### Comments to Session 1A "Entrepreneurship and Access to Credit"

Xavier Gine

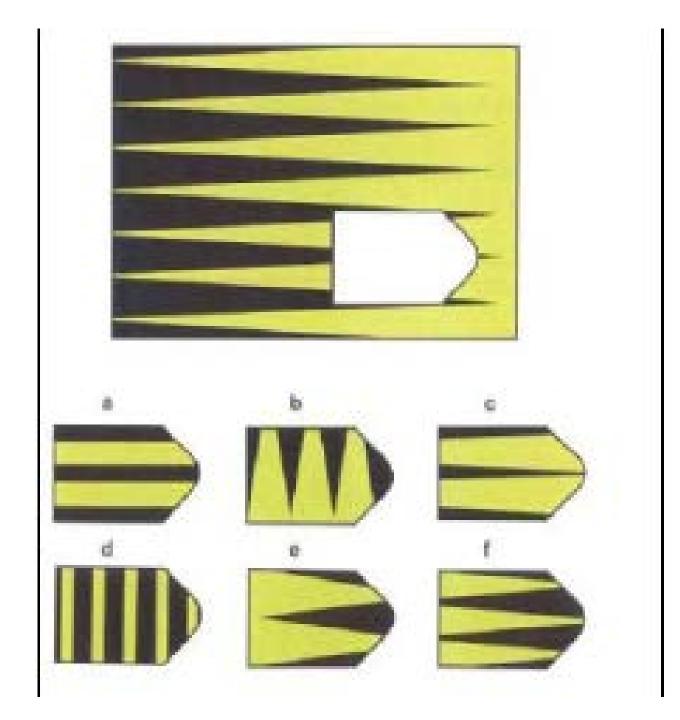
World Bank

### Summary of "Psychometric tests"

- Goal of paper is to use a psychometric tool to improve credit scoring
- So what is a credit score?
  - Fancy probit model to predict the probability of default based on individual characteristics and past credit history
    - No data for previously "unbanked" individuals
    - Limited sharing and coverage of information

### Summary of "Psychometric tests"

- What is a psychometric tool?
  - Assesses individual traits with a personality assessment "Big 5 model", digit span recall, an integrity assessment and Raven matrices.



### Summary of "Psychometric tests"

- What is a psychometric tool?
  - Assesses individual traits with a personality assessment "Big 5 model", digit span recall, an integrity assessment and Raven matrices.
  - Goal is to measure the ability and willingness to repay

- Who is the tool applied to?
  - If there is division of management into finance / production / etc, then who is the relevant person? Is one trying to capture the culture of the business?
- Overfitting using new model. Are data used to fit the model different from data to validate it?
- Sample: Data only available on applicants?
  - How does EFL distribution compare among applicants and non-applicants?

		Traditional Model decision (TM)			
		Accept	Reject		
EFL decision	Accept	(1) Accepted	(2) Accepted		
		659 entrepreneurs	158 entrepreneurs		
		(20.6% unbanked)	(10.1% unbanked)		
		(23.5% got loan from the implementing	(24.7% got loan from the		
		institution)	implementing institution)		
	Reject	(3) Accepted	(4) Rejected		
		860 entrepreneurs	209 entrepreneurs		
		(25.1% unbanked)	(7.2% unbanked)		
		(29.3% got loan from the implementing	(0% got loan from the		
		institution)	implementing institution)		

		Traditional Model decision (TM)			
			Accept	Reject	
EFL decision	Accept		(1) Accepted 659 entrepreneurs (20.6% unbanked)	(2) Accepted 158 entrepreneurs (10.1% unbanked)	
		(23.	5% got loan from the implementing institution)	(24.7% got loan from the implementing institution)	
	Reject		(3) Accepted	(4) Rejected	
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- H1. Among accepted by TM, those rejected by EFL should have higher default.
  - H1 holds for banked but not unbanked sample
  - Unbanked more likely than bank to have sole manager. Yet, results show no improvements for the unbanked.
    - Is this about power (N = 1167 vs N = 352)?
- H2. Rejected individuals by TM but accepted by EFL should have same default as those accepted by TM
  - H2 does not hold for banked sample but it does for unbanked sample.
    - 0 result could be due to low power.
- H3. Among unbanked, individuals accepted by EFL should have higher probability of getting a loan
  - Result holds but it is akin to a "first stage".

### **Other Comments**

- Why use old (using coefficients from Africa) and new (using coefficients from data from actual lender) used? What do we learn, exactly?
- Correlation between both (EFL and TM)
  measures? Scatter plot of each measure in each
  axis, with lines in the relevant cutoffs.
- What happens if the actual (continuous) EFL measure is used, rather than dummy for accepted / rejected?
- GE effects. Results with only one lender using EFL measure. What if lender uses it?

# Summary of "Opportunity vs Necessity"

- Goal is to classify female microbusinesses into necessity and opportunity business.
  - Proxy for opportunity is "reason to start business"
- Important for policy
  - Better targeting of government programs to either ease transition into wage work or to provide business training and access to services

# Comments on "Opportunity vs Necessity"

- Measure of Opportunity:
  - Would be nice to have panel data.
  - Perhaps people ex-post rationalize answer...
     successful businesses tend to say they started a business because of opportunity
- Instrument may not satisfy exclusion restriction.
   GDP growth and state of economy may directly affect outcomes.
  - Also, controls are endogenous... so why have them at all?

# Comments on "Opportunity vs Necessity"

- Data Quality
  - If opportunity firms have better recordkeeping, then measurement error is non-classical
- Timing of elicitation
  - Can non-cognitive skills and business practices be learned? If so, then to say that opportunity firms have higher profits and better business practices & non-cognitive skills may be a bit tautological.
  - Ideally one would like pre-determined predictors of opportunity
    - Comparison of opportunity with high necessity performers may be problematic

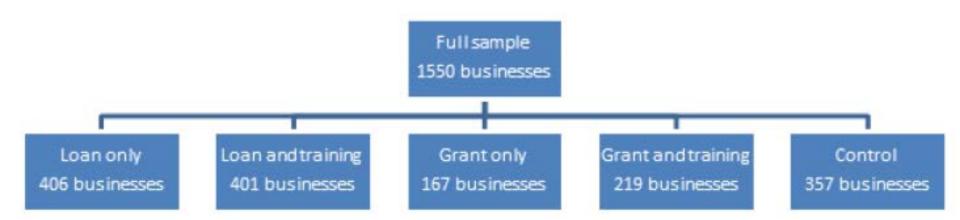
# Comments on "Opportunity vs Necessity"

#### Cohort analysis:

- Take all firms that are 1 year old, 2 year old, etc.
- Is there higher variance in outcomes among opportunity? Do necessity business act more conservatively?
- More generally, there should be differential turnover... When GDP growth is high, necessity businesses should shut down while opportunity businesses should grow. Is this true?

### Summary of "Business is Tough"

 Interesting design to measure the impact of different policy options to improve productivity of small businesses



### Summary of "Business is Tough"

#### • Results:

- Men benefit from Loan & Training only
- Women do not benefit from anything
- When interactions with willingness to hide money are included
  - Single men perform best
  - Married men that do not hide do well too, but those that hide show no impact
  - Opposite effects for women

### Comments on "Business is Tough"

- Definition of business ownership and control in a household
  - Do both spouses have a business that they have full control over? Or do both spouses work in the same business under different capacity?
  - If the former, are there cross-reports of business profits? Are there accurate?
  - Is it typically the case that male businesses are larger and with more potential than female businesses? Could this explain the contradictory results in the game?

### Comments on "Business is Tough"

#### Sample

The sample consists of individuals interested in borrowing. If men and women face a different selection process the results could be due to the differences in characteristics and not in gender per se.

#### Design

- Why no effects of grants? Selection story?
  - Grants should entail an income effect (infinite grace period)
  - Were grants given in kind or in cash? Were they easier to appropriate than loans?

### Comments on "Business is Tough"

- Timing of loans / grants relative to training?
- Hiding game:
  - Correlation between hiding income and decisionmaking power
  - Could game proxy for bad performance? If so, then pressure to share is correlated with outcome and one has reverse causality. Results would be different if played at baseline.
    - But this does not explain results for women!