

Norm Compliance, Enforcement, and the Survival of Redistributive Institutions

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Redistribution, Enforcement & Norms

- ▶ Redistribution is ubiquitous in human communities: food-sharing among hunter-gatherers to complex taxation and social insurance systems in developed economies.
- ▶ Any redistributive arrangement is prone to free-riding.
- ▶ **Enforcement:** Complicated cheater detectors (Cosmides and Tooby, 1992, 2005), desire to punish violators (Fehr and Fischbacher, 2004), the universal sanctions for tax evasion (OECD, 2017) strongly suggest that redistribution cannot be implemented without restricting the incentives to free-ride.
- ▶ **Norms:** The prevalence of social norms that commend the acts for greater good, the abundance of examples of norm following at personal cost (Bicchieri, 2005).

Introduction

We are interested in these two opposing forces:

- ▶ The opportunistic incentive to use a redistributive institution for personal gain.
- ▶ The desire to live in and follow the rules of a regulated community populated by similarly obedient individuals.

...and their interaction in determining the success and failure of redistributive institutions.

Research Questions:

- ▶ Is the desire to follow the rules of an institution overcome by free-riding?
- ▶ Do the fairness ratings of overall income inequality depend on redistribution rules and experienced opportunistic behavior.

Related Literature

The current paper is related to three stands of literature:

- ▶ Norm-compliance and pro-social behavior in various settings: Kimbrough and Vostroknutov (2016), Krupka and Weber (2013), Gächter et al. (2017).
- ▶ Prevailing fairness ideals in experimental settings: Cappelen et al. (2007), Konow (2000), Starmans et al. (2017).
- ▶ Endogenous Choice of Institutions: Gurerk et al. (2006), Sutter et al. (2010), Dal Bo et al. (2017)

Experimental Design

- ▶ Two tasks: the Rule-Following task (Kimbrough and Vostroknutov, 2018) and the Institution Choice and Redistribution task.

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- ▶ The Rule-Following (RF) task, subjects choose how much to follow an arbitrary costly rule set by the experimenter. Measures the individual degree of “norm compliance” or “the rule-following propensity” .
- ▶ In the Institution Choice and Redistribution task, prior to learning their randomly generated income, subjects choose among three different redistributive institutions.

The Rule-Following Task

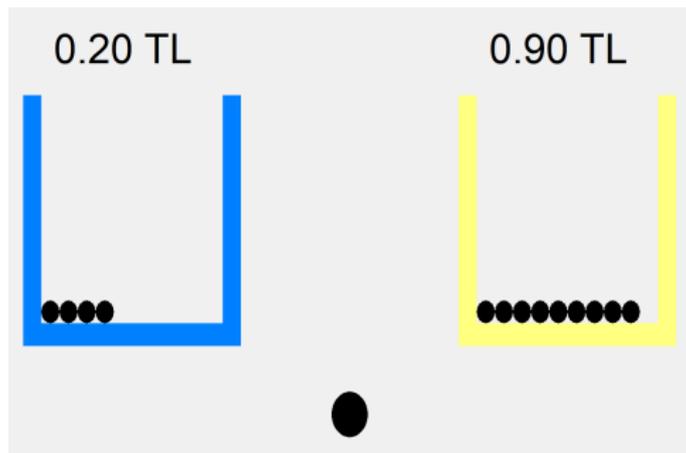
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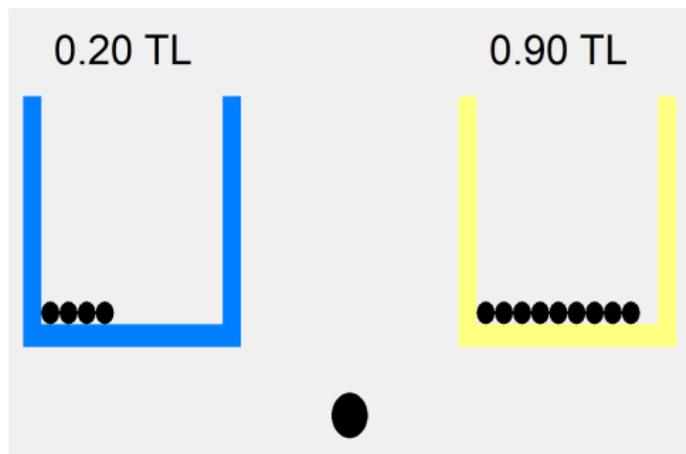
- ▶ Subjects have 100 balls that they can put one-by-one into two buckets: yellow or blue.
- ▶ For each ball in the yellow bucket they receive 0.10 TL, and for each ball in the blue bucket they receive 0.05 TL



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A “culture-free” rule-following task based on Kimbrough and Vostroknutov (2018).

- ▶ Subjects have 100 balls that they can put one-by-one into two buckets: yellow or blue.
- ▶ For each ball in the yellow bucket they receive 0.10 TL, and for each ball in the blue bucket they receive 0.05 TL
- ▶ The instructions explicitly state that *“the rule is to put the balls into the blue bucket”*



Institution Choice and Redistribution task

- ▶ Lasts for 20 periods
- ▶ In each period each subject
 1. chooses one of the “worlds”
 2. receives random income (uniform on $[0, 50]$)
 3. chooses how much of it to transfer to the “tax pool”
 4. tax pool gets equally divided among all subjects in the *chosen world*

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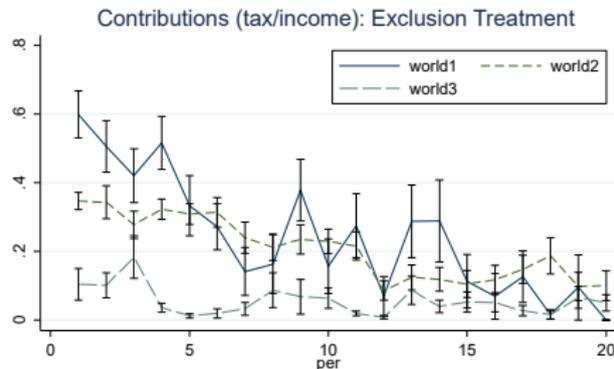
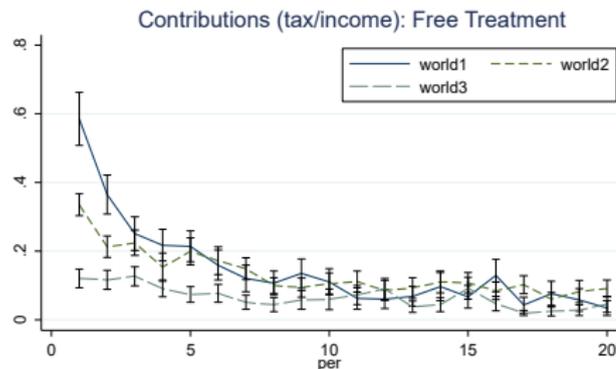
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- ▶ Three worlds:
 - **World1:** “The principle of division is to transfer 100% of your income”
 - **World2:** “The principle of division is to transfer 50% of your income”
 - **World3:** “The principle of division is to transfer any amount of your income you like”

Institution Choice and Redistribution task

► Treatments

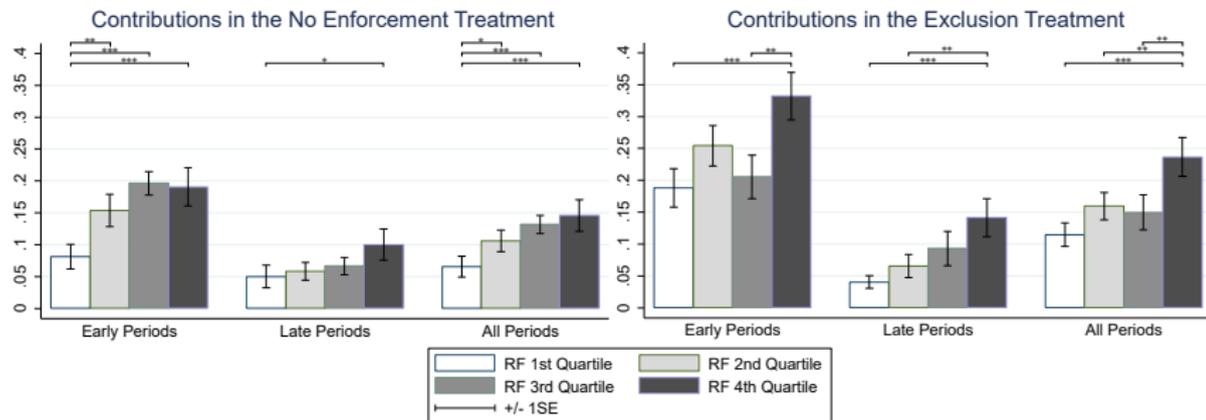
1. **No Enforcement:** subjects can transfer any amount they want
2. **Exclusion:** subjects can transfer any amount they want, but get excluded from the world with 20% probability if they transfer less than 80% of the world's requirement (80%, 40%). After exclusion they cannot join the world ever again
3. **Enforcement:** subjects can transfer more than or equal percentage of the world's requirement (100%, 50%)
4. 158 subjects in No Enforcement, 72 in Exclusion, 106 in Enforcement.

Contributions by Period



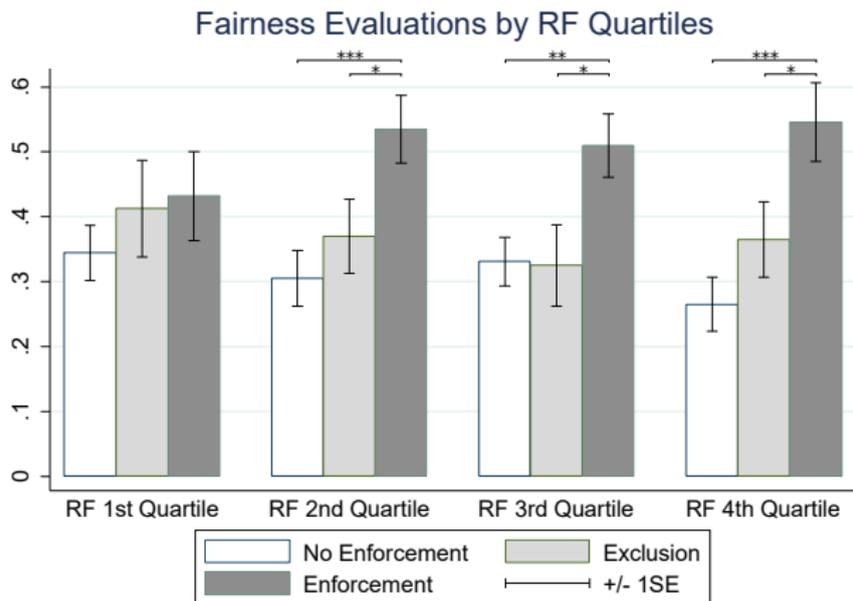
- ▶ Free riding problem is, not surprisingly, rather severe
- ▶ Nevertheless, exclusion helps to sustain contributions longer

Contributions by Rule Following



- ▶ Conditional response to free-riding eventually overcomes the desire to follow the rules of the groups,
- ▶ Rule-followers are still trying to maintain higher contribution levels than rule-breakers.

Perceived Fairness



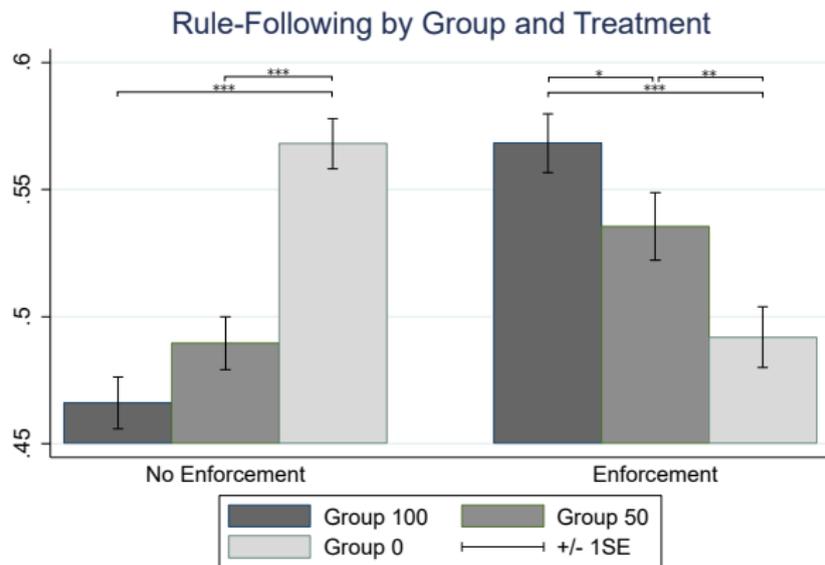
- ▶ Rule-followers, but not rule-breakers, find income distribution in the No Enforcement and Exclusion treatments less fair, as compared to the Enforcement treatment
- ▶ The reason for this is that in both the No Enforcement and Exclusion treatments, rule-followers experience the bad consequences of free-riding, while in the Enforcement treatment they do not.

Perceived Fairness

		Income Gini		Fairness
		Pre-Tax	Post-Tax	
No Enforcement	All	0.340	0.343	0.311
	Group 100	0.340	0.352	0.261
	Group 50	0.344	0.336	0.324
	Group 0	0.338	0.339	0.320
Exclusion	All	0.322	0.324	0.368
	Group 100	0.332	0.350	0.300
	Group 50	0.322	0.307	0.333
	Group 0	0.316	0.319	0.410
Enforcement	All	0.336	0.242	0.508
	Group 100	0.325	0.121	0.556
	Group 50	0.339	0.215	0.519
	Group 0	0.345	0.344	0.504

- ▶ De facto redistribution across groups not only blurs, but also clashes with the announced norms
- ▶ Rule-followers in the egalitarian group realize that they are the constant losers due to the free riding of those who contravene the announced group norm.

Choice of an Institution

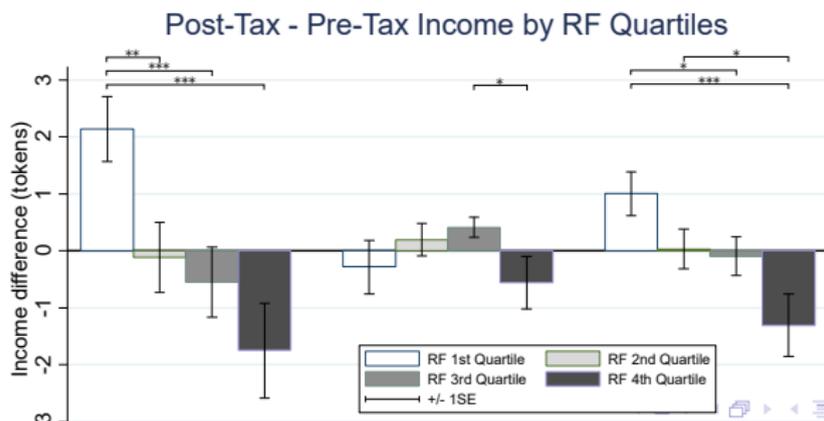


- ▶ In the No Enforcement, treatment rule-followers are congregated in group 0, where there are no rules of redistribution, whereas rule-breakers go to group 100, where the rules are to contribute 100% of income.
- ▶ In the Enforcement treatment, the picture is the opposite.

Choice of an Institution

We postulate that the observed pattern of group choices can only be explained by assuming a separate preference over redistribution rules.

- ▶ Rule-followers prefer institutions which are demanding in terms of rules (contribute 100% of income)
- ▶ Whereas rule-breakers prefer institutions without rules (contribute any desired percentage of income).
- ▶ Rule-followers, as much as they care about being in group 100, nevertheless choose to switch to group 0 mostly due to the influx of free riders, i.e. rule-breakers who switch from group 0 to group 100.



A Simple Model

$r_i \in [0, 1]$ denote the rule-following propensity of individual i
 $T_s \in [0, 1]$ be the exogenously assigned tax rate in society s .
Two types of individuals, H and L (i.e., **H**igh and **L**ow rule-followers)
with $r_H > r_L$.
We define the utility of individual i from choosing to belong to
society s to be

$$V_i(s) = \underbrace{-r_i(t_i - T_s)^2}_{\text{Rule-following}} \underbrace{-(1 - r_i)t_i^2}_{\text{Self interest}} \underbrace{+\delta(t_{-i}^s)}_{\text{Public good interest}}, \quad (1)$$

- ▶ *Equilibrium with Enforcement*: In equilibrium, only rule-followers choose the egalitarian society and only rule-breakers choose the free society,
- ▶ *Equilibrium without Enforcement*: rule-breakers choose the egalitarian society and rule-followers choose the free society

Explanations

- ▶ Herbert Simon (1990), introduced the notion of a docile individual.
- ▶ Such individuals tend to learn and believe what they perceive others in the society want them to learn and believe.
- ▶ Simon showed that altruists, can survive in the population of selfish individuals if they are docile and the altruistic trait is propagated through the learning of social norms.
- ▶ Laland (2017, 2018): moral norms could plausibly have generated natural selection acting on human genes to favor cooperative tendencies.
- ▶ Docile individuals who are more inclined to conform to norms would find it easier to enter larger norm-bound societies, and to abide by the rules (Richerson & Boyd, 1998; Henrich, 2012).

Conclusion

- ▶ A simple announcement of non-binding rules of redistribution makes many subjects try to follow them.
- ▶ However, in the absence of enforcement, free-riding overcomes this tendency and leads to the decay of contributions
- ▶ Rule-followers find the same level of inequality fairer when it was achieved without anyone breaking the rules
- ▶ Well-defined rules of conduct provide a good incentive to maintain redistribution. However, some level of enforcement is necessary in order to protect institutions from free-riding.
- ▶ *Man did not adopt new rules of conduct because he was intelligent. He became intelligent by submitting to new rules of conduct. (Hayek, 1973)*