Center for International Development
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Entrepreneurship, finance & the missing middle

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Outline

- Entrepreneurship & Development
- The missing middle
- Causes of the missing middle
- The challenge of financial intermediation
- Current approaches to the missing middle and their limits
- Potential solutions

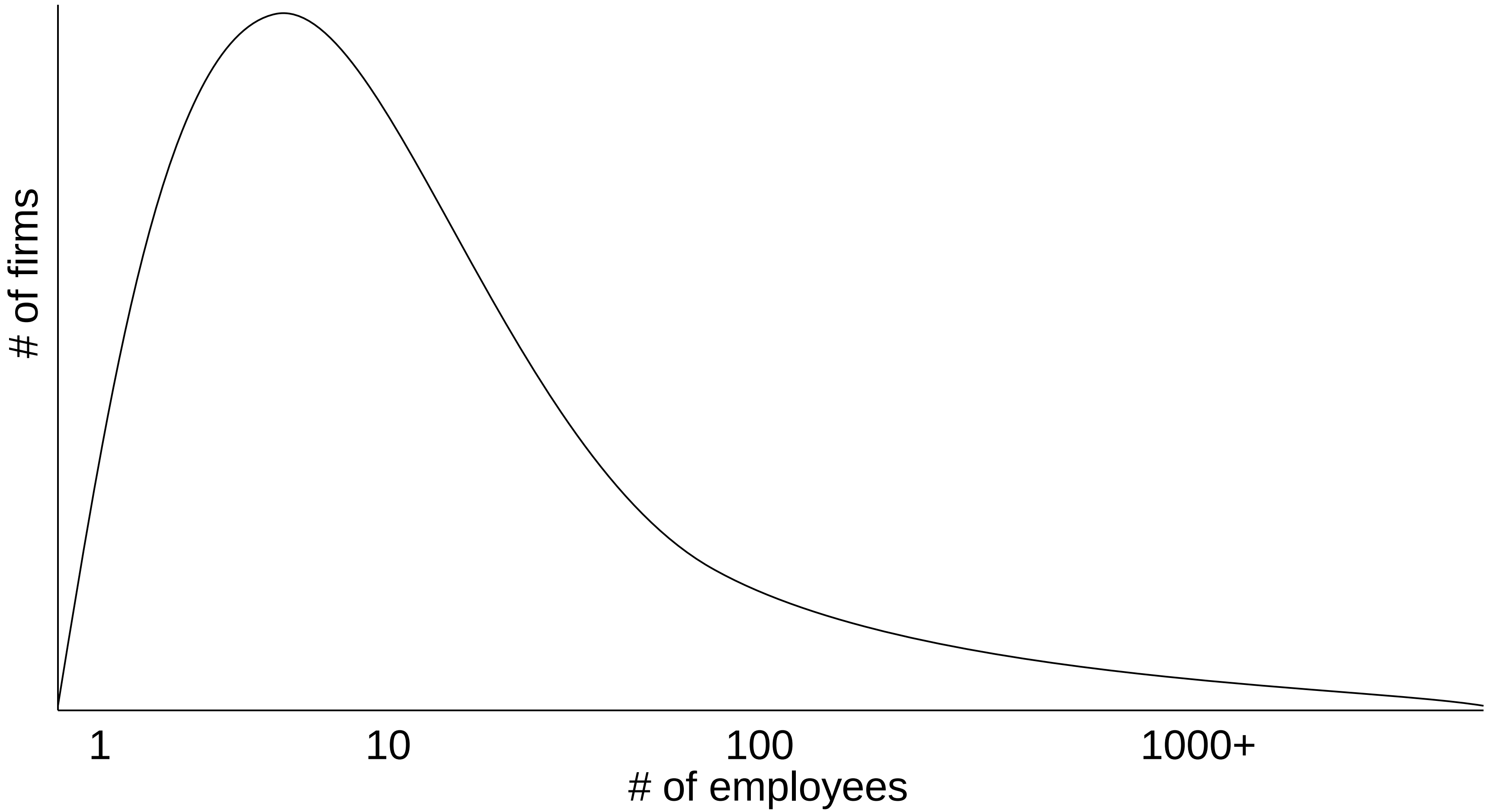
Entrepreneurship & Development

- 50s & 60s: countries are poor because they don’t have enough entrepreneurs
  - i.e. the ‘supply side’
- But when economic conditions in LICs improved in the post-war period, there was a strong supply response
  - With opportunities and an appropriate environment, some entrepreneurs emerged

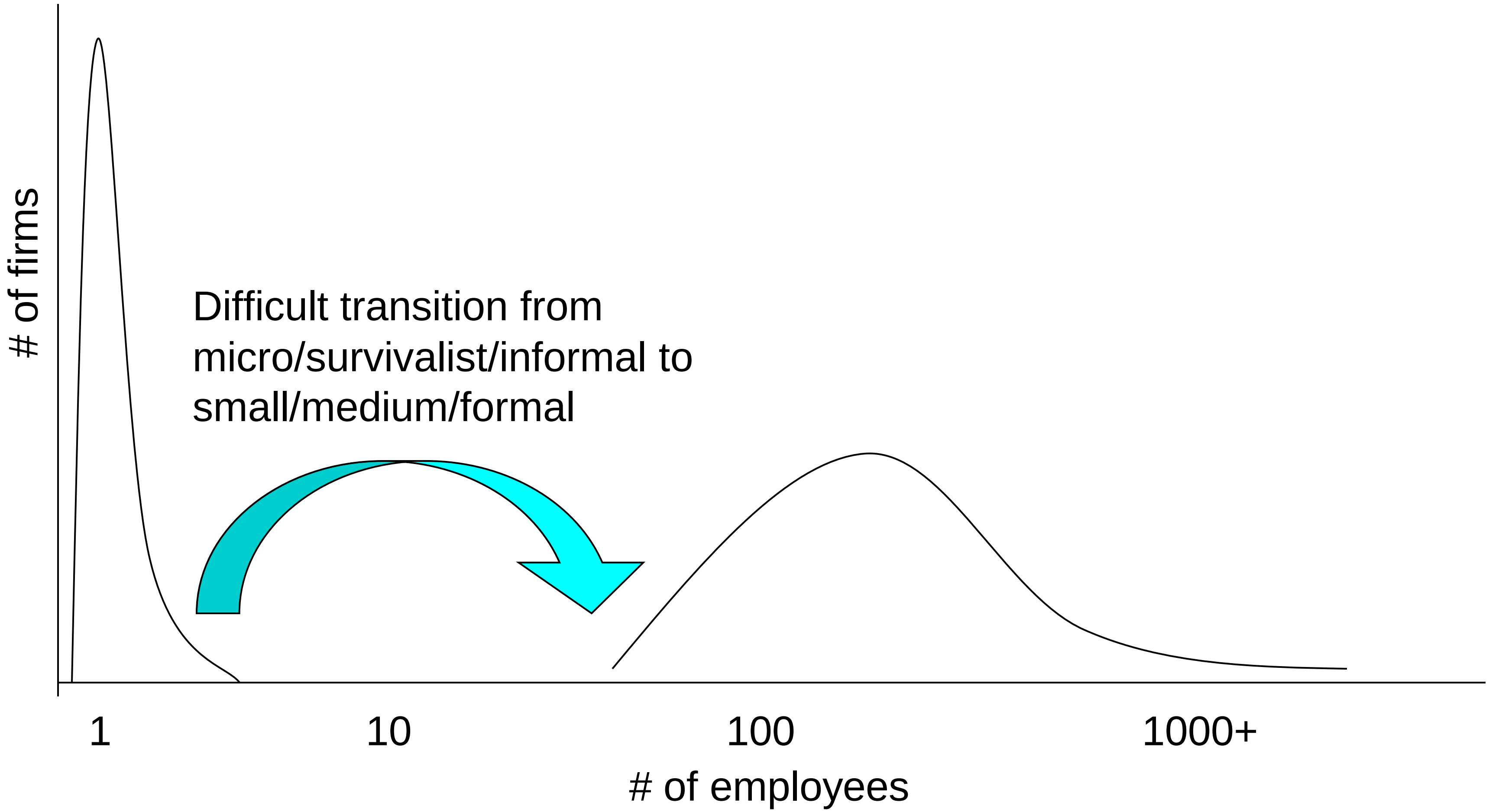
Entrepreneurship & Development

- Yet, problems remain:
  - Limited technological entrepreneurship (innovation and technology adoption)
  - Bias against entrepreneurship as a career path, and even hostility against it (unlike the US)
    - Particularly when entrepreneurship was concentrated in minority ethnic groups
  - Barriers to entry in entrepreneurship (particularly access to finance)
  - The result: the ‘missing middle’

Typical Firm Size Distribution in Rich Countries



Typical Firm Size Distribution in Developing Countries – The Missing Middle



Source: Tybout, “Manufacturing firms in developing countries: how well they do and why?”

Causes of the Missing Middle?

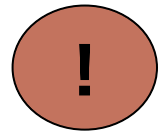
- Could be costs of formality, labor market regulations, institutions, culture, etc.
  - These are all **low returns** stories

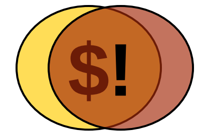
- Yet Very High Returns in this Gap
  - Returns in excess of 5% *a month (80% annual)*
  - Across a wide variety of countries & firm sizes
  - So despite all of the costs & inefficiencies, entrepreneurs can earn much more than the banks's cost of capital

- Unexploited high returns means there is a problem with **financial intermediation** in this segment

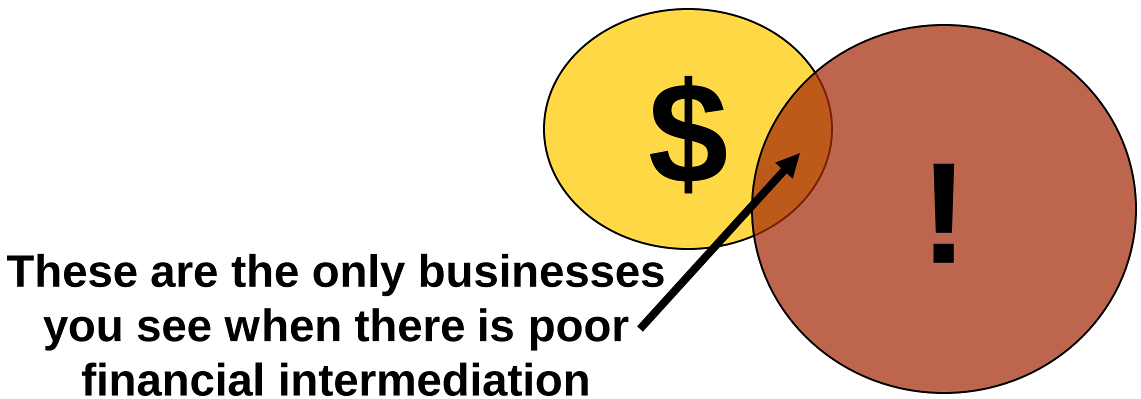
Financial Intermediation

- What is (growth-enhancing) financial intermediation?
  - ***Matching*** 

Money 

to Ideas: 

- Why needed?
  - Because typically distribution of wealth and ideas does not fully overlap:



- Why countries w/ poor financial intermediation have family-controlled conglomerates, foreign-owned firms
- Results in few productive firms, high inequality, idle capital, and many lost but profitable ideas

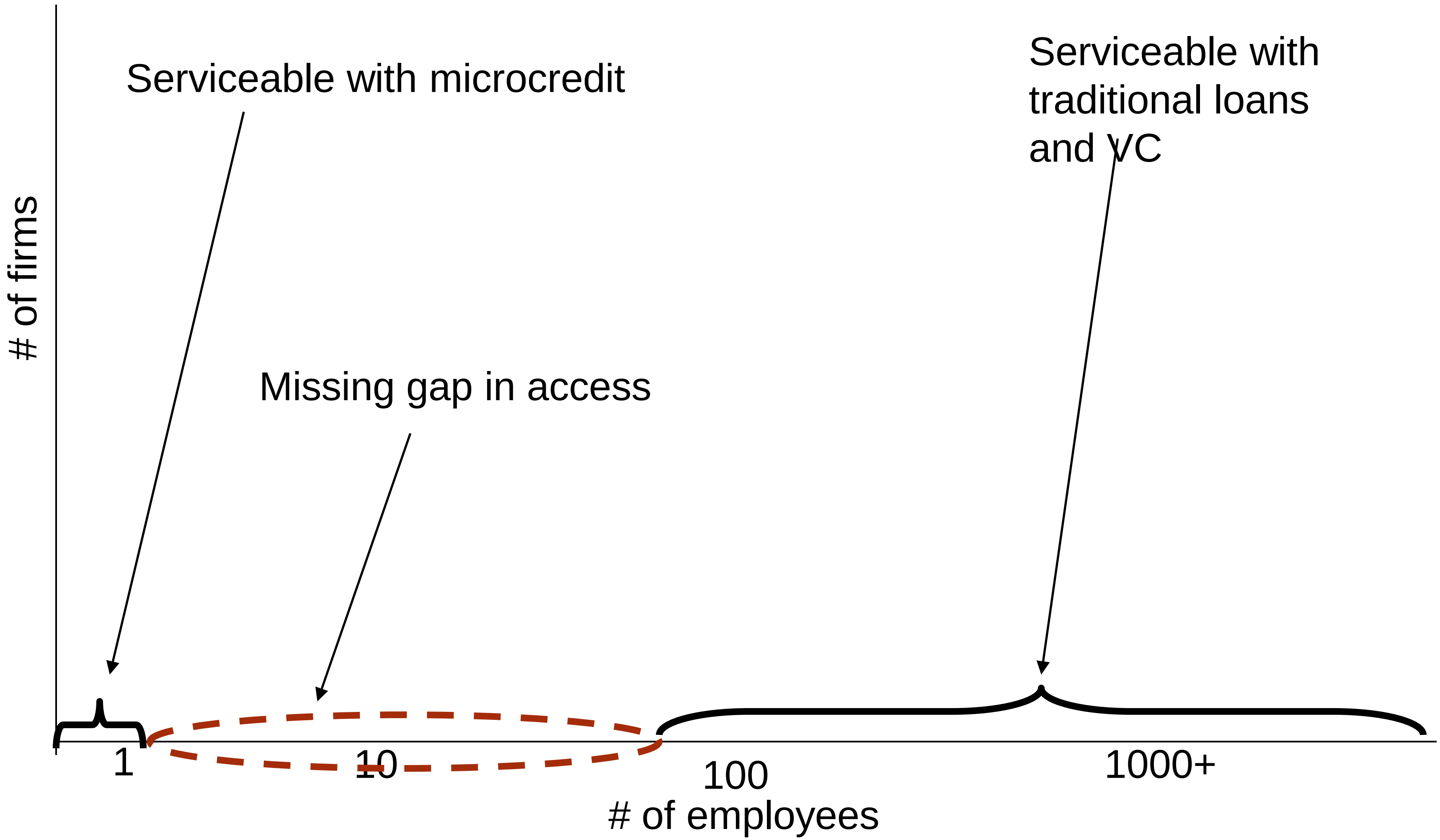
Why is it so hard to match?

- **The Screening problem:**
  - Investor needs to identify and value ideas
    - Identify: How do you find the potential entrepreneurs?
    - Value: How to you determine future value of an idea?
  - Very costly to screen:
    - Banks – performance/credit history; VCs – elaborate due diligence

- **The Monitoring problem:**
  - Investor needs to ensure pay-back
    - Moral Hazard – entrepreneur may misuse/hide money
  - Very costly to set up monitoring mechanisms
    - Banks – collateral; VCs – direct monitoring

- **As a result of these Informational problems**:
  - Little financing for the “Smart poor” in Developing countries

Traditional approaches to screen & monitor



Microcredit?

- Microcredit allows poor to start up informal 0 – employee micro-enterprises (MEs)
- BUT MEs rarely grow to become SMEs (survivalist to opportunity-based) & suffer persistently low productivity (Brookings 2007)
- Micro-credit solves Screening & Monitoring through joint liability:
  - Screening – get local group/borrower to identify "good" borrower
  - Monitoring – get local group/borrower to monitor borrower
- Why microcredit & group lending doesn't work for such firms:
  - Joint Liability not as effective at enforcement
  - Amounts needed are too large
  - Group lending has too little risk tolerance & too short a term structure for capital investment

Banks?

- Ask yourself:
  - What is likelihood S&L could have gotten a bank loan to start Google?
- Banks (mostly) designed to lend money against money:
  - Large Collateral requirements
  - Need credit history:
    - Most firms in LICs don't have this history
    - Chicken and Egg problem – how can smart poor have a credit history when no one lends
  - Since no upside for banks care less about entrepreneur's future worth than current net worth
- Increasing evidence that banks plagued by rents, inefficiencies, cater to large firms

What about VCs?

- Do care about entrepreneurs' upside
- Appetite for financing innovations
- Screen for good ideas and Monitor though equity stake

- BUT:
  - Have long and expensive screening process
    - Because a low failure rate is necessary
    - And because selection mechanisms aren't automated
    - Too costly for missing middle firms

  - Profits are earned through 'exit' (selling or listing the firm)
    - Limited exit options for missing middle firms

So What Can One Do?

- Need to Develop:
  - Cheaper/automated ways to screen & monitor
  - Capture upside (without exiting)

- Learn from Developed Economies?
  - Main innovation in US to fill missing middle
    - Treat small firms like individuals (as VCs do):

      Judge the person
    - Don’t evaluate business plans and estimate cash flows (costly)
    - Instead, lend based on a credit model drawing mainly on the owner’s individual credit history (Fair Isaac)
    - Innovation Key as it lowered costs (replace loan officers with credit scoring models)

  - Not surprising since large fraction of businesses in US setup on credit card debt

So is that it? Are we done?

- Why can’t developing countries do the same thing?
  - There aren’t (yet) enough detailed credit histories
    - Chicken & Egg again
  - Could wait but not certain How long & at what cost?

So the Challenge to us all

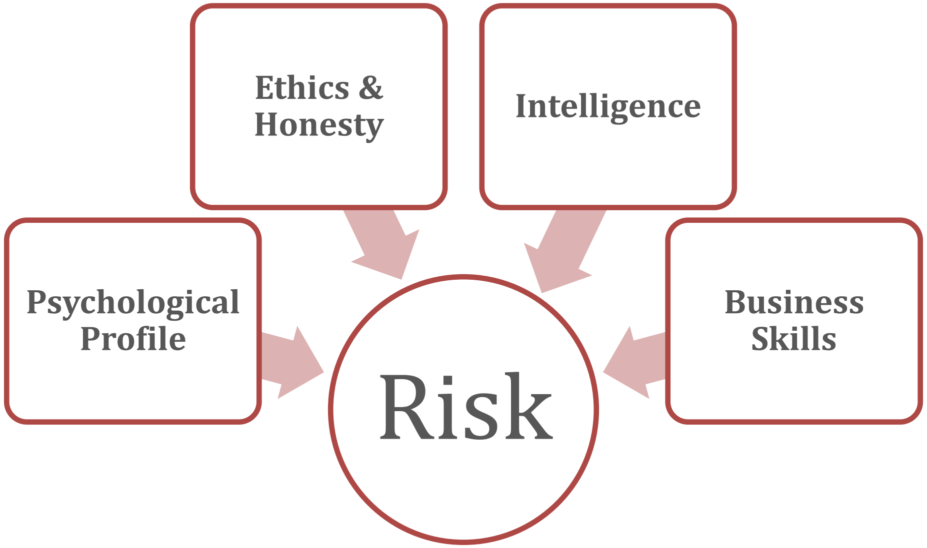
- Information innovation:
  - Find **cheap** (automated) ways to identify idea/entrepreneur
    - but without relying on wealth, credit history, family links
- Once identified, **cheaply** ensure:
  - Entrepreneur puts in effort
  - Entrepreneur does not “take the money and run”
- Embed the above in a financially viable/profitable tool:
  - Need banks/VCs/Funds to see this as profitable opportunity to get scale
  - This innovation could unlock billions of idle capital worldwide and (even more) idle ideas in LICs

Some ideas we've been working on

- Screening Innovation:
  - VCs say get a 'pretty good idea' about ability in 15 minutes
  - Use psychometric evaluation tools to automate this
    - "Measure" Entrepreneurial ability etc.
    - Prevalent, commercially viable in other contexts (Employment screening etc.), empirically linked to entrepreneurial success
  - Tests are designed to overcome gaming
  - Ultimately build an Entrepreneurial Score database (like FICA etc.)

- Financial Innovation:
  - Subsidize failed investments with the successes (80% yr)
  - Tie in with micro-equity to capture upside

- Screening innovation is done using EFL's **psychometric testing process**
  - 30-40 minute automated assessment
  - Analyzes key dimensions spanning intelligence, business skills, and psychological parameters
  - Measures the 'jockey' rather than the 'horse'
  - Technology developed by Harvard-based lab funded by Google



- EFL has spent over three years developing and pilot testing this technology

- We have tested 2300 microenterprise and SME owners across 7 countries and 8 languages

Bancolombia

- Partnership with Bancolombia since 2009
- Tested 270 ‘emprendedor’ clients with half the test
- Also tested 250 microenterprises with Bancamia

- The results are very encouraging…
  - Potential reduction in default from 20% to 45%
  - Increase in profitability of 15 to 30%
  - At a fraction of the cost of traditional evaluations and due diligence

Conclusion

- Huge growth opportunity if we can finance missing middle:
  - There is a 100 dollar bill (actually, a 3.6 trillion dollar bill) lying on the ground
- Existing Tools insufficient:
  - BUT everyone is trying:
    - Micro-Finance increasing scale; Banks/VCs reducing it
- Need Informational innovations
  - Example – psychometric screening
- Experimenting is cheap
- And if it works, the pay-off is **enormous**