

The Foundations of Social Policy Support: Experimental Evidence on How Institutional Quality Affects Redistributive Preferences

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Version 1

EXPERIMENTAL DESIGN

We will conduct an experiment in the USA and Russia to see how tax evasion influences individual preferences for redistribution. We have 3 conditions: good institutions (no tax evasion), tax evasion with uniform audit risk, and tax evasion with variable audit risk. In each country, we assign 3 groups per condition for a total of 9 groups in each location. For each session, we anticipate roughly 12-15 students will participate. We will have up to 150 participants in each location meaning a maximum of 300 participants total. We expect that American participants will earn, on average, about \$15-20 and that Russian participants will earn about 500 rubles (the equivalent of about \$8-10). These are the standard compensation rates for experiments like this in each country.

Our hypotheses:

Hypothesis 1 (Tax Evasion, Uniform Audit): Allowing tax evasion with a uniform risk of audit will lead to high rates of cheating and will undermine support for redistributing wealth from the common pot.

Hypothesis 2 (Tax Evasion, Variable Audit): Allowing tax evasion with a variable risk of audit will lead individuals with a low risk of audit to cheat a lot and support more redistribution and individuals with a high risk of audit to cheat less and support less redistribution.

Hypothesis 3 (Productivity \times Risk of Audit): Generally, more productive individuals should prefer less redistribution according to the classic Meltzer-Richard model. We expect that the risk of audit and individual levels of productivity to have an interactive effect which alters this traditional expectation. Individuals who are highly productive and have a low risk of audit should be the most likely to cheat and prefer *more* redistribution because they benefit from both cheating and redistribution.

In each session, participants will play 10 rounds (1 practice round and 9 actual rounds). We will follow the procedures described below.

In the **good institutions** condition,

- (1) Participants are given the information about the game including that they will complete a clerical task, pay taxes into a common pot, and that the common pot will be evenly redistributed to all participants at the end of the game. Their compensation will depend on how well they complete the task, how they play the game, how others play the game, and chance. Specifically, they will be paid a specific amount of experimental currency units (ECU) for every line of numbers entered and these ECUs will be converted into dollars at the end of the game.
- (2) There will be one practice round of the clerical task where all students are employed. Participants will first be asked to vote for their preferred tax rate; the preferred tax rate is considered to be their redistributive preference and is our main dependent variable of interest. We will emphasize

that the size of the tax rate determines how large the common pot is which then gets distributed to all participants at the end of each round. In the practice round, their performance will not determine their compensation. For the practice rounds, participants will complete the task and be updated with a list of pre- and post-tax earnings with individuals ranked from high to low productivity and their own position highlighted. This mimics the procedures for the subsequent actual rounds of the game.

- (3) Next, we hold several rounds of the actual game. First, participants will first find out if they were randomly assigned to be unemployed and will receive this message on their computer screen. Unemployed students will be asked to wait for this round to end and informed that this does not mean they will necessarily be unemployed in future rounds of the game.
- (4) *Tax Rate 1 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the first time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not. At the end of all 3 rounds, participants are updated with the information from the previous 3 rounds. This includes pre- and post-tax earnings, the productivity of all participants, and where their own productivity lies.
- (5) *Tax Rate 2 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the second time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not. At the end of all 3 rounds, participants are updated with the information from the previous 3 rounds. This includes pre- and post-tax earnings, the productivity of all participants, and where their own productivity lies.
- (6) *Tax Rate 3 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the third and final time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not.
- (7) At the end of all of the rounds, participants will complete a short survey including questions about social trust and an incentivized risk question (a short gambling game).

In the **first tax evasion treatment (uniform audit risk)** of the game:

- (1) As above, participants are given the basic information about how the game is played.
- (2) Unlike the good institutions scenario described above, participants will additionally be told they can choose what percentage of their earnings to report at the end of the round. Taxes will only be paid on reported income and all individuals face a low probability (10%) of being audited. Audited individuals who have under-reported their income must pay a fee of 2 times the amount which they hid. These funds *are not* placed into the social policy pool for future redistribution. We will truthfully inform individuals that the probability of audit is the same across individuals and exogenous. That is, it does not depend on the percentage of earnings reported or productivity. Subjects will be allowed to choose to report any percentage of their earnings between 0% and 100%. Participants will not know how many rounds they will be playing, but they will be informed beforehand that we will be updating them with information about how much each participant earns, how much each person pays in taxes, and the extent of underreporting. They will be told that this information will be anonymized (they will not know who earned or reported certain amounts).
- (8) Practice round as described above.
- (3) Next, we hold several rounds of the actual game.
 - a. *Tax Rate 1 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the first time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not. At the end of all 3 rounds, participants are updated with the information from the previous 3 rounds. This includes

pre- and post-tax earnings, the productivity of all participants, their own productivity, and the rate of actual cheating in the previous three rounds. Participants will be asked to choose what percentage of income to report and reminded that there is a uniform and low risk of audit that is not linked to how much they earned or how much income they choose to report.

- b. *Tax Rate 2 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the second time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not. At the end of these 3 rounds, participants are updated with the information from the previous 3 rounds. This includes pre- and post-tax earnings, the productivity of all participants, their own productivity, and the rate of actual cheating in the previous three rounds. Participants will be asked to choose what percentage of income to report and reminded that there is a uniform and low risk of audit that is not linked to how much they earned or how much income they choose to report.
 - c. *Tax Rate 3 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the third and final time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not.
- (4) At the end of all of the rounds, participants will complete a short survey including questions about social trust and an incentivized risk question (a short gambling game).

In the **second tax evasion treatment (variable audit risk)** of the game:

- (1) As above, participants are given the basic information about how the game is played.
- (2) Unlike the scenarios described above, participants will also be told they will be allowed to decide what percentage of their earnings to report at the end of the round as in the first tax cheating treatment. This time, however, probability of being audited will be either 10 or 70% (participants will have a 50/50 chance of being assigned either risk of audit). Each participant will have the same risk of audit throughout all of the rounds below. Those who are audited and caught underreporting their income will pay the tax plus a fine equal to the amount of the tax. Note that the common pot is only funded by reported income and even if participants are caught underreporting, the penalty will not go into the common pot. The idea is to see how different risks of audit influence individual rates of cheating and how the differing risks of audit interact with other individual level characteristics (especially productivity) to influence preferences for redistribution. Again, participants will be truthfully informed that audit risk is exogenous and not tied to income or how much they underreport.
- (3) Practice round as described above. Everyone is employed in the practice round, tax evasion will be allowed to let participants see how that works, and participants will receive the information about pre and post income.
- (4) Next, we will hold several rounds of the actual game.
 - a. *Tax Rate 1 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the first time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not. At the end of all 3 rounds, participants are updated with the information from the previous 3 rounds. This includes pre- and post-tax earnings, the productivity of all participants, their own productivity, and the rate of actual underreporting in the previous three rounds. Participants will be asked to choose what percentage of income to report and reminded that there is a uniform and low risk of audit that is not linked to how much they earned or how much income they choose to report.

- b. *Tax Rate 2 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the second time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not. At the end of these 3 rounds, participants are updated with the information from the previous 3 rounds. This includes pre- and post-tax earnings, the productivity of all participants, their own productivity, and the rate of actual underreporting in the previous three rounds. Participants will be asked to choose what percentage of income to report and reminded that there is a uniform and low risk of audit that is not linked to how much they earned or how much income they choose to report.
 - c. *Tax Rate 3 (3 rounds of clerical task)*: Participants will vote on a preferred tax rate for the third and final time. The actual tax rate will be the median tax rate for which participants vote. Participants will complete 3 rounds of the clerical task. Each round some participants will be randomly assigned to be unemployed or not.
- (5) At the end of all of the rounds, participants will complete a short survey including questions about social trust and an incentivized risk question.

Note that it is important for this to be played as a game in which there are real consequences for a person's compensation depending on how she and other group members play. There is evidence that simply setting up a hypothetical scenario will not produce realistic results. The game is designed to mimic a realistic situation in which there is a risk of unemployment and individuals vary in their productivity.

Survey questions

- Risk aversion (gambling game): asked before any of the other parts of the experiment
- Socioeconomic questions (age, marital status, education, income, employment, current employer, current position)
- Government spending preferences (8 different categories)
- Government responsibility preferences (7 different categories)
- Degree to which an individual is law-abiding
- Social trust
- Perception of institutions (how fair do you think the system is)
 - 5 categories of answers from strongly disagree to strongly agree with a "hard to say" answer
 - Several Statements
 - Politicians typically follow through on their policy promises.
 - Government policies change frequently.
 - Most people pay their taxes.
 - Government officials can generally be relied upon to follow laws.
 - It is easy to get the state-provided benefits to which I am entitled.
 - Government officials are typically corrupt.