

Microfinance Around the World: Experiments to Unravel Some Unknowns

Dean S. Karlan
Yale University,
Innovations for Poverty Action (IPA) and J-PAL
and
Sendhil Mullainathan
Harvard University,
Innovations for Poverty Action (IPA) and J-PAL

Overview

- Describe how we work
- General questions we are asking
- Describe four specific projects in three countries
 - Give some sense of the differences between countries.
 - Give idea behind project
 - Give overview of implementation procedures

Expanding access

Breakthroughs & challenges

- Need major breakthroughs to reach 500 million
- Biggest provider today is public sector (55%)
- Social investors dominate private capital
- Face critical knowledge gaps

“Impact”

- “Impact” makes some shudder. Why?
 - Long history of “impact” studies that do not deliver *prescriptions*
- Why?
 - Methodological flaws
 - Lack of win-win approach to (a) solving operational problems while simultaneously (b) measuring impact
 - Example: credit scoring (3rd project discussed today)
 - Improve efficiency → reach sustainability at lower interest rates, deepen outreach
 - Measure impact of credit program → improve targeting so as to maximize impact

Key Questions

- Why despite our best efforts are so many not reached?
 - Is it flexibility?
 - Is it price?
 - Is it institutional (organization structure, financing, human resource policy, etc.)?

Is It Flexibility?

- Cash flows do not match cash flow needs in many cases.
 - Farmers
 - Fluctuation in income
- Is it fear?
 - Afraid of not having money to repay (irony: this is a GREAT client! she is so trustworthy that she won't even take out a loan due to her fear of going into default!)
 - Lack entrepreneurial skills to expand business
 - Fears peer punishment
- What product designs can alleviate these concerns?

Is It Price?

- Strikingly little evidence on price.
- The “old” line: price does not matter
- Recent work challenges this:
 - Dehejia, Montgomery & Morduch from Bangladesh
 - Karlan and Zinman from South Africa
- Clearly, elasticity of demand depends on a lot:
 - Competition
 - Business opportunities
 - Financial literacy
 - Framing of offer

Product and Process Innovation

- Key challenge for policymakers, donors and researchers:
 - How do we provide better advice as to what to do?
- Product innovation process should measure impacts to *the institutions* (as well as clients)
- Typical innovation process:
 - Step 1 (?): Small pilot to resolve operational kinks
 - Step 2: Full launch to entire program
- Experimental innovation process:
 - Step 1: Small pilot to resolve operational kinks.
 - Step 2: Horse race. Randomized control trial to launch new product (or change) to some but not all clients (or some but not all new areas, in the case of a new product).
 - Step 3: If new product or process wins the horse race, full launch. If not, go back to Step 1 and tweak and try again.

Product and Process Innovation

- Advantages of randomized control trials
 - Less risky (avoids costly mistakes)
 - Learn more about your client and your institution
 - Provides public good to other microfinance institutions
 - Can test multiple changes at once
- Disadvantages
 - Typically requires involving outsider to help coordinate the test
 - Requires patience

Three Examples

- **FINCA - Peru Business Training**
 - Credit with Education versus Credit
 - Joint work with Martin Valdivia, GRADE
- **Green Bank of Caraga in the Philippines**
 - Group liability versus Individual liability
 - Joint work with Xavier Gine, World Bank
- **Interest Rates and Credit Evaluations Decision in South Africa**
 - Joint with Jonathan Zinman

How is the Philippines Different?

- No credit bureau
- Dominated by rural banks and a couple NGO's
- Higher interest rates (60-80% apr)
- Rural areas more sparse geographically, clearly defined village concepts
- Most *do* take savings.
- No interest rate caps.
- Default typically 0-5%.

Group versus Individual Liability

- Green Bank of Caraga in the Philippines
- 150 joint liability Grameen-style centers
 - 75 randomly assigned to convert to individual liability centers, but weekly meetings remained intact (“treatment”)
 - 75 randomly assigned to remain as-is, under joint liability
- Outcomes:
 - No change in repayment
 - No change in savings
 - No change in allocation of time by credit officers
 - Higher client retention
 - Higher number of new members joined

Group versus Individual Liability

- Next steps:
 - What happens if groups are begun under group liability but told from the beginning that they will convert to individual after one successful loan cycle? Perhaps this is the right balance to strike?

How is Peru Different?

- Credit bureau new
 - Was difficult at first to get MFI's to report to it
 - Now most are.
- Higher interest rates (60-80% apr)
- Rural areas more sparse geographically
- Overall, low penetration
- Beginning to see large banks going downscale to the poor. Market still dominated though by NGO and pure microfinance.
- Most can *not* take savings. But many do so under a different name (e.g., loan guarantee fund)
- No interest rate caps.
- Default typically 0-3%

FINCA Peru

- FINCA Peru conducted market research and learned that clients wanted more education in business skills.
- Freedom from Hunger developed materials and trained FINCA Peru in their Ayacucho branch
- Atinchik developed materials and trained FINCA Peru in their Lima branch
- 239 village banks in Lima and Ayacucho
 - 138 randomly assigned to receive credit with education (“treatment”)
 - 101 randomly assigned to remain as-is, receiving credit only (“control”)

FINCA Peru Outcomes

- **Impact on MFI**
 - Repayment increased
 - Client retention increased 10%
 - Reciprocity? or improved business outcome?
- **Business processes**
 - Invested profits back in business
 - Keeps records from business
 - Implemented innovations in their business
- **Client outcomes**
 - Increase in average sales
 - Increase in worst-month sales
 - No increase in employment
 - Female children more likely to attend school

How is South Africa Different?

- High unemployment
- Much higher default rates (~15%)
- No screening on use of funds. Less (no) targeting to the poor or to microentrepreneurs or to women
- Huge consumer finance industry making cash loans to the employed
- Microenterprise lending, for the most part, has not taken off. Huge default, low take-up.
- **Very** high interest rates (7% - 30% per month)
- Interest rate caps came, went, and are coming again
- Huge concerns about overindebtedness. Firms punished for lending too much. National hotline to report instances.

Interest Rates and Credit Decision

- Do individuals care about interest rates?
- Yes. Particularly on increases from their prior rates.
- But, loan size **far more** sensitive to maturity than interest rate.
 - Lower interest rates and loan size goes up.
 - Extend maturity and loan size goes up A LOT.
 - Evidence of liquidity constraints

Credit Decision

- Is screening too rigorous?
- What is the impact of lending to those not being reached currently?
 - Lender uses credit scoring + subjective decision-making by branch manager.
 - Unrejected in real-time rejected clients.
 - Surveyed them 6-12 months later.
 - Positive impact on employment, wages and hunger.
 - Profitable for lender to lend to them.

Laundry List

- Price (interest rates)
 - South Africa project
 - Finds profit maximizing at current rates
 - Behavioral issues?
 - Finds evidence of information asymmetries
 - Finds psychology marketing matters far more than price.
- Entrepreneurial training
 - The poor know what to do with the money... they just need credit?
 - Karlan and Valdivia: FINCA - Peru Business Training
- Liability structure (joint versus individual liability)
 - Gine and Karlan: Green Bank of Caraga in Philippines
- Credit bureaus
 - de Janvry, McIntosh & Sadoulet et al in Guatemala
- Loan terms and frequency
 - Field and Pande in India

Laundry List

- Loan size
- Screening process
 - Karlan and Zinman: FMB in the Philippines, South Africa
- Links to formal insurance
 - Hospitalization, health, life, rainfall, cattle insurance
- Savings product design
 - Commitment savings (liquidity)
 - Goal
 - Price

Contact Info

- Dean Karlan:
 - dean.karlan@yale.edu
- Sendhil Mullainathan
 - mullain@fas.harvard.edu
- Websites:
 - <http://www.poverty-action.org>
 - <http://www.povertyactionlab.com>
 - <http://www.ifmr.ac.in/cmfr>
 - <http://www.deankarlan.com>