Scaling up SME Loans: Products with Dynamic Incentives

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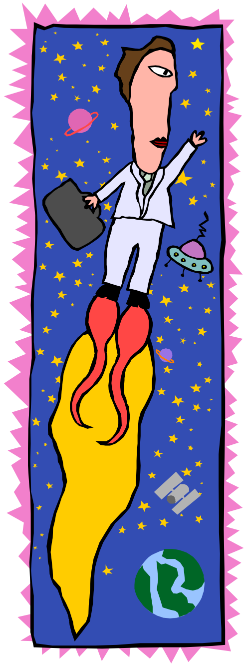
Motivation

- Last slide of Chris' presentation in the IPA SME September 2011 conference:

High returns, heterogeneity, high variance

- What does this imply about optimal contracts for providing capital?
  - State-dependent?
  - Equity?
  - Identifying those with better prospects?



Questions

- Long term
  - How should financing products aimed at *scaling up high growth* SMEs look like?
- Immediate
  - Test empirically whether the necessary conditions for such a product to be feasible exist

Innovation Example: Dynamic Incentives

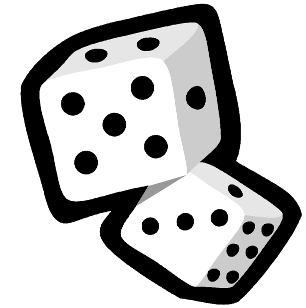
- Contract features that offer higher future payoffs to high growth entrepreneurs
  - Promise of higher future lending (growth)
  - Performance pricing (separation)

→Theory: Self-selection

(example: Manso-Strulovici-Tchistyi 2010)

→ Practice: Features exist in current small business credit card products

RCT Design Example



- Goal: measure effect of performance pricing on self-selection of high productivity borrowers
  - Design similar to Karlan-Zinman 2009
  - Suppose: SME/micro lender, max. credit of $1,000, rate r

- Treatments:

T0. (25%) Offer nothing

T1. (25%) Offer $500 loan (add.); rate r

T2. (50%) Offer $500 loan (add.); rate r; missed repayments on additional loan increase rate to $r_1 > r$ on all balances

T3. Remove perf. pricing to half of T2 sample after selection

Discussion

- Interpretation
  - T3 – T1: pure selection effect of perf. pricing (0, +)
  - T2 – (T3 – T1): pure repayment effect of perf. pricing (–, 0)
  - T2 – T1: overall effect of perf. pricing (?)

- Caveats in implementation
  - Corner solutions (0% or 100% take-up)
  - Power: extensive margin requires large samples
  - Relevant outcomes: repayment and return on investment
  - Partner: looking to scale up
  - Cost: expensive if capital must be funded externally

Necessary Conditions for Positive Selection Effect

- Low incentives to “take the money and run”
  - Default must lower SME returns (ex. some assets to seize)
- Entrepreneur cares about risky future payoffs
  - Discount factor, risk aversion: Karlan-Zinman 2009, Cadena-Schoar 2011, Cole-Gine-Vickery 2011
- Entrepreneurial success driven by permanent characteristics (not luck), observable by entrepreneur
  - Human capital, business plan: McKenzie-Woodruff 2008, Kaplan-Sensoy-Stromberg 2009
  - Entrepreneurs know their own “type”: ?
- Entrepreneurs understand the product

Thanks!