Financial Education and Access to Savings Accounts: Complements or Substitutes?

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Motivation

- What is the value of “emergency savings” and avoiding high-cost credit products?

- International: microcredit ➔ microsavings

- Can saving become a habit among youth?
  [Cf new 22-year-old UAE Minister of State for Youth Affairs]

- Obstacles to saving
  Access ➔ information ➔ preferences
Mixed results on financial literacy & education

• Indonesia: Cole-Sampson-Zia (2011) find no more likely to open savings acct
• India: Field et al. (2010) no impact on prob. of saving
• Several recent review articles (Hastings-Madrian-Skimmyhorn 2013; Karlan-Ratan-Zinman 2013; Fernandes-Lynch-Netemeyer 2014) conclude that evidence is scant, mixed, and on the whole negative
• But generally more positive for youth: Bruhn et al. (2013) in Brazil and Berry-Karlan-Pradhan (2013) in Ghana
Previous literature

- Mostly positive results from access
  - **Subsidies**: Dupas-Robinson (2013) and others generally find more accounts and more usage
  - **Branches**: Burgess-Pande (2005) and Ashraf-Karlan-Yin (2006) find both increased saving and increased downstream outcomes such as income
  - Contrast to the mostly negative (neutral) evidence on access to microcredit, e.g. Banerjee (2013)
Background

- Uganda has a very young population (52% under age 15); current actions may have a large effect.

- Generally low savings rate (even compared to e.g. Kenya) – can ‘move the needle’ and develop habits.

- Small communities, often no bank branches within 1-2 hours; usually expensive to maintain accounts.
Behavioral RCT Design

- What is the **impact** of education and access on these youth?

- Impact evaluation measures how have their behaviors and outcomes changed compared to **how they would have changed** in the absence of the program?

- Note this is different from “How have their lives changed?”
Intervention

- Randomly assigned 240 Church of Uganda youth groups into four arms:
  - Control
  - Education only
  - Account only
  - Education + Account

- Each group has 15-40 members, although not all active, with an average age of 24.5
240 youth clubs

- 25%: Control
- 25%: Financial Education
- 25%: Account Access
- 25%: Educ + Account
## Baseline characteristics

<table>
<thead>
<tr>
<th></th>
<th>Account only</th>
<th>Educ only</th>
<th>Account + Educ</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion female</td>
<td>43%</td>
<td>41%</td>
<td>42%</td>
<td>44%</td>
</tr>
<tr>
<td>Has formal account</td>
<td>12%</td>
<td>13%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Proportion in school</td>
<td>37%</td>
<td>39%</td>
<td>38%</td>
<td>39%</td>
</tr>
<tr>
<td>Income last 90 days (‘000 USH)</td>
<td>147</td>
<td>146</td>
<td>169</td>
<td>141</td>
</tr>
<tr>
<td>Club has money</td>
<td>82%</td>
<td>70%</td>
<td>77%</td>
<td>83%</td>
</tr>
<tr>
<td>Club has account</td>
<td>7%</td>
<td>5%</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Financial education

- Developed by Innovations for Poverty Action, Freedom from Hunger, and Straight Talk Foundation
- One 90-minute session per week for 10 weeks
- Mean attendance 4.7 sessions (with 75% ≥ 1)

- Focused on saving, but also general finance:
  - Myths about banks
  - Saving vs borrowing
  - Goal-oriented saving
  - Budgeting and spending
  - Challenges, including negotiating around money
Group accounts

- Simplified opening procedure; no fees then or later
- Required to make a deposit within 30 days of opening, and to maintain balance of 50000 USH
- One account per group, with multiple co-signers
- This decreased transaction costs, but required more trust (one reason to use existing church groups)
- Everyone trained to read/use ledger for keeping track of individual balances
- 66% of treatment groups opened an account
Data and methods

- Baseline \((n=2810)\) and endline \((n=2680)\) surveys include
  - Basic demographics; some risk, time, & social preferences
  - Work, income, and consumption measures
  - Financial knowledge
  - Borrowing, lending, and saving behavior

- Admin savings data from the two Account arms

- Estimate effects of each treatment (using dummy for assignment) on various outcomes
  - Controls: demographics; baseline values when possible
  - Fixed effects for region and initial club savings level, which were both used for stratification
Results: saving

Total saving (’000 USH)

- Control
- Account only
- Education only
- Acct + Educ
## Results: saving

<table>
<thead>
<tr>
<th>LHS:</th>
<th>Balance ('000 USH)</th>
<th>99% trim</th>
<th>Total saving ('000 USH)</th>
<th>99% trim</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>bank admin data</td>
<td>survey data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acct only</td>
<td></td>
<td></td>
<td>52.8 (55.2)</td>
<td>22.8 (26.3)</td>
</tr>
<tr>
<td>Educ only</td>
<td></td>
<td></td>
<td>127.9** (62.0)</td>
<td>56.6* (30.0)</td>
</tr>
<tr>
<td>Acct+Educ</td>
<td>1.21 (1.02)</td>
<td>1.05* (0.45)</td>
<td>17.8 (46.0)</td>
<td>52.3* (27.9)</td>
</tr>
<tr>
<td>comparison mean</td>
<td>1.61</td>
<td>0.49</td>
<td>247.1</td>
<td>185.7</td>
</tr>
<tr>
<td>n</td>
<td>3775</td>
<td>3738</td>
<td>2678</td>
<td>2647</td>
</tr>
</tbody>
</table>
Results: saving & borrowing

- Financial education increases savings 1-2 years later!
- Account access also increases savings, although less significantly and robustly than education
- No significant changes in borrowing, other assets, or expenditures
- Hence increased saving is changing overall wealth
Results: income

90-day earnings ('000 USH)

- Control
- Account only
- Education only
- Acct + Educ
## Results: income

<table>
<thead>
<tr>
<th>LHS:</th>
<th>Earnings in past 90 days ('000 USH)</th>
<th>99% trim</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct only</td>
<td>30.7 (33.5)</td>
<td>37.0** (16.5)</td>
<td></td>
</tr>
<tr>
<td>Educ only</td>
<td>23.7 (30.7)</td>
<td>45.0*** (16.2)</td>
<td></td>
</tr>
<tr>
<td>Acct+Educ</td>
<td>34.1 (35.2)</td>
<td>53.3*** (18.0)</td>
<td></td>
</tr>
<tr>
<td>control mean</td>
<td>232.8</td>
<td>184.1</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>2679</td>
<td>2652</td>
<td></td>
</tr>
</tbody>
</table>
Results: income & employment

- Earned income increases for all treatment arms, at roughly equal levels
- This implies there exist downstream effects of the interventions, beyond even savings behavior!

- We do not observe any significant effects on hours worked, business investment, or school attendance
- These are fairly imprecisely estimated, so difficult to distinguish mechanisms linking saving and income
Conclusion

- Financial education impacts knowledge & behavior
- We do not observe significant differences in either savings or income between education and access
- Evidence suggests that they are substitutes rather than complements – and as a byproduct that knowledge may not be necessary for downstream outcomes
- At second endline, the combined intervention does perform relatively better than separate ones
- Policy recommendations depend on the cost-effectiveness of each intervention
Thank you!

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