How to Encourage Socially Responsible Behavior?

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Outline

1. What is socially responsible behavior?
2. Is there any reason to encourage it?
3. If so how?
   a) What drives socially responsible behavior?
   b) Can the drivers be affected?

What Is Socially Responsible Behavior?

Charitable giving Volunteering Conciliating Whistleblowing*

*”*I felt that as an American citizen, as a responsible citizen, I could no longer cooperate in concealing this information from the American public. I did this clearly at my own jeopardy and I am prepared to answer to all the consequences of this decision.*” Daniel Ellsberg

Other Socially Responsible Behaviors

- Recycling
- Not flying
- Not littering
- Boycotts
- Buycotts
- Paying taxes (?)
- Reducing consumption

Definition: ISR

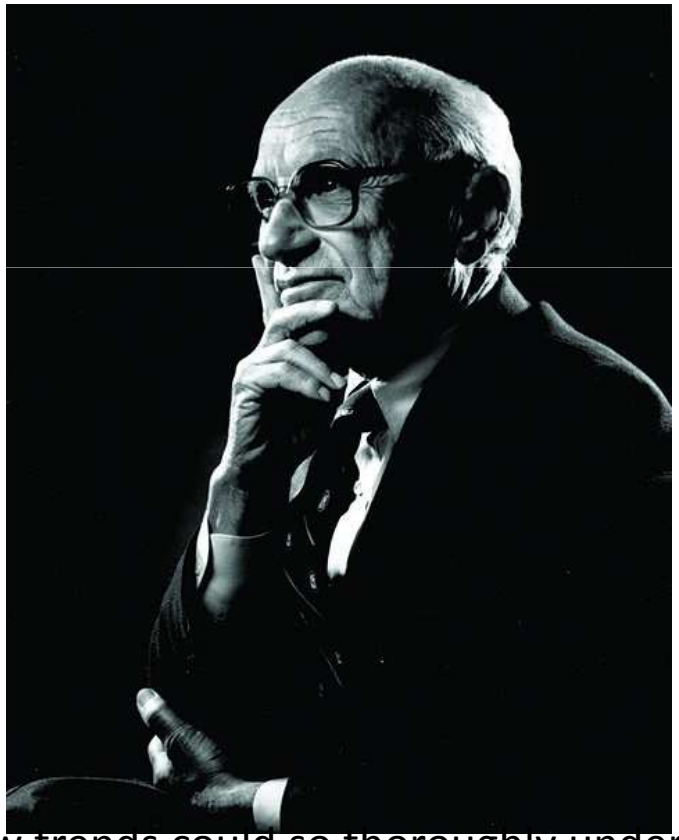
- **Individual Social Responsibility - Economics**: A sufficient condition for an individual to be socially responsible is that she is willing to *incur a cost, in terms of forgone consumption, leisure, or status, for the benefit of someone else* (outside the family).
- **Cooperation – Biology:** Cooperation is to pay a cost (in terms of own fitness) for the benefit of someone else.
- Note: Never talk about voluntary sacrifice of utility in economics!

Definition: CSR

- A corporation is socially responsible if the owners are willing to sacrifice shareholder returns for the benefit of others (to whom the owners are not directly linked).
- CSR may still be profitable!
  - The promise not to exploit trust invites trust.
  - For more on the economics of CSR, see Benabou and Tirole, Economica (2010, 1-19).

Is Social Responsibility Useful?

Some say no – at least to CSR



- Few trends could so thoroughly undermine our free society as the acceptance by corporate officials of a social responsibility other than…

Others say yes

- …a large corporation these days not only may engage in social responsibility, it had damn well better try to do so.

Why Social Responsibility Makes Sense

- **Collectively:** Regulations are weak or not properly enforced:
  - Recycling (too low garbage taxes)
  - Not flying (too low airfuel taxes)
  - Boycotts/Buycotts (too lax regulation)
  - Paying taxes (despite lax tax enforcement)
  - See e.g. J.-F. Rischard (WB VP), *High Noon*, 2002.
- **Individually:** Sacrifices in one domain create gains in other domains.

The Nature of Prosociality: Distinction #1

Proximate explanations

- Properties of utility functions that rationalize* data, e.g.,
  - Altruism (Edgeworth, Becker)
  - Spite
  - Inequality aversion
  - Reciprocity
  - Social esteem
  - Self esteem
  - Guilt aversion
  - Norm obedience

Ultimate explanations

- Evolutionary selection of behaviors.
- Individual selection
  - Direct reciprocity (Trivers)
  - Indirect reciprocity (Nowak&Sigmund)
  - Group "incentive schemes"
  - Signaling of desirable trait (Zahavi)
- Group selection
  - Relative group success

* Rationality ≠ selfishness!

I'll be concerned with proximate explanations today.

The Nature of Prosociality: Distinction #2

Universal domain models

- Most "early" models of altruism and fairness.
  - What economists were used to do.
- General learning models.

Situation-specific models

- Most models of social norms.
  - "Ideal" behavior socially specified for the setting.
- Most models of the evolution of cooperation.
  - Typically a specific class of repeated PD games.

I'm afraid we have to move away from universal domain models.

Dictator Game Evidence

Basic Dictator Game experiment:

- Two subjects.
- One subject, the Dictator, gets a monetary endowment *M* from the experimenter.
- The other subject, the Recipient, gets nothing.
- The Dictator decides how to allocate the endowment between herself and the recipient.
- Typical outcome
  - Peaks at *0* and *M/2*, little mass above *M/2*, troughs just above *0* and just below *M/2*.

Clarification

- Experiments with monetary payoffs are not “games” but “game forms”. Only when the (von Neumann-Morgenstern) utility function has been defined, can we identify the game theoretic “solution”.
- The *quest for suitable utility functions* is what concerns me here.

Clarification (cont.)

- We look for utility functions *U* that may "rationalize" the choices that we observe.
- Initially, we consider simple utility functions that depend merely on the material outcomes.
- As a convention:
  - "sub-utility" functions *f* are increasing,
  - parameters are non-negative.
- Of course, people differ.

Preview: Some Lessons from DGs

1) Subjects are responding (heterogeneously) to a (situation-specific) social norm.
   - Little hope for universal domain models.
2) Subjects care about others' inference.
   - Beliefs appear in preferences (e.g., shame/guilt).
3) Subjects care about others' communication ("asking" as well as "feedback").
4) Subjects don't care much about frames.

Lesson 1: No universal domain

- Candidate universal domain model is altruism:

$$U_i = f_1(c_i) + \alpha_i f_2(c_j),$$

where c_i is *i*'s (lifetime) consumption.

- Doesn't work, because:
  - It is unlikely that the utility maximization problem would have an interior solution.
  - The gift is sensitive to *M* – but *gift shares* are invariant.
  - Interior final allocations are sensitive to taking options. Bardsley (EE, 2008) and List (JPE, 2007).

Does Narrow Bracketing Help?

- Altruism and "narrow bracketing"? Let

$$U_i = f_1(s_i) + \alpha_i f_2(s_j),$$

where s_i is i's share of the experimental endowment M.

- Observe: Narrow bracketing takes us into social norm territory!
  - The "situation" is: sharing manna from heaven. (Very different if surplus is first created by one party.)
  - Equal splits rationalized by $\alpha = 1$ and $f_1 = f_2$.
  - But what about the troughs just above *0* and just below *0.5*? (And Bardsley/List evidence?)

A Fairness Norm?

- What about *fairness*? Let

$$U_i = f_1(s_i) - \varphi_i f_2(|s^* - s_j|),$$

  where s_i is *i*'s share of *M*.
- Explains why few give more than half.
- But why give *exactly 0.5*? If $s^*=0.5$, we'd expect $s_i<0.5$ is f_2 is smooth. (Fehr-Schmidt assume kink.)
- And what about those troughs just above *0* and just below *0.5*?
- And what about Bardsley and List? Does this model really explain less giving by subjects for whom taking is an unused option?

Lesson 2: It's Not Only the Allocation

- Exit evidence: Dana, Cain, Dawes (OBHDP, 2006).
  - $10 Dicator Game,
  - Unexpected $9 exit option – (exit implies receiver unawareness about game).
    - Case 1: Standard. Receiver aware unless exit.
    - Case 2: Private. Receiver always unaware.
  - Models considered above predict: No exit.
  - Standard game: 33% exit. (*n=61*)
  - Private game: 4% exit. (*n=24*)
- Broberg, Ellingsen, Johannesson (EL, 2007)
  - People pay more to exit when they intended to give more. "Involuntary" generosity? (*n=119*)
- See also Lazear, Malmendier, Weber (AEJ, 2011).

Perhaps It's Social Esteem?

- For example, let

$$U_i = f_1(s_i) - \varphi_i f_2(|s^* - s_j|) + f_3(\varphi^B),$$

  where φ^B is i's belief about j's belief about φ_i; Andreoni and Bernheim (Ecma, 2009).
  - Related literature:
    - Glazer and Konrad (AER, 1996), Prendergast and Stole (EER, 2001), Bénabou and Tirole (AER, 2006), Ellingsen and Johannesson (AER, 2008; JPubE, 2011).
- Assume continuous distribution of φ_i.
- Compute perfect Bayesian equilibria and apply D1, a signaling game refinement.

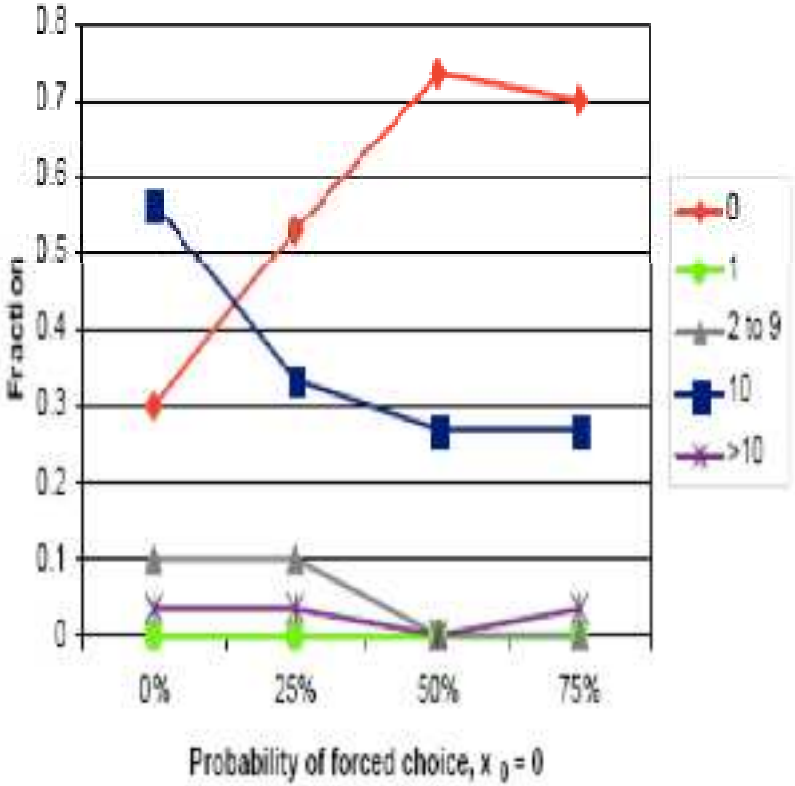
Fit

- The current model can explain…
  - Absence of $s_i > 0.5$ (as before – yet not trivial)
  - Prevalence of $s_i = 0.5$ (new)
  - Troughs just above *0* and just below *0.5* (new)
  - Anonymity evidence (new)
  - Exit evidence (new)
- …i.e., all puzzles so far.
- And it has additional implications.

Andreoni and Bernheim's (Ecma 2009) New Evidence

- A USD 20 non-anonymous Dictator Game.
- Suppose that with probability *p* the donation is *x* (small) regardless of dictator's choice; this in known to both.
- Pure fairness → larger donations.
- Social esteem concern → donate *x*.
- Two "conditions" (*x=0, x=1*). Each dictator sees one, and makes choices for *p=0, p=1/4, p=1/2, p=3/4.* (*n=30*/treatment and role).

Findings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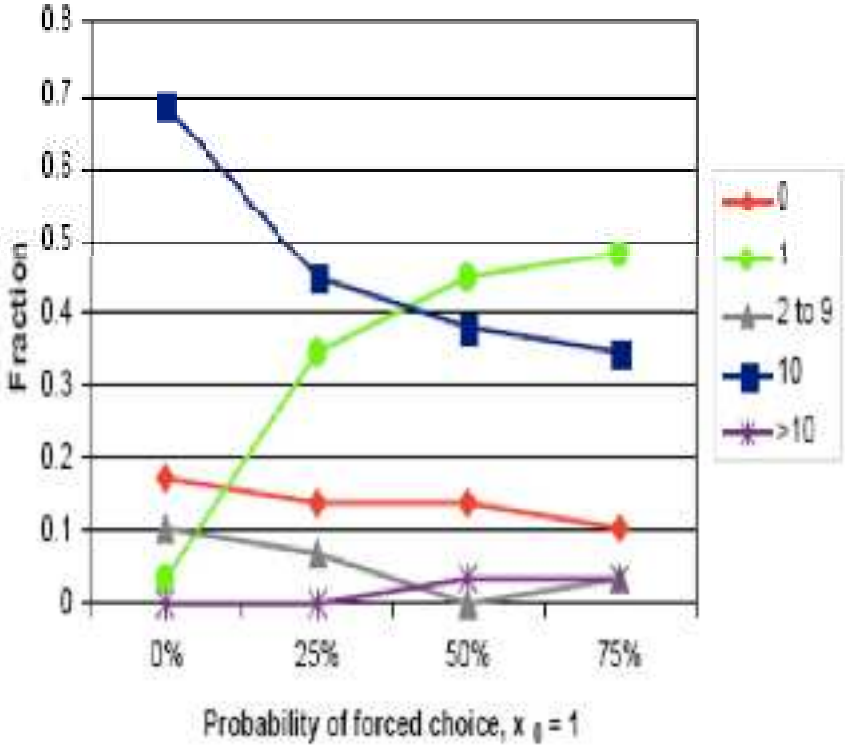
Probability of forced choice, x 0 = 0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75%
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>10
Probability of forced choice, x 0 = 1

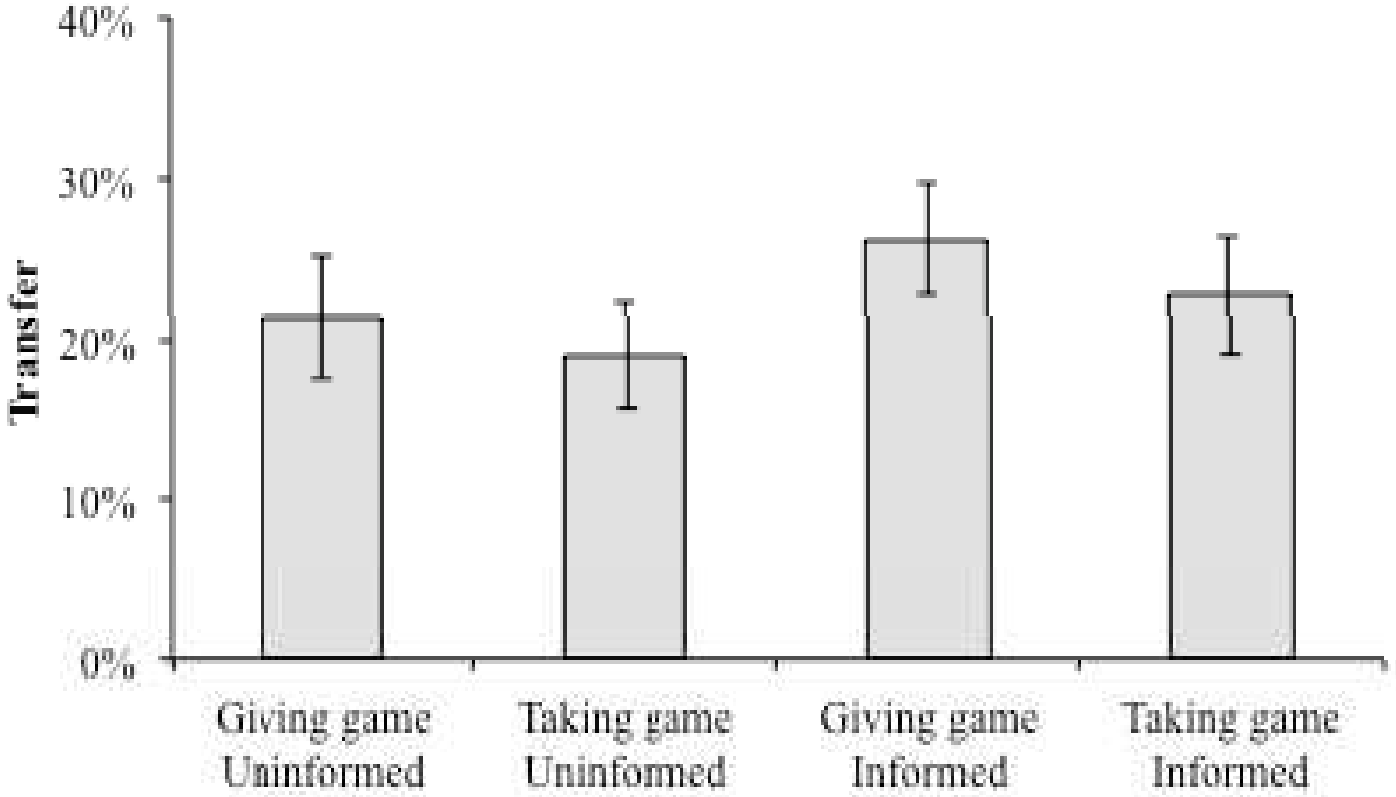
Lesson 3: More than Payoffs and Esteem – Norm Activation?

- Communication matters
  - Prior argumentation: Mohlin and Johannesson (JEBO, 2008).
  - Anticipated feedback: Ellingsen and Johannesson (EHB, 2008).
  - Asking and explaining: Andreoni and Rao (JPubE, 2011).
- People shield themselves from information
  - Dana, Weber, Kuang (ET, 2007).

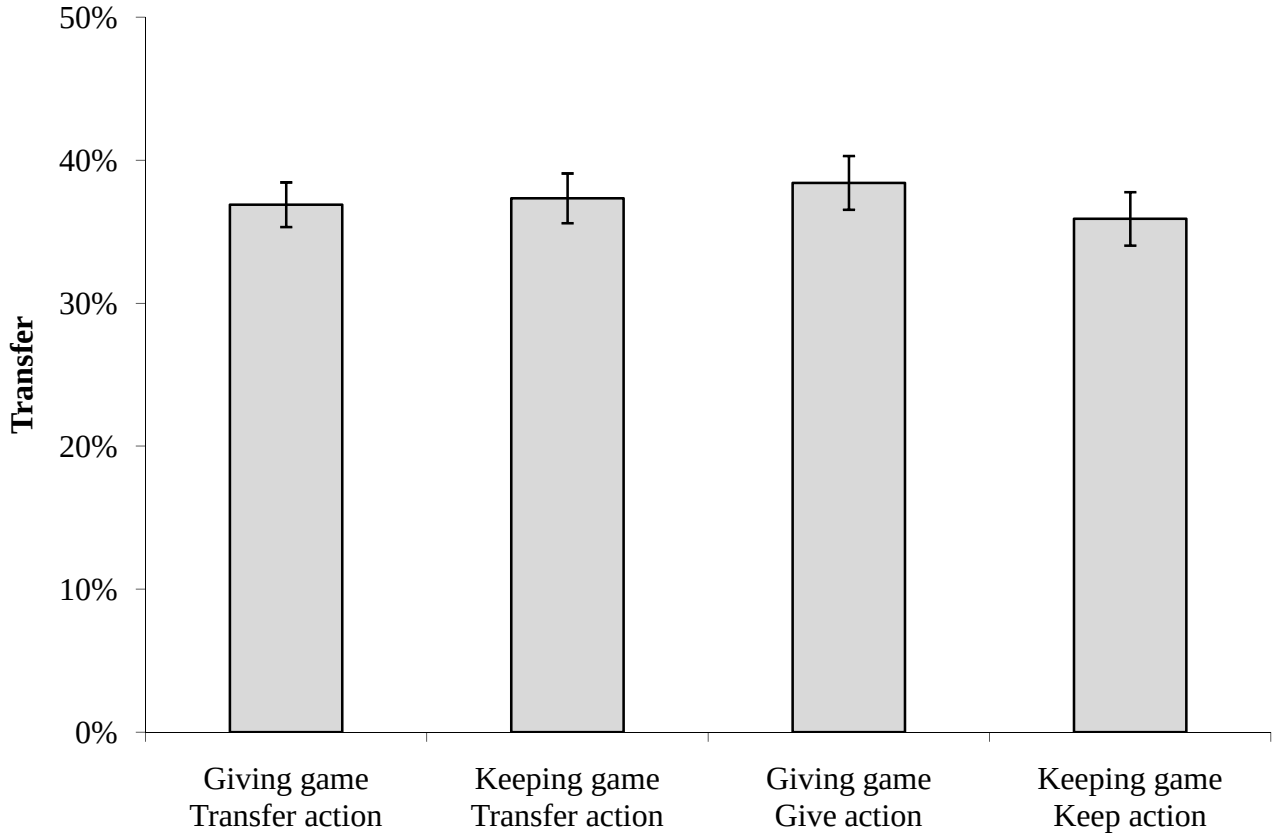
Lesson 4: Framing in DG

- Dreber, Ellingsen, Johannesson, Rand (manuscript 2011).
  - Experiment 1: Giving game vs Taking game. Idea: People should be averse to taking.
  - Experiment 2: Giving game vs Keeping game. Idea: People should be more generous when prompted to give than when prompted to keep.

Giving vs Taking: Results
n=400

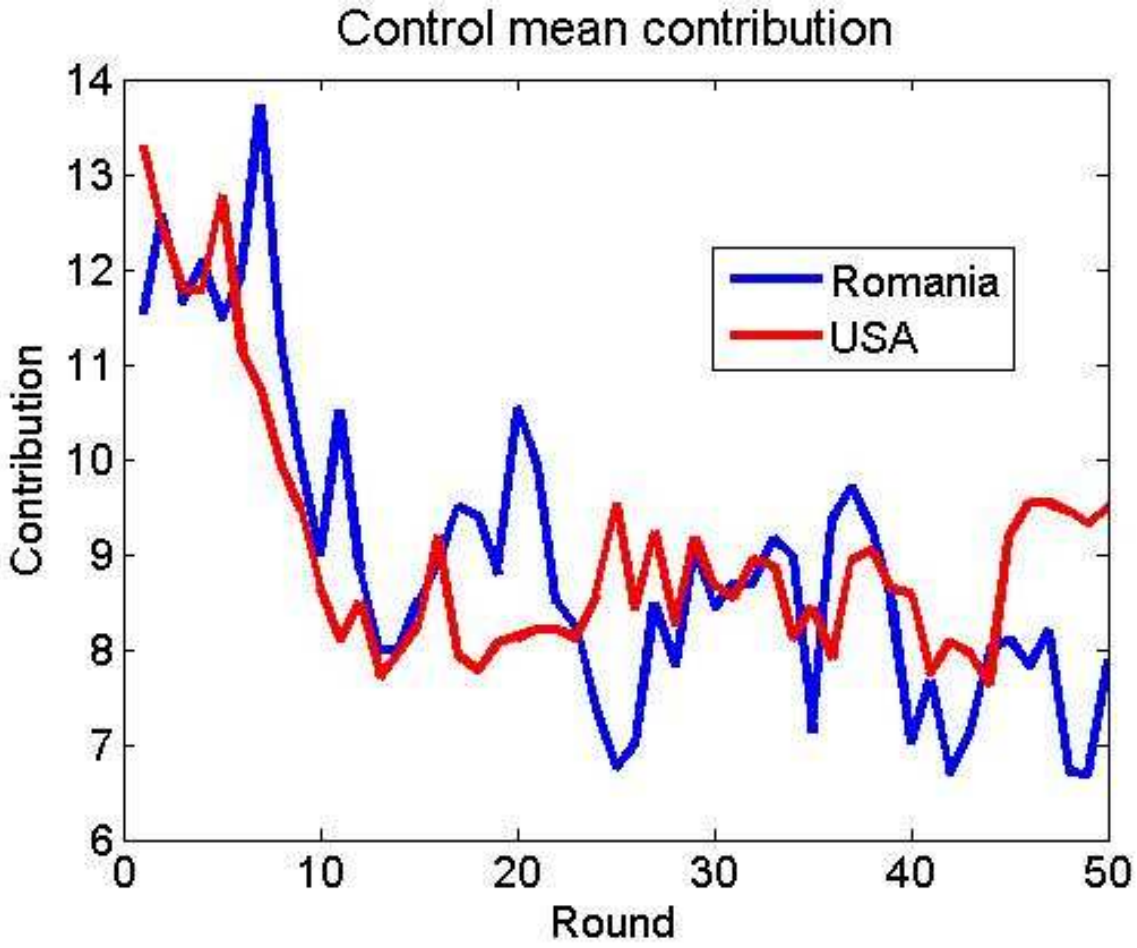


Giving vs Keeping Results n=1586 (Mturk)

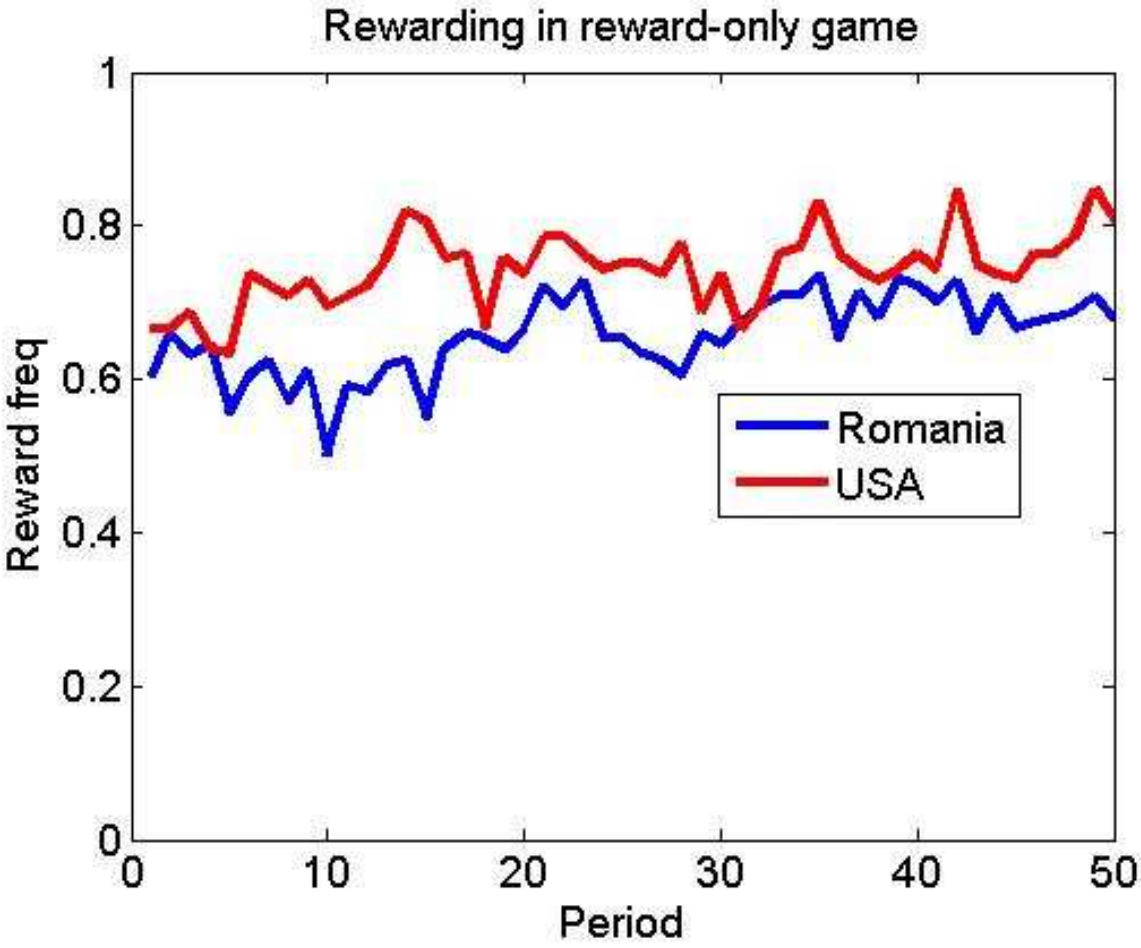


PD Evidence

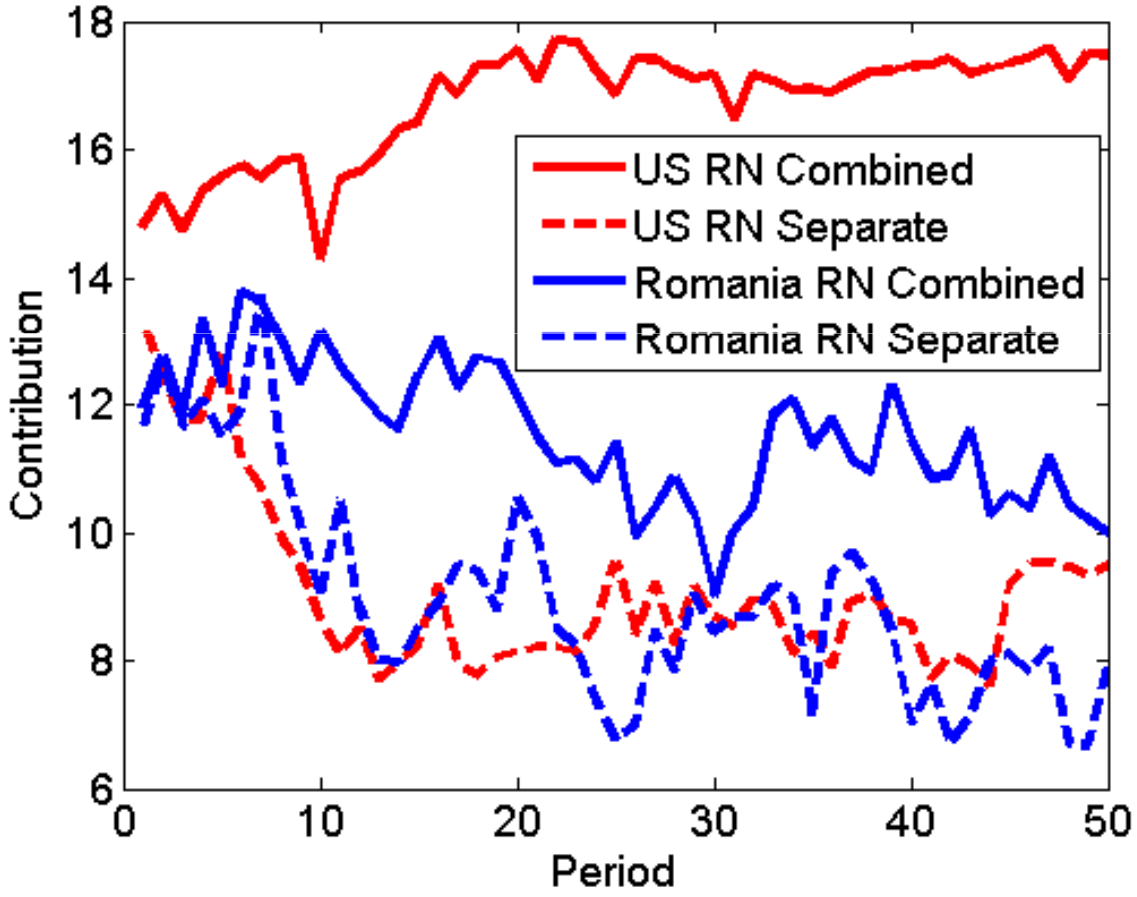
The Basic Public Goods Game



The Basic Bilateral Interaction



When Subjects Can Reward



What's the Difference?

- Both US and Romanian subjects adapt their PGG behavior in response to targeted rewarding.
- But Romanian subjects don't often condition bilateral (PD) behavior on the opponents' multilateral (PGG) behavior.
- That is, the Romanians aren't voluntarily providing the sanctioning system.
  - Lack of "engaged citizenship".