The Effect of Flexible Loan Repayment Schedules on Youth Enterprises in Uganda

Gemma Ahaibwe
Salim Daouda
Naomi Kimani
Martin Ostermeier

TA: Hira Siddiqui
Background

- High youth unemployment and underemployment rates

- 13.3% unemployed (relaxed definition)

- 63.2 percent underemployed/underutilized

- Wage employment in public and private sectors accounts for only 24.6% of employed youth,

Source: SWTS (UBoS, ILO, 2013)
As a result of youth unemployment, and narrow wage sector, youth are more likely to be in self employment (micro enterprises), (74.8%)

However, there is low investment and enterprise growth among youth business startups, and high business failure (for every business started nearly another closes down (GEM, 2004)

Literature shows that access to micro-credit has improved however their repayment inflexibility may not provide the necessary time for investments to show a yield.

Hence the need for our intervention (flexible loan grace period and its effect on business investment and performance
Theory of change

Low investment and survival rates for youth start ups

Provide flexible loan repayment/grace period schedules

Take up of flexible loans by youth enterprises

Increased access to flexible loans

Increased business investment and performance (e.g. profits, number of employees, investments, business survival)
<table>
<thead>
<tr>
<th>TOC</th>
<th>Low investment and survival rates for youth start ups</th>
<th>Assumptions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention / Inputs</td>
<td>Provide flexible loan repayment/grace period schedules</td>
<td>Short/No grace period barrier to investment</td>
<td>- Intervention (1 or 0 assignment to control and treatment)</td>
</tr>
<tr>
<td>Outputs</td>
<td>Take up of flexible loans by youth enterprises</td>
<td>Applicants take up the loans</td>
<td>- Number of loans disbursed by grace period and applicant</td>
</tr>
<tr>
<td>Intermediary outcomes</td>
<td>Increased access to flexible loans</td>
<td></td>
<td>- Take up rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Assets purchased</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Increased business investment and performance (e.g. profits, sales, number of employees, investments, business survival)</td>
<td>Loans are invested in businesses Conducive business environment</td>
<td>- Return on Investment/value of assets</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Number of employees</td>
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</tbody>
</table>
Evaluation Questions and Outcomes

- Does increased loan grace period correlate with increase in business investment and performance

Outcomes

- Investments, profits, number of employees, business survival
Evaluation Design

Population of Uganda (n=37,578,876)

Youth population in Uganda (18-30 years) (n=6,764,197)

Youth population in Kampala (n=250,275)

Randomisation: Individual level

TREATMENT 1 (6 month)
- n₁ = 8,100

TREATMENT 2 (9 month)
- n₂ = 1,825

CONTROL (1 month)
- n₁ = 8,100
- n₂ = 1,825
Data Sources

1) Largely based on survey data

2) To a small extent administrative data
## Sample Size

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Control (1 month)</th>
<th>Treatment 1 (+ 6 month)</th>
<th>Treatment 2 (+ 9 month)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean (monthly net profit)</strong></td>
<td>US$ 297</td>
<td>US$ 302.94</td>
<td>US$ 315.06</td>
<td>US$ 333.23</td>
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<tr>
<td><strong>SD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>US$ 469</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Expected change</td>
<td>.</td>
<td>+ 2%</td>
<td>+ 6%</td>
<td>+ 12%</td>
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<tr>
<td>$R^2$</td>
<td>.</td>
<td>.</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>$\alpha$</td>
<td>.</td>
<td>.</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>$\delta$</td>
<td>.</td>
<td>.</td>
<td>0.02193</td>
<td>0.0549</td>
</tr>
<tr>
<td>$n$</td>
<td>.</td>
<td>.</td>
<td>24,299</td>
<td>5,475</td>
</tr>
</tbody>
</table>
Power Calculation

N = 5213.646165, power = 0.800000

N = 23141.790883, power = 0.800000
Potential Challenges

- Take up rate: 85% target
- Compliance: high, maybe on supply side
- Attrition: 5% no systematic
- Spillovers: not much to worry about

How to manage the challenges

- Adjust sample size to take care of these challenges
- Good monitoring checks
Results

Target audience
- Governments and policy makers,
- NGOs with credit components,
- Micro finance institutions
- Research community

Dissemination channels
- Workshops
- Policy briefs, research paper
- Targeted meetings