Finance

Dean Karlan, Northwestern University & USAID Nobel Symposium in Economic Sciences STIAS @ Stellenbosch, South Africa March, 2024

True Story

Reflection #1

Same slides as 20 years ago. Plus digital.

Microcredit Fans Claim....

- High marginal returns in business
 - > higher income
 - > higher consumption
- Less vulnerable to shocks
- Women empowerment within the household
- Group process builds solidarity and community development
- HIV/AIDS
 - Mitigation because now able to care for the ill
 - Mitigation because now able to adopt orphans
 - Prevention because women empowered

Microcredit Critics Claim...

- Business returns not that high...
 - Debt traps?
- Joint liability can destroy social networks
- Consumer protection laws not strong enough
 - 2024 Addition: Digital = 3 clicks-to-credit = awesome & scary
- Discourages savings mobilization
 - safer way for individuals to build up to investments
- Problem isn't merely credit
 - Info problem too: need business training alongside?

Contracting Questions

- Why group liability? Group lending (groups w/o liability)?
 - Improves selection?
 - Reduces moral hazard? Or could contagion → higher default?
 - Just cheaper to implement?
- Relational lending? Cash flow modelling?
- Interest rates
 - CGAP pushed lenders to increase rates, achieve market viability
 - Does demand slope down? (yes, some claimed not)
 - Importance of adverse selection & moral hazard w/r/t i-rates?

Behavioral Questions

- "Over"-borrow? (what does that mean?)
- With i-rate so high, why not save up?
 - If someone is borrowing @ 80% APR, they can save risk-free @ 80% by paying down their debt. Is that the best option for them?
- Behavioral challenges?
 - Temptation
 - Attention
 - Compounding underestimate?
- Trust?
- Social/household pressures?

Why Randomize

(abbreviated version from 2004 deck)

• Those who CHOOSE.....

• Weather.....

Road got built.....

Reflection #2

Heterogeneity across people, heterogeneity within person across time, & intermingling with other market failures = Complicated!

Reflection #3

Catch-22 of External Validity

Catch-22 of External Validity*

Understand "the why" to then make predictions
 Implicitly includes nuanced and detailed theory
 Inevitably requires a lot of data, across contexts & people & situations

Go NARROW

e.g., one industry, one firm size, one key decision, one moment, etc.

Precise understanding of "why", but low validity to countless other circumstances

Go BROAD

- e.g., all SME in a country or region
- Limited understanding of "why"
- but (handwave-y) results apply to broader cross-section of people/world/time/situations

Starting with the first question: Impact of "Standard" Microcredit

- Entrepreneurial credit, 7 countries, published in Science & AEJ-AE
- Meager (2019, 2022): Bayesian Hierarchical Analysis of the 7
 - Meh on average confirmed (precise zero from 5th to 75th percentile)
 - Noisy outside, but top end had promise, particularly prior biz owners
- How did "industry" respond?

How did Microcredit Industry Respond?

- Called their PR team, told before-after anecdote
- "But you didn't measure long enough"
 - 1-2.5 years
 - My reaction: we didn't measure short enough...
- "But look at our 100% repayment rates!"
 - Uhhh......100%?!?
- "But this is all on the margin"
 - No study compared zero formal lenders to a thick market
 - Fair. (Although for policy, expansion is the policy, not $0 \rightarrow 1$)
 - Breza & Kinnan (2021): Shifted my thinking considerably
 - Big (negative) impact from shutdown of industry in India

How have we researchers (mostly?) responded?

- Savings!!
 - (some of this preempted the credit)
 - Some progress from tagged, commitment, attention, lower costs
 - Ultimately, when ultra-poor, saving up takes a long time at best
- Improve selection
- Improve products: Match cash-flows
 - Rigid repayment = effectively higher i-rate (hold back \$ to make payments)
 - Lean season, conditional loans, flexible repayment timing for risk, bullet for farmers, delayed repayment for startup period
 - Many too scared of debt, don't even borrow (dream client!)

We put too much on any one paper

Implicit sub-point of the Catch-22 of External Validity problem

Here are some of my personal favorites, and their contradictions

Contradiction #1 Time inconsistent demand commitment savings?

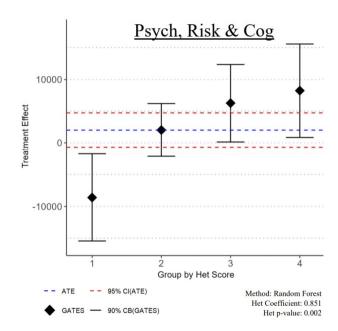
- Tying Odysseus to the Mast (Ashraf et al. 2006)
 - Those time inconsistent more likely to open commitment savings account
 - A few years later: did not replicate.
 - Karlan & Zinman, JDE, very very long footnote
 - Survey design changes
 - Surveyors different (marketers vs surveyors)
 - Prior clients vs new clients
 - Bad luck, sampling variation
 - · Commitment rules changed

Contradiction #2 Standard vs consumer credit

- Remember the 7 "standard" microcredit:
 - Entrepreneurial not loans-to-workers
 - Lower i-rates
 - But meh average impacts
- Prior, Karlan & Zinman (2009), South Africa consumer microlender
 - 200% APR
 - 11 percentage points more likely to be employed!
 - Average household income accordingly up
 - Lesson is about credit-->risk management a la Udry (1996).

Contradiction #3 Is selection positively predictive of impact?

- Egypt, attempt to shift micro → SME (Osman et al. 2023):
 - Average impact of 4x vs 2x loans: small positive impact
 - HUGE heterogeneity
 - Over-optimistic: BAD
 - Realistic (or under?): GOOD
 - Will it replicate????
- BUT:
 - Mali, farmers, Beaman et al (2023)
 - Farming-tailored loan
 - · Borrowers: high returns to capital
 - Non-borrowers: zero return to capital



Contradiction(s) #4, 5,6,7,8...: Flexible Lending Produce Consistent Results?

- Six recent(ish) papers
 - Field et al. (2013)
 - Barboni and Agarwal (2022)
 - Battaglia (2021)
 - Brune et al. (2023)
 - Shonchoy and Kurosaki (2014)
 - Aragon et al. (2020)
- Results QUITE mixed
 - Higher firm growth. Or not. (no harm)
 - Higher default. Or not.

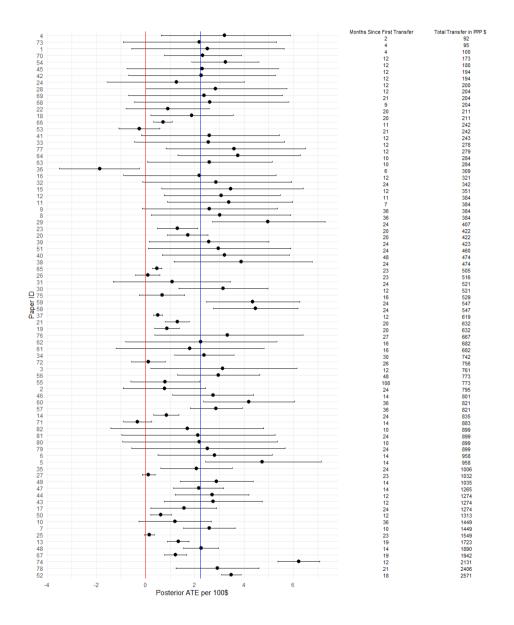
Strikingly Consistentish

Meta-Analysis 114 UCT Cash Transfers Papers Crosta et al. (2024)

Sorted by Total Grant Amount

Key result:

Impact per \$ linear w/r/t grant size



Strikingly Consistentish

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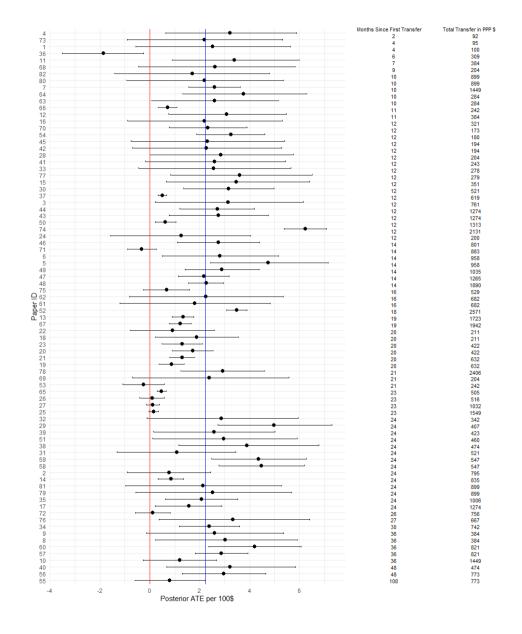
Sorted by Time since transfer

Key result:

Lump-sum: persists, but diminishes

Stream-ongoing: amplifies

Stream-ended: converges to lump-sum



Where does this leave us?

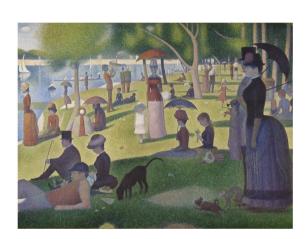
Where we are

Where we can get

Where we will never be







Need more replication, syncing & coordination & measurement research

Theory + Empirics → External Validity → Better Policy

Thank you!

Dean Karlan

dean.karlan@gmail.com