PROMISES AND PARTNERSHIP

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November 15, 2022

Overview

Main Question

Impact of communication on trust and cooperation.

- How does communication influence motivation and behavior?
- Communication may influence motivation and behavior by influencing beliefs about beliefs.

* Will promises enhance trustworthy behavior and why?

Trust Game with "dilemma"

- selfish risk-neutral players: A (principal), B (agent) positionwiidth
  imgs/game1.png
  Sol: *Nash* − *bargaining*(*effort*&*wage* : *enforceable*)
- (*Out, Don't Roll.*): unique backward-induction solution.
  Agent exerts less effort, resulting in principal refuse to form a partnership.

Notion of guilt aversion

- $t_A \in [0,1]$ probability that A assigns to *Roll*. $t_B \in [0,1]$mean of B's belief of t_A

imgs/game3.png

- *Don't*: A gets 0. B believes A believes A will get $t_B[(5/6)\cdot 12 + (1/6)\cdot 0]$=$10t_B$. The difference, $10t_B$ - 0 = $10 \cdot t_B$, measures how much B believes he hurts A relative to what A believes she will get, if he chooses *Don't Roll.*.
- If B chooses *Don't Roll.*, he therefore experiences guilt in proportion to $10 \cdot$ tB

Questions

- If other concerns motivate the players, perhaps communication will matter.
- written-form message
- **The relevance of guilt aversion**: Are *Roll* choices more common when (our measure of) t_B is high?
- **The role of communication**: Are In and *Roll* choices more common in the message treatments, and is this coincident with higher t_A and t_B values, as the guilt-aversion hypothesis would suggest?
- **Content of the message**: Do promises or statements of intent play a special role in moving the frequency of choices and values?

Trust Game Design

First two treatments: exactly the game parameters displayed in Γ1.

- First treatment, no messages were permitted.
- Second treatment, each B had the option to send a nonbinding message to A prior to A's choice of *In* or *Out*.
  - All B's were given a sheet of paper (could decline), were transmitted to A before the choice of *In* or *Out*.
  - Next, B chose whether to *Roll* or *Don't Roll*.
  - After the decisions had been collected, a six-sided die was rolled for each B.
  - This roll was determinative if and only if (*In*, *Roll*.) had been chosen.

Trust Game Design

Next two treatments: payoff vector was (7 7) rather than (5 5) in case A chose *Out* - Robustness Test

- Conducted after observing considerable effectiveness for communication.

- The gap between A's expected payoff of 10 after (*In*, *Roll*) and A's reservation payoff is smaller, *In* presumably less attractive to A.
- (Perhaps) effective communication is (perhaps) ineffective.

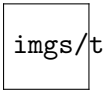
Trust Game Design

Final two treatments: Switch Message Sender and Receiver

- Conducted after observing considerable effectiveness for communication.
- Conducted after observing the results in the first two initial treatments.
- Here we use the (5 5) reservation payoffs of our first two treatments, but change who gets to send the message, so that A sends a message to B.

Main Table

strong correlation between beliefs and behavior



- Guilt aversion predicts a positive relationship between B's second-order beliefs (t_B) and the likelihood that B choose *Roll*: A's who chose *In* made higher guesses about likelihood of *Roll*, B's who chose *Roll* made higher guesses.

Conclusion

Evicence & Notion

- Promises (or statements of intent) sent from agents to principals enhance trust, cooperation, and efficiency.
- The evidence squares well with a notion of guilt aversion, which implies that the more the agent believes his principal expects to be helped, the more likely the agent is to actually help.
- Hypothesis (that our measure of t_B is correlated with the likelihoodof a *Roll* choice) predicts a positive relationship between the likelihood of Roll choices and t_B in $\Gamma 1$

Discussions

Notion of guilt aversion against the fixed cost of lying: people do not like to lie.

- Merits:

* Guilt aversion can explain selfless choice in contexts where lying does not occur
* Guilt aversion admits that in certain contexts decision makers do not suffer if they lie (as long as this is expected).

Discussions

Notion of guilt aversion against the fixed cost of lying: people do not like to lie.

- Might expect a difference in *Roll* behavior across the A-message and B-message treatments in the (5 5) outside-option case, controlling for B's guess.

$$Roll = 1.924 + 0.027^{**} Guess + 0.054 A\_message - 0.010^{*} A\_message * Guess \quad (1)$$

- Participant B's guess is important for B's decision whether to *Roll*, but there is no difference across treatments (reflected in the insignificance of the coefficient of both terms with an A-message dummy). This indicates that, holding beliefs constant, B's in the B-message treatment are no more likely than B's in the A-message treatment to *Roll*, suggesting that a fixed dislike of lying is not a major factor in our data.