Measuring Preferences and Values: Survey and Experimental Techniques

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Fundamental Preferences

- Agent-based models link outcomes (income, educational choice, lifestyle, etc.) to preference parameters, and beliefs, at the individual level.

- There is still a lot to be learned about the empirical distribution of fundamental preference parameters, within and across nations/populations.
  - Trust, reciprocity, willingness to take risks, impatience, preferences for redistribution, conception of social justice.
  - More evidence is needed, especially from developing countries.
Why is this relevant?

- Differences across individuals/groups have crucial implications for explaining important dimensions of poverty.
- Policy prescriptions must appreciate differences in preferences/culture.
- How can preference parameters and beliefs be measured, reliably and on a large scale?
- What environmental/background factors contribute to the formation of these behavioral traits and beliefs?
  - Age, gender, etc.
  - Parents.
  - Life events.
  - Poverty.
Measurement

• Choice experiments:
  • Simple experiments can be conducted in the field, with large representative samples.
    • Also in developing nations.
  • Compelling because measure actual behavior.
  • Useful complement to survey measures, not a substitute.
  • Examples of games usable in the field:
    • Trust game.
    • Simple social justice game with voting.
    • Risk-taking experiment.
    • Impatience experiment.
Measurement

- Survey questions:
  - Low cost, can be used on a very large scale.
  - More direct elicitation than revealed preference approach used in experiments.
  - Need not be cardinal.
  - E.g., qualitative questions asking:
    - “How willing are you to take risks, in general?”
    - “How much can people be trusted these days?”
    - Response scale from 0 to 10.
  - Can be validated, or cross-checked, with cardinal measures from experiments.
Recent Projects of our Group

• Risk Attitudes in a population (Germany).
General Risk question and risk taking behavior

N = 500
Responses on General Risk Attitudes:

All Respondents - SOEP 2004

Fraction

0 0.05 0.1 0.15 0.2

0 = completely unwilling; 10 = completely willing

N = 22,000
Willingness to Take Risks: By Age and Gender

N = 22,000
Cardinal Risk Preference Parameters: CRRA Preferences
Recent Projects

• Risk Attitudes in a population (Germany).

• Time preference, hyperbolic discounting.
Time Discounting in the German Population

N = 500
Recent Projects

• Risk Attitudes in a population (Germany).

• Time preference, hyperbolic discounting.

• Intergenerational transmission.
Child’s Risk Attitude as a Function of Parent’s

Notes: Weighted regression lines, taking into account number of parents in a given category.
N = 10,000
Child’s Trust as a Function of Parents’

Notes: Weighted regression lines, taking into account number of parents in a given category.

N = 10,000
Recent Projects

• Risk Attitudes in a population (Germany).

• Time preference, hyperbolic discounting.

• Intergenerational correlation in risk and trust attitudes.

• Risk attitudes, impatience, and cognitive ability.
Risk Attitudes, Impatience, and Cognitive Ability

N = 1,000
Potential for Studying Poverty

• Development of a module on preference parameters/beliefs for large scale surveys, supported by field experiments.
  • Comparable across different countries.
• Understanding of how development context shapes preference parameters and beliefs.
• Stability and evolution of preferences and attitudes over time.
  • Adaptation.
  • Intergenerational transmission.
  • Education
Responses on General Risk Attitudes: Differences Females-Males

Gender Differences

Difference in Fraction

0=completely unwilling; 10=completely willing