Very similar in Uganda and Ghana - lower take-up in Malawi

More likely to join are women
- From wealthier households
- With small businesses (at baseline)
- With prior access to savings and credit

![Figure: Take-up](chart)
Use of VSLAs

- **Savings contributions**
  - Typically between $.5 to $1 per week
  - Median of $.66

- **Credit**
  - At endline, 68% of members had taken a VSLA loan
  - Median loan size is about $20
  - Most frequent uses are small businesses, food, education, health and agriculture

*Figure: Loan uses*
Use of VSLAs

- **Share-out**
  - Share-outs are typically $30 to $50
  - Most frequent uses for the VSLA loans are small businesses, food, agriculture and education

*Figure: Share-out uses*
H1: Financial management

- **Savings**
  - Increase in total financial savings

- **Loans**
  - Respondents in treatment areas report take more loans
  - Total amount borrowed increases
  - Some substitution away from other lending sources (formal, family and friends)

Evidence supports hypothesis that VSLAs meet previously unmet demand for savings and credit services
H2: Shocks

- Reactions to shocks
  - Households in treatment areas are somewhat
    - more likely to use loans from savings groups to cope with shocks
    - less likely to sell assets, livestock or crops to deal with health shocks
  - But effects are small (<2 percentage points)

- Recovery from shocks
  - We don’t see impacts

- Food security
  - We see slight improvement in food security for adults
H3: Income-generating activities and investment

- Agriculture
  - We don’t see effects on agricultural input usage

- Businesses
  - Increase in likelihood of running a business for women (from 18% in control to 20% in treatment)
  - Income from businesses also increases

- Animal holdings and household assets
  - We don’t see impacts

- Human capital
  - Non-robust evidence that school enrollment increases
  - Should be considered suggestive
H4: Intra-household decision making and social capital

- Intra-household decision making
  - Women in treatment villages are more likely to report having influence in household decision making

- Social capital
  - We don’t see impacts on our measures of
    - Community participation: participation in groups, attend village meetings, etc.
    - Political empowerment: feel people can change things, feel women should be involved in village decision making, etc
    - Collective action: time spent on community work
H5: Consumption and poverty

- Do VSLAs increase food and non-food consumption and reduce poverty?
- We don’t detect effects on
  - Food consumption
  - Non-food expenditures
  - Poverty score (PPI)
Conclusion

- Popular program
  - Relatively high take-up
  - Program is spreading to control communities
- We find support for some of short run effects predicted by our theory of change
  - Increase in financial savings and use of credit
  - Business development
  - Increased household decision making
- We do not detect impacts on
  - Asset accumulation
  - Ultimate welfare outcomes
- Evaluation is relatively short term - we cannot exclude that effects will materialize in the longer run
  - In Mali study, exposure to VSLA is longer on average. Results soon!
Take-away

- Two readings
  - Pessimistic
    - We don’t see welfare impacts
    - Let’s look for something else
  - Optimistic
    - Popular program
    - Not revolutionizing lives
    - But small changes
    - Given that program is cheap, that’s good enough