

# Expanding Credit Access: Using Randomized Supply Decisions to Estimate the Impacts

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# Win-Win

- ▶ Operations win:
  - Manage portfolio risk
  - Learn the most about profitability on high risk clients
  - Can build in tests of optimal decision making (soft versus hard information)
  - Can build in tests of other key loan features (term, interest rate, dynamic incentives, loan amount)

# Win-Win

- ▶ Research win:
  - Randomized control trial
  - Cleanly identified evaluation of impact of access to credit
  - Cleanly identified tests of product features

# Why an experiment to measure impact?

- ▶ Impact studies of microcredit have been done (and done and done and done...)
- ▶ Why an experiment?
  - Basic selection problems:
    - Who *chooses* to borrow? Entrepreneurial spirit? Resourceful individuals?
    - Who do MFI's agree to lend to?
    - Program placement: MFI's target growing areas
- ▶ First randomized trial on credit access

# What we do: Field Experiment on Consumer Credit Access

- ▶ Field experiment: randomly assigned loans to below-bar, first-time applicants for consumer credit in South Africa
  - Treatment = standard product: 4-month installment loan, 200% APR, unsecured, individual liability
  - Control = rejected per usual
  - Sample frame: working poor (Table 1)

# What we do:

## Outcome Measures

### Outcomes:

- ▶ Household survey: wide range of economic and subjective well-being measures 6–12 months out
  - Credit access: effect on constraints
  - Investments and well-being: ultimate impacts of interest
- ▶ Credit scores 15 and 27 months out
- ▶ Loan profitability

# Motivation: Finance–Growth Nexus

- ▶ Focus thus far on commercial, entrepreneurial credit
  - Money is fungible.
  - Even traditional microcredit → consumption
- ▶ What about explicitly consumer credit?
  - Growing in LDCs as well as DCs
  - “Traditional” MFIs adding products
  - FIs adding down–market segments

# Potential Productive Benefits of Consumer Credit

- ▶ Human capital investment
  - Education
  - Health (including food consumption smoothing)
- ▶ Labor markets
  - Transport, work training costs, uniforms, other search costs
  - Improve labor market efficiency
    - Better matching
    - Fewer separations
- ▶ Business investment
  - Money is fungible

# Potential Detrimental Impacts of (Consumer) Credit Access

- ▶ Behavioral biases » overborrowing?
  - Present-biased preferences (Ashraf et al; Benartzi and Thaler)
  - Present-biased perceptions: underestimation of borrowing costs (Stango & Zinman)
- ▶ Does restricting (formal sector) access mitigate bias' effects? Not necessarily.
  - May just end up promoting even more costly (over)borrowing in informal markets

# Experimental Design: Overview

- ▶ Engineer random variation in approval of some below-the-bar applications
- ▶ Finance company's normal underwriting process a combination:
  - Centralized credit scoring (recommendation/bounds)
  - Loan officer discretion
- ▶ What's in it for Lender?
  - Thought officers too conservative

# Impact Evaluation for Consumer Credit Policy

- ▶ Default policy prescription *restricts* access to (expensive) consumer credit
  - USA
  - Japan
  - South Africa
- ▶ Key evaluation question in consumer credit: can rule out *negative* impacts?
  - Contrast with microenterprise credit, where subsidies
  - Then need to worry about opportunity cost of subsidies
  - And getting (precise) estimate of impact magnitude more important

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- ▶ What's in it for Lender?
  - Senior mgmt thought officers too conserv.
  - Reluctant to tweak performance pay
  - Common for retail models not be fully optimized (Allen et al JBF 2004)

# Summary of Key Results

- ▶ Treatment: additional loan(s) to marginal consumer credit applicants, at 200% APR
- ▶ 10% points more likely to be employed
- ▶ 7% points less likely to be below the poverty line
- ▶ No adverse effects on credit scores 15–27 months out
  - And positive effects on having a score
- ▶ Marginal loans were profitable
- ▶ Results consistent with welfare gains from expansion of high-risk, high-cost consumer credit
  - Limited power on many outcomes
  - Most importantly we can rule out noticeable negative effects overall

# Replication Imperative

- ▶ One point in time
- ▶ One country
- ▶ One market
- ▶ Will this hold?
- ▶ As with all empirical work, replication mandatory for forming proper policies
- ▶ The simplicity and win-win for operations and research make this a replicable and evaluation strategy.

# Thank you.

- ▶ Innovations for Poverty Action
  - [www.poverty-action.org](http://www.poverty-action.org)
- ▶ M.I.T. Jameel Poverty Action Lab
  - [www.povertyactionlab.org](http://www.povertyactionlab.org)
- ▶ Financial Access Initiative
  - [www.financialaccess.org](http://www.financialaccess.org)