## Title of the Project

Redistributive Preferences and Their Determinants

## Authors

Tuomas Kosonen (Vatt Institute for Economic Research)
Kaisa Kotakorpi (Tampere University)
Satu Kuitunen (University of Helsinki)
Janne Tukiainen (University of Turku)

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Finland

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## Abstract

This paper examines individuals' redistributive preferences and the motivations behind them. While the effect of information treatments on inequality perceptions is well established in the literature, how these perceptions translate into redistributive preferences remains unclear. To address this gap in the literature, we use two conjoint experiments and two information treatments. The first conjoint explores preferences for redistributive policies like income tax rates and unemployment benefits, while the second examines preferences for motivational factors such as fairness, luck versus effort, and the perceived societal impact of inequality. The first treatment exploits the timing of Finland's Tax Day, with half of respondents surveyed before and half after. On the Tax Day, citizens' tax data is publicly released, and especially top earners' incomes and taxes are widely discussed in the media. The second treatment randomly assigns respondents to watch an informational video which discusses on tax collection, public services funding, and potential downsides of poorly designed tax policies. This way, we provide novel insights into how real-life and targeted information interventions influence redistributive preferences and the motivations behind them.

## Primary Outcomes

The study has four primary research questions or outcomes of interest:

1. What kind of redistributive preferences individuals have?

2. What motivations drive redistributive preferences?
3. How information provision about how public sector operates shifts the individuals' redistributive preferences and the motivations underlying these preferences?
4. How real-life increase in the salience of income inequality affects the preferences for redistribution and the motivations for those preferences?

Following these research questions, first two outcomes of interests are (1) choices over a public policy package that contains redistributive elements and (2) choices over the motivational factors made by the individual in the survey. These choices are measured with two conjoint surveys in which respondents choose between two sets of attributes (either a policy package or a candidate in election where the candidate holds certain views about redistribution and income inequality). In the first conjoint, we elicit preferences over seven redistributive policy attributes which each can obtain three different possible value realizations. Respondents' repeated answers reveal how they, as a group, value these different attributes and their values in their decision making relative to the other attributes and their values. In the second conjoint, the choice is measured with five attributes, which are motivational statements about the consequences of redistribution, fairness and trust. The second conjoint is built around following hypotheses which mirror to the five motivational attributes:

We hypothesize that preferences for redistribution depend on whether or not individuals perceive that

1. income inequality is fair or not (fairness)
2. Luck matters more than effort in success (luck vs. effort)
3. That redistribution decreases incentives to contribute to society (efficiency)
4. They can trust that political system works for their benefit (trust)
5. inequality increases instability or more equality increases stability (instability)

The third outcome of interest is the effect of our information treatments on redistributive choice and motivational factor choice. We are interested in (a) how informational video about how public sector operates affects redistributive choice and motivational factor choice, (b) how the Finnish Tax Day (7.11.2024), when information about the incomes of top income earners from tax records is revealed, affects redistributive choice and motivational factor choice and; (c) how the combination of both treatments affects redistributive choice and motivational factor choice.

This third outcome of interest question is motivated by following hypotheses:

1. The informational video about the role of taxes and public spending affects beliefs about the role of taxes in redistribution and tackling income inequality and could then affect preferences or motivations for redistribution.
2. The informational video about the role of taxes and public spending provides new information about the role of taxes in providing social security and public goods and could then affect preferences or motivations for redistribution.
3. The Finnish Tax Day increases income transparency and salience of income inequality, and informs respondents about others and one's own relative position in income distribution.
4. The Finnish Tax Day shifts individuals' beliefs about the fairness and efficiency of the Finnish tax system and could then affect preferences or motivations for redistribution.
5. The Finnish Tax Day increases information about tax planning.
6. The Finnish Tax Day increases information about the earning at the top of the income distribution and could then affect preferences or motivations for redistribution.

## Secondary outcomes

Secondary outcomes we study are how what following:

1. What kind of stated redistributive policy preferences individuals have?
2. What kind of stated motivations individuals have to redistribute?
3. How much people know about some current redistributive policies?
4. What kind of stated beliefs individuals have about the state of society, their own future, who can be trusted and what consequences inequality has.

Secondary outcomes are measured as normal independent questions in the survey.

## Experimental design

Our study contain a set of regular survey questions, two conjoint survey experiments, one information provision video experiment implemented within the survey and one real-life shock in the form of the Finnish Tax Day. The respondents are drawn from our survey partners (Taloustutkimus) respondent panel which is nationally representative on the level of age, gender, region (NUTS 2).

The survey proceeds in the following manner.

Respondents are divided into two groups by our real-life information treatment, the Finnish tax-day. We achieve this by half of the respondents being surveyed before the Tax Day and the other half after the Tax Day. The first survey window is between 22.10.2024 and 5.11.2024. The Tax Day takes place on 7.11.2024. The second survey window takes place between, 8.11.2024 and 22.11.2024.

The second treatment assignment is conducted at the start of the survey. Half of the people in both groups (before and after the Tax Day) are randomly assigned to watch an informational video of the role of taxes and public spending in redistributing income.

Before the video, all respondents answer basic demographic questions.

Demographics:

1. Gender [Male, Female, Other]
2. Birth year [open response field]
3. What is the postal code of your area? [open response field]

Then those who are randomly allocated to the video treatment proceed to video which cannot be skipped. The video is a whiteboard animation, which explains in simple manner how taxes are collected each year, why taxes are collected and what they are used for, and what benefits and costs are associated with tax collection.

Those without video treatment move straight into background questions that include demographic questions and questions about political preferences, values, knowledge of redistributive policies, trust, views about the world and one's own life, and habits concerning media consumption. The English translation of questions can be found in the attached analysis plan-.

Demographics:

4. Gender [Male, Female, Other]

5. Birth year [open response field]
6. What is the postal code of your area? [open response field]

Values, knowledge and habits]

1) Societal values can be described using different dimensions. How would you place yourself on the following dimensions?
   a) 1 = Left 2 3 4 5 = Right
   b) 1 = Value liberal 2 3 4 5 = Value conservative
   c) 1 = Emphasizes environmental values 2 3 4 5 = Does not emphasize environmental values
2) Which party would you vote for if the parliamentary elections were held now [List of parties in Finland]
3) To what extent do you believe people like you can influence the actions of the government in the Finnish political system?"? (Scale very much 1-5 not at all)
4) Which of the following degrees have your parents, or one of your parents, completed? Please mark the highest level of education from the options below (List of degrees recognised in Finland)
5) Overall, how satisfied are you with your life at present? (scale 1 very unhappy -10 very happy)
6) How fair do you think your level of disposable income is, considering your earned income, capital income, their taxation, and the benefits you receive? (scale 1=very unfair-10=very fair)
7) People hold different positions in Finnish society based on income. In which income decile do you place yourself in terms of disposable income within Finnish society? ( 1= lowest – 10=highest)
8) How do you see the current state of Finnish society (1 = Very negative - 10 = Very positive)
9) How do you view the future of the Finnish economy over the next 10 years? (1 = Extremely - 10 = Extremely positive)
10) How economically equal do you think Finns are in terms of financial wellbeing at present? (1 = Very equal - 4 = Very unequal, 5 = I don't know)
11) To what extent do the following statements reflect the situation in Finland, in your opinion?
    a) Do you think that a better life can usually be achieved through hard work or does success depend more on luck? (Hard work … luck)
    b) Large income differences are (Unjust … Just)
    c) Increasing income redistribution through taxation and transfers would… (Increase employment and economic growth … Have no effect on employment or economic growth … Decrease employment and economic growth)
    d) The functioning of the political system for the benefit of citizens (Cannot be trusted … Can be trusted
12) Do you think people can be trusted, or is it better to be cautious about others? (1 = It is better to be cautious - 10 = Most people can be trusted)
13) How much do you personally trust the following entities or groups? 1 means you do not trust at all, and 10 means you trust very strongly.
    a) the judicial system b) The police c) Politicians d) The media f) Researchers g) Healthcare h) Kinsfolk i) Citizens of another country j) citizens of your country
14) How often do you use the following media for news? 1 = Never - 10 = All the time
    a) Television b) Radio c) Online newspapers d) Printed newspapers e) Facebook f) Twitter g) Instagram h) TikTok i) Jodel j) Discussion forums k) Messaging apps (e.g., Whatsapp/Facebook Messenger)
15) How often do you generally discuss politics and societal issues: (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Daily)
    a) With close ones?
    b) With colleagues or fellow students?
    c) With other acquaintances?
    d) With strangers?"
16) What is the current highest income tax rate in the state taxation in Finland? [Slider 0-100%]
17) What is the current highest tax rate on capital income in Finland? [Slider 0-100%]
18) What is the current average amount of the basic unemployment allowance per month? [Open response field]

19) Think of the tax rate as a percentage of all earned and capital income that a person pays in taxes. (For example, if you earn 30,000 euros in income and capital gains and pay a total of 3,000 euros in income taxes, your tax rate is 10%.) Please use the slider to indicate what percentage of their income you think the top 10% of earners in Finland should pay in taxes. ["In my opinion the top 10% of earners should pay []% of their income in taxes.]
20) What percentage of all disposable income received by Finns went to the top 10% of earners in 2023? [Slider 0-100%]
21) A transfer payment means that the government redistributes income among citizens using taxes and benefits, compared to a situation without taxation or benefits. Should there be more transfer payments in Finland? [Strongly disagree 1 - 5 Strongly agree
22) Do you agree with the statement: "People should take advantage of the opportunities provided by the tax system to minimize their tax burden." [Strongly disagree 1- 5 Strongly agree]

On top of these questions, our survey partner's panel includes the following information of the respondents:

1. Highest completed education (List of degrees recognized in Finland)
2. Occupational status [Entrepreneur, leadership position, other senior official / expert, official/clerk, employee, farmer, student, pensioner, stay at home mother/father, unemployed]
3. Household composition [on person, couple with no children, other only adult household, household with children under 18]
4. Ages of children living at home [0-2, 3-6, 7-12. 13-15, 16-17, no children under 18]
5. Size of your household
6. The combined gross income of your household, from which taxes have not been deducted? [under 10.000 euros/year, 10.000 - 20.000 euros/y, 20.001 - 30.000 euros/y, 30.001 - 40.000 euros/y , 40.001 - 50.000 euros/y, 50.001 - 60.000 euros/y, 60.001 - 70.000 euros/y 70.001 - 80.000 euro/y 80.001 - 90.000 euros/y, over 90.000 euros/y, I prefer not to say]

In the last part of the survey, we run two conjoint survey experiments.

In the first conjoint, the respondents are presented with two cards, A and B, which both present policy packages that hypothetical parties in the next parliamentary elections are proposing in their party manifestos. Both cards include seven statements (attributes) regarding taxes and redistributive policies. The respondents are asked to choose which party, A or B they would rather vote. The respondents make the choice between the candidates six times. Each attribute category contains value realisations that are associated with a specific redistributive policy. The seven polices are: 1) income taxes; 2) unemployment benefit; 3) public health care; 4) national debt; 5) capital income tax; 6) progressivity of the income tax at the top and; 7) fuel taxes.

List below displays the attributes and their levels in the first conjoint. Each attribute has three levels. The value of each attribute is randomised for each card and the order of the attributes is randomised once for each respondent but is the same on both cards and remains the same for the same respondent across the cards.

**Income taxation:**

- Increase income tax evenly by 1 percentage point across all income groups
- Keep the current level of income taxation
- Decrease income tax evenly by 1 percentage points across all income groups

**Unemployment benefits:**

- Make unemployment benefits more generous by increasing the basic daily allowance by 200 euros per month
- Keep the current level of unemployment benefits
- Tighten unemployment benefits by reducing the basic daily allowance by 200 euros per month

**Public healthcare funding:**

- Increase public healthcare funding by 1 billion euros per year
- Keep the current level of public healthcare funding
- Cut public healthcare funding by 1 billion euros per year

**National debt:**

- Be willing to take on an additional 1 billion euros of national debt per year
- Not seek to change the current level of national debt
- Aim to reduce national debt by 1 billion euros per year

**Capital gains tax:**

- Increase capital gains tax by 2 percentage points
- Keep the current level of capital gains tax
- Decrease capital gains tax by 2 percentage points

**Tax progression:**

- Increase tax progression by raising the top income tax rate by 3%
- Keep the current level of tax progression
- Reduce tax progression by lowering the top income tax rate by 3%

**Fuel tax:**

- Increase the fuel tax by 5 cents per liter
- Keep the current level of fuel tax
- Decrease the fuel tax by 5 cents per liter

The second conjoint tests the motivation hypotheses detailed in the previous section, that is, what kind of views people have about reasons and consequences of income inequality and redistribution. In the conjoint, the respondents are presented with the personal opinions of two politicians A and B and are asked which of these individual politicians would they rather vote for in the next parliamentary elections. The opinions concern the possible effects and externalities of redistributive policies and taxation. The conjoint has five attributes which are: 1) fairness; 2) luck vs. effort; 3) efficiency; 4) trust in politicians and; 5) inequality's effect on stability.

List below displays the attributes and their levels in the second conjoint. Each attribute has either two or three levels. The value of each attribute is randomised for each card and the order of the attributes is randomised once for each respondent but is the same on both cards and remains the same for the same respondent across the cards.

**Large income differences:**

- Large income differences are unfair
- Large income differences are fair

**Causes of large income differences:**

- Large income differences are the result of good luck experienced by high earners
- Large income differences are the result of the hard work of high earners

**Income redistribution and economic impact:**

- Income redistribution would increase employment and boost economic growth
- Income redistribution does not have an impact on employment or economic growth
- Income redistribution would decrease employment and diminish economic growth

**Trust in politicians:**

- Politicians can be trusted to foster the common good of the citizens
- Politicians cannot be trusted to foster the common good of the citizens

**Income inequality and societal stability:**

- Large income differences reduce societal stability and increase crime
- Large income differences do not affect societal stability or crime
- Large income differences increase societal stability and reduce crime

Table 1. Conjoint I (Translation from Finnish)

***Next, we will show you 6 card pairs one at the time. Each pair of cards contains the manifestos of two imaginary parties (party A and Party B). Please choose which party you would rather vote in the next parliamentary elections.***

| | | |
|---|---|---|
| Increase income tax evenly by 1 percentage points across all income groups | Keep the current level of income taxation | Decrease income tax evenly by 1 percentage points across all income groups |
| Increasing the basic daily allowance of unemployment benefit by 200 euros per month | Keep the current level of unemployment benefits | Reducing the basic daily allowance of unemployment benefit by 200 euros per month |
| Increase public healthcare funding by 1 billion euros per year | Keep the current level of public healthcare funding | Cut public healthcare funding by 1 billion euros per year |
| Willing to take on an additional 1 billion euros of national debt per year | Keep the current level of government debt taking | Aim to reduce government debt by 1 billion euros per year |
| Increase capital income tax by 2 percentage points | Keep the current level of capital income tax | Decrease capital income tax by 2 percentage points |
| Increase tax progression by raising the top income tax rate by 3% | Keep the current level of tax progression | Reduce tax progression by lowering the top income tax rate by 3 percentage points |
| Increase the fuel tax by 5 cents per liter | Keep the current level of fuel tax | Decrease the fuel tax by 5 cents per liter |

Table 2. Conjoint II (translations from Finnish).

***Politicians decide on the collection and use of public sector funds. Taxation and income transfers affect the disposable income of citizens. Income redistribution means that the state uses taxes and subsidies to reduce income differences between citizens. Politicians also decide on the funding of public services, such as education and healthcare.***

***Next, we will show you 6 pairs of cards, one pair at a time. Each card pair presents the views of two fictional politicians on income differences and redistribution. For each pair, choose the candidate you would prefer to vote for in the next parliamentary elections.***

***When politicians decide on the size of the public budget, I would prefer to vote for a candidate who believes that...***

| | | |
|---|---|---|
| Large income differences are unfair | | Large income differences are fair |
| Large income differences are the result of good luck experienced by high earners. | | Large income differences are the result of the hard work of high earners. |
| Income redistribution would increase employment and boost economic growth | Income redistribution does not have an impact on employment or economic growth | Income redistribution would decrease employment and diminish economic growth |
| Politicians can be trusted to foster the common good of the citizens | | Politicians cannot be trusted to foster the common good of the citizens |
| Large income differences reduce societal stability and increase crime | Large income differences do not affect societal stability or crime | Large income differences increase societal stability and reduce crime |

## Experimental design details

**Randomisation method:**

Randomization done in office by a computer

**Randomisation unit:**

**Tax Day treatment:** Respondents are randomized based on the timing of Finland's Tax Day. Half of the respondents are surveyed before the Tax Day and the other half after, creating two groups based on exposure to the real-life event.

**Video treatment:** Within both the 'before' and 'after' Tax Day groups, respondents are randomly assigned at the individual level to either watch an informational video on tax collection and public services or not. This creates four treatment arms overall (no treatment, Tax Day only, video only, and both Tax Day and video).

**Sample size (or number of clusters) by treatment arms**

In total we have 4000 respondents. The treatments create following treatment arms:
Pure control group: no video and surveyed before Tax Day, 1000 respondents
Treatment group 1: watch the video and surveyed before tax date, 1000 respondents
Treatment group 2: surveyed after Tax Day, 1000 respondents
Treatment group 3: surveyed after Tax Day and watch the video, 1000 respondents

## Analysis of Results

**Background characteristics and questions**

First, we will begin by analyzing the background characteristics of the respondents to provide an overview of the sample composition. This will include descriptive statistics for key demographic and attitudinal variables such as education, gender, political views and media consumption habits. Most of the background variables are categorial, and we will present their frequencies and percentages.

We will then ensure that the distribution of these background characteristics is balanced across the four treatment groups (no treatment, video, tax day, and tax day & video). This will serve as a randomization check to confirm that the random assignment of treatments did not result in significant imbalances in key demographic and attitudinal variables across groups. If necessary, the differences will be controlled in our analysis.

After confirming balance, we will present descriptive statistics for the responses to the direct survey questions detailed in previous section. Part of these questions cover respondent attitudes and preferences and mirror the attributes presented in the conjoint analysis. The remaining questions cover a range of topics, asking individuals to evaluate their relative social status and life satisfaction, assess the current state of income inequality, report how frequently they discuss politics, and gauge their knowledge of redistributive policies. The distribution of responses to these questions will be illustrated using histograms to provide a visual representation of how these preferences and answers are distributed among the overall sample and across the different treatment groups. Lastly, we will include cross-tabulations or other graphical presentations to compare how these background characteristics and direct responses are distributed within each treatment group.

We will also use the background questions to study the representativeness of the sample by comparing the characteristics (age, gender, region, education and income) to those of the whole population based on Statistics Finland data. We will conduct the main analysis with the survey data as such, but if substantial selection to the sample is observed, we will conduct robustness analysis that implement corrective weights. This robustness analysis will be run on all the main analysis that study the effects of the information treatments.

Those standard format questions that ask directly about opinions we are interested, that is, redistribution views will also be used as outcome variables to study the effects of the Tax Day treatment and the information video treatment. These are the questions that relate to expressing their views, and test their knowledge, about redistributive matters. We will analyze these effects will standard OLS regressions.

**Baseline conjoint analysis**

Second, we conduct analysis of our conjoint survey results. Following Hainmuller et al. 2014, we estimate the average marginal component effect (AMCE) for each attribute, which captures how changes in one attribute level affect the likelihood of a profile being chosen. The analysis is conducted simply such that each card is used as one row in the data and the outcome variable in the OLS regression is a dummy for whether the card for chosen. Explanatory variables are dummies for each of the possible attribute values all at the same time in the model. One attribute value per attribute is omitted from the model to be a reference group. This method allows us to simultaneously assess the influence of multiple attributes on respondents' preferences and allows us to analyze how respondents weigh different factors in their decision-making process. We also conduct marginal means analysis for robustness in the appendix.

To assess the impact of our experimental treatments, we divide the sample into two based on the treatment (for both treatment separately). Then we can compare the preferences that the conjoint revealed between the samples. Alternatively, we run regressions where we incorporate our treatment indicators in the AMCE model to assess the direct effect of each treatment on choice preferences. We also incorporate interaction terms between the treatment indicators and the conjoint attributes.

**Heterogeneity analysis**

For our heterogeneity analysis, we will employ several approaches to analyze how the background characteristics, knowledge and stated preferences affect preferences revealed for the conjoint attributes and the treatment effects we find. This analysis will allow us to assess whether certain subgroups of respondents display different preferences or react differently to the treatments.

We begin our analysis on how the treatment effects vary by respondent characteristics by dividing the sample into subgroups based on key respondent backgrounds characteristics and views (education, income, gender, age, urban vs. rural, various political views, media source, life satisfaction, trust in government etc.). For each subgroup, we estimate separate models to see how preferences for the attributes differ. This allows us to determine whether certain groups place more or less importance on specific attributes. The estimated AMCE for each subgroup can then be compared to identify significant differences across groups.

This approach allows us to simultaneously assess how different characteristics, stated preferences and views of the society influence preferences that are revealed in the conjoint. This will allow us to determine if the treatments have heterogeneous effects depending on the respondent’s background, shedding light on how these factors shape the influence of the treatments on preferences. One of the most important aspects that we explore is the interaction between the stated preference for redistribution and motivational factors. E.g. do people with low. vs. high redistributive preferences have different preferences for specific motivational attributes (conjoint 2).

**Robustness and validity checks**

We conduct robustness and validity checks standard to conjoint analysis:

1. No carryover effects. An important identification assumption is the stability or the avoidance of carryover effects across different hypothetical choices in our experimental design. We test for these types of spillovers

by executing distinct regressions of respondent choices per individual choice task/round among voting decision outcomes.

2. No attribute and profile order effects. Another concern for identification could be that respondents are affected by the order, in which attributes are presented to them. This could be due to a priming (or primacy) effect in which a larger share of the attention goes to attributes placed near the top of the choice task. Our survey design, in which the attribute order randomized, (but keep it constant for a given respondent), attenuates this concern considerably. Nevertheless, we test for such attribute order effects with a set of regressions for each attribute, in which we regress the binary choice on a set of dummies for the attribute realizations, a dummy for the position of the attribute, and the interactions of these variables. A related concern could be that respondents favor different profiles due to the order in which they are presented within a particular task, that is, whether a given profile is shown as card A or B. We test this by splitting our sample depending on whether a given profile was presented on the left or right side of the choice task.

3. Specification checks. We also show the robustness of our results with a number of sensitivity checks, varying our econometric specification. We will include set and/or card-level fixed effects as well as standard errors without clustering. Moreover, we try a logit model instead of a linear probability model. We check whether our standard errors are robust to multiple hypothesis testing when accounting for the multitude of treatments in our survey design. We follow the procedure proposed by Westfall and Young (1993). We treat each attribute realization as separate treatments.

4. When analyzing subgroups, we also estimate marginal means instead of conditional AMCEs to account for potential differences in the omitted categories between subgroups (Leeper et al., 2020).

5. We will also include background characteristics as fixed effects in our conjoint model to control for their influence on choice behavior. This is done to account for baseline differences in preferences across respondents. By controlling for these individual-level factors, we will isolate the main effects of the conjoint attributes and treatments on choice outcomes.

6. Additionally, we will explore how respondents' answers to direct survey questions, which mirror the conjoint attributes, reflect their preferences in the conjoint tasks. We will include respondents' answers to these questions as interactions with relevant conjoint attributes. This will help us assess whether their stated preferences are consistent with their revealed preferences in the conjoint analysis. These consistency checks validate our conjoint analysis results by comparing respondents' revealed preferences with their directly stated preferences.