Perceptions of Relative Income Positions and Preferences for Redistribution: Survey Design and Methodology

Rui Fukuda and Rintaro Ando
October 2025

Abstract

This study investigates how individuals' awareness of their relative income position influences their views on fairness, inequality, and redistribution. To address this question, we implement a randomised information intervention survey in collaboration with a Japanese municipality. The survey is linked to administrative tax records, allowing respondents to be informed of their actual income rank within local reference groups. Treated individuals receive information on their rank within demographic cohorts. This design builds on and extends the findings of Hvidberg et al. (2023), shifting the analytical focus from fairness perceptions to redistribution preferences. The study has three main objectives. First, it examines the causal impact of positional information on attitudes towards redistribution, contributing to a re-evaluation of the Prospect of Upward Mobility (POUM) hypothesis by incorporating the role of misperceptions. Second, it documents the accuracy of income-related beliefs in Japan, including perceptions of (*i*) median income within reference groups, (*ii*) one's own position within those groups, and (*iii*) expectations about future income. Third, a follow-up survey conducted several months later assesses the persistence of the intervention's effects over time. Future income expectations are validated by linking survey responses to tax records in the subsequent year.

Keywords: Misperceptions; Social position; Preferences for redistribution; Tax records; Survey experiment.
JEL codes: D31, D63, D8, H20, H31

I. Research framework

The survey is structured around four conceptual domains, each corresponding to a major analytical focus. These domains are positioned at the top of Figure 1 and guide the overall research design. Each domain corresponds to a core module that includes specific survey items and analytical objectives. Below, we describe the content and purpose of each module.
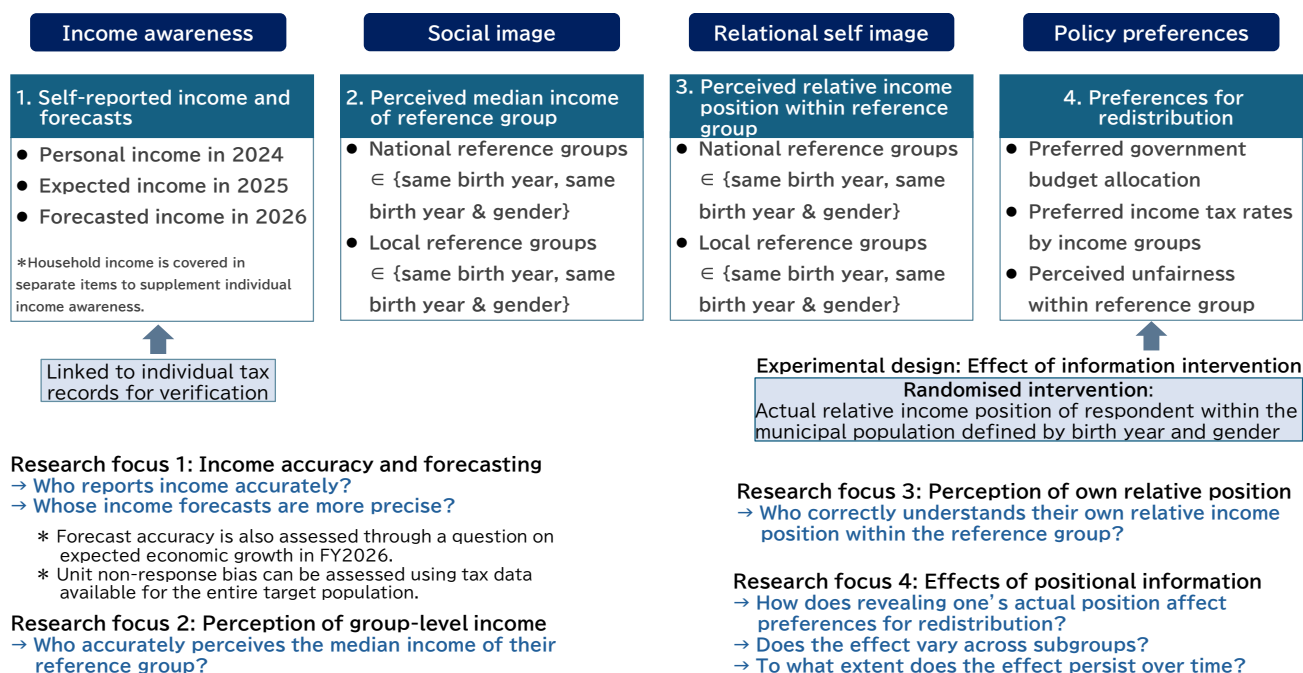

FIGURE 1
Overview of survey structure and research questions

Module 1: Self-reported income and forecasts   This module collects data on individuals' current and expected income, linked to individual-level tax records for validation. It contributes to answering the following research questions: *Who reports their income accurately, and who is able to forecast their future earnings more precisely?*

For respondents who remain within the municipality, the accuracy of their income forecasts for 2026 can be verified using administrative tax records available in the summer of 2027.

Module 2: Perceived median income of reference group   This module examines how individuals perceive the income levels of others in their reference group, defined by birth year and gender. It contributes to answering the following research question: *Who accurately estimates the median income of their reference group?*

Actual medians within the municipality can be identified using administrative tax records. For nationwide reference groups, verification will be possible once microdata from the 2025 Comprehensive Survey of Living Conditions, which serves as the basis for Japan's inequality indicators reported to the Organisation for Economic Co-operation and Development (OECD), becomes available.

Module 3: Perceived relative income position   This module investigates individuals' awareness of their own position within the income distribution of their reference group. It contributes to answering the following research question: *Who correctly understands their relative income position within the group?*

As in Module 2, actual positions can be identified using administrative tax records and, in the near future, nationwide survey data. The difference between perceived and actual position within the municipal reference group is used in the experimental design of Module 4, where positional information is randomly revealed to identify causal effects on redistribution preferences.

Module 4: Preferences for redistribution   This module evaluates how individuals' preferences for redistribution are shaped by awareness of their income position. It contributes to answering the following research questions: *Does revealing one's actual income rank affect redistribution preferences, and does this effect vary across subgroups?*

To identify causal effects, respondents are randomly assigned to receive information about their actual position amongst same-age peers and same-gender cohorts within the municipal income distribution prior to answering redistribution questions. In addition to immediate effects, the module also examines the persistence of the intervention's impact. The Wave-2 survey conducted six to twelve months later allows us to assess whether the effects on redistribution preferences endure over time.

This module also includes questions on perceived unfairness within the reference group. Whilst empirically positioned within Module 4, perceived unfairness may conceptually serve as a mediating factor between individuals' awareness of their relative income position (Module 3) and their policy preferences (Module 4), offering insight into how subjective perceptions of inequality shape attitudes toward redistribution.

II. Survey design

II-i. Survey structure

Table 1 provides a summary of the core design features of the survey. It outlines the timing, target population, data collection procedures, experimental structure, incentive scheme, follow-up plans, and implementing institutions.

TABLE 1
Overview of survey design

	Description
Survey Period (Wave 1)	Late October–November 2025
Target Population	Residents of a Japanese municipality (city) as of 15 October 2025, who have a 2024 tax record, were born between 1976 and 1980, and hold Japanese nationality. Total target sample: 4,918 individuals.
Survey Mode	Web-based self-administered survey conducted via Qualtrics
Data Collection Method	Invitation and reminder sent by post; responses collected via an online form
Experimental design	Participants are randomly assigned to receive information about their own income rank within the income distribution of the municipality. Randomisation is implemented automatically by Qualtrics.
Incentives	A coaster featuring the University of Tokyo logo is provided to all invited participants. In addition, gift cards and gift catalogues are offered through a prize draw, which is open only to those who complete the entire questionnaire.
Follow-up survey	To assess the persistence of the intervention effects, a follow-up survey will be conducted 6 to 12 months after Wave 1, targeting respondents who completed the initial survey.
Implementing Organisations	A Japanese municipality (a city with a population fewer than 100,000) and the University of Tokyo.

The first wave of the survey will be conducted between late October and November 2025. The target population comprises residents of a Japanese municipality who, as of 15 October 2025, meet the following criteria: they possess a 2025 municipal tax record that include income data for the year 2024, were born between 1976 and 1980, and hold Japanese nationality. The total target sample comprises 4,918 individuals.

The survey will be administered online using a self-completion format via Qualtrics. Invitations and reminders will be sent by post, and responses will be collected through an online form. An experimental design is embedded within the survey: participants are randomly assigned to receive information about their own income rank within the municipal income distribution. This randomisation is implemented automatically by the Qualtrics platform.

To encourage participation, all invited individuals will receive a coaster featuring the University of Tokyo logo. Additionally, those who complete the entire questionnaire will be eligible for a prize draw offering gift cards and gift catalogues. These incentives are designed not only to improve overall response rates, but also to help address the tendency for lower-income individuals to participate less frequently in self-administered surveys (Dutz et al., 2025).

To assess the persistence of the intervention effects, a follow-up survey will be conducted six to twelve months after the initial survey. This follow-up will target respondents who completed the initial survey. The survey is jointly implemented by a Japanese municipality, with a population of fewer than 100,000, and a research team based at the University of Tokyo.

II-ii. Profile of the municipality

Table 2 presents a consolidated summary of the municipality's demographic and socioeconomic characteristics, based upon distributional comparisons with national averages. The table summarises information from the individual figures in Appendix A, which are derived from census data and cover age distribution, educational attainment, household composition, and industrial structure.

TABLE 2
Key characteristics of the municipality compared to national average

	Summary
Age Distribution	Greater proportion of younger age groups (under 45); smaller share of older adults (60+)
Educational Attainment	Higher proportion of university graduates across all age groups and both sexes
Household Composition	Fewer elderly-only households; more households with children, particularly within nuclear families
Industrial Structure	Higher female labour force participation; more employment in education, retail, and care sectors; less in manufacturing

The municipality exhibits a distinctive demographic and socioeconomic profile relative to national patterns. (*i*) Its age structure is comparatively younger: the proportion of residents under 45 is consistently higher than the national average, whilst the share of older adults (aged 60 and above) is lower. (*ii*) Educational attainment is notably high. Across all age groups, both men and women in the municipality are more likely to have completed a university degree or higher, with particularly marked differences observed amongst younger adults. (*iii*) Household composition reflects this demographic profile. The municipality has fewer elderly-only households and a greater prevalence of households with children, especially within nuclear family settings. These patterns indicate a community structure oriented towards active family life. (*iv*) Finally, the local economy is service-oriented and characterised by strong female labour force participation. Employment is concentrated in sectors such as education, retail, and health care, whilst manufacturing plays a relatively smaller role. The share of regular workers and the proportion of women amongst them are both higher than national averages.

Overall, these characteristics portray a municipality with a younger, well-educated population, active family households, and a gender-inclusive labour market centred around service industries.

II-iii. Survey schedule

Figure 2 illustrates the planned timeline for survey implementation between 2025 and 2026. The first wave of the survey begins with the dispatch of invitation letters on 30 October 2025. Respondents are initially asked to complete the questionnaire by 21 November. For those who do not respond by this initial deadline, a reminder postcard will be sent, and the final deadline for participation is set for 10 December 2025.

The Wave-2 survey will be conducted exclusively amongst individuals who completed the Wave 1 questionnaire. This second wave is scheduled to take place approximately six to twelve months after the initial survey, allowing for the assessment of the persistence of intervention effects over time.
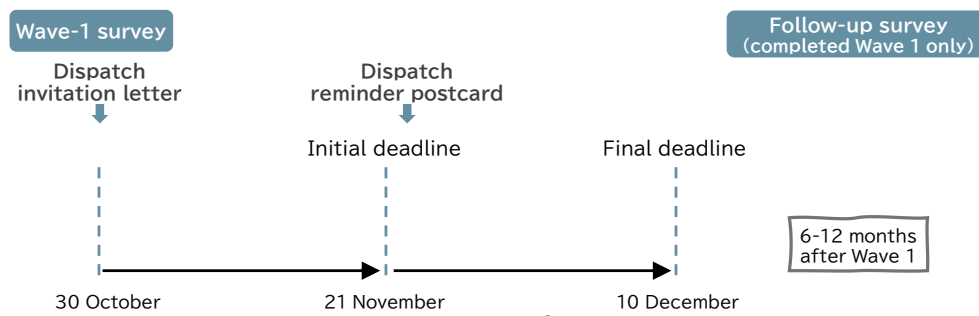
FIGURE 2
Planned survey schedule (2025–2026)

II-iv. Operational flow

Figure 3 illustrates the secure workflow used to implement the survey, designed to ensure that researchers do not handle any personally identifiable information of participants. The survey is conducted in collaboration with three parties: the local government, the research team, and the survey implementation agency. Although the survey is postal-based in terms of invitation delivery, responses are collected exclusively via the internet using a QR code embedded in each invitation letter.

The anonymised tax data used in the survey—including linked information from the resident register, which enables the supplementation of household characteristics—is managed by the Local Government Administrative Data (LGAD) Project at the University of Tokyo, where members of the research team are also affiliated. For further details on the LGAD Project and its anonymisation protocols, see Fukuda (2025). Through the procedures detailed in Figure 3, it is possible to securely link participants' survey responses with individual-level administrative tax records, whilst maintaining strict privacy safeguards.
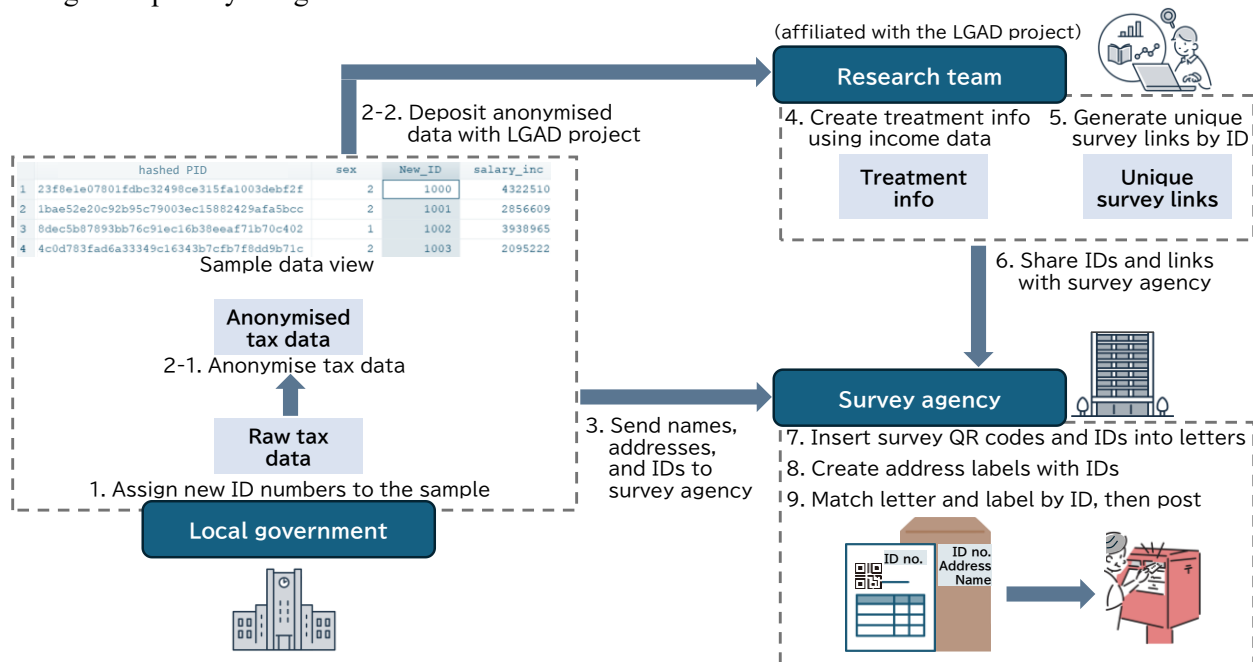
FIGURE 3
Secure data handling workflow

The implementation procedure is structured as follows:

Local government

1. Assign a unique participant ID number to each sample individual based upon their 2025 tax records, which include income data for the year 2024. ID numbers begin from 1,000.
2. Anonymise the tax data and deposit it with the Local Government Administrative Data (LGAD) Project at the University of Tokyo.
3. Send the survey agency the sample's names, addresses, and corresponding ID numbers.

Research team

4. Use the anonymised 2024 income data to generate treatment materials, which are embedded into the survey form.

5. Generate a unique survey link associated with each participant's ID number.
6. Share each participant's unique ID and corresponding survey link with the survey agency.

Survey implementation agency
7. Insert the QR code and ID number, provided by the research team in step 6, into each invitation letter.
8. Create address labels for envelopes using the name, address, and ID number data received from the local government in step 3.
9. Match the ID numbers on the letters with the address labels, then assemble and post the survey invitations.

III. Measurement framework and variable construction

This section outlines the structure of key variables used in the analysis, including perception-based measures, policy preference indicators, and the experimental intervention. It also describes how these variables are constructed, validated, and linked to administrative data.

III-1. Perceptions

This subsection introduces the variables related to individuals' perceptions of income and inequality. These measures are used to assess how people perceive their own economic position, the income distribution around them, and the fairness and causes of income differences. All perception-based questions are constructed using the same four reference groups, defined by the respondent's birth year, gender, and municipality of residence.

Self-reported annual income   Respondents enter their income across four categories using free-entry fields. The total amount is automatically calculated and confirmed by the respondent before proceeding. This measure serves as the basis for subsequent perception and forecasting variables and for constructing the intervention described in III-3.
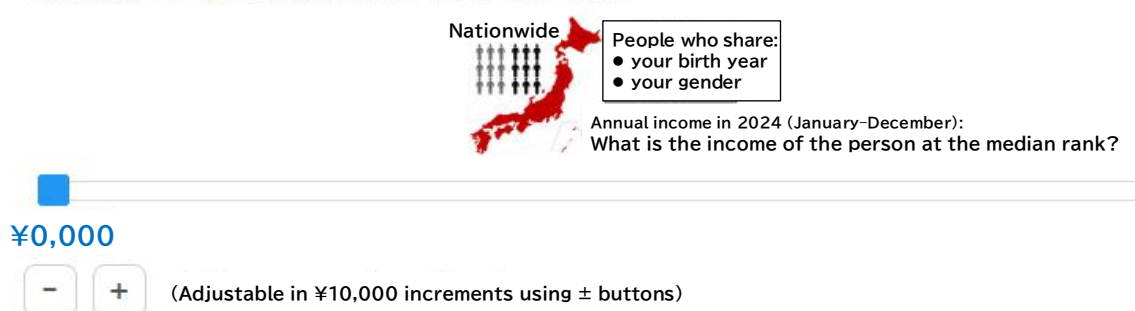
The definition of income used in this survey follows the classification adopted in Japan's Comprehensive Survey of Living Conditions (CSLC), as published by the OECD. It includes only those components that can be matched with administrative tax records, ensuring consistency and comparability across data sources. For details on the CSLC survey design, see Fukuda (2025, Appendix D.1).

The exact wording of the income questions and income forecast questions (English versions) is provided in Appendix B.1 and B.2, respectively.

Estimated median income of the reference groups   Respondents are asked to estimate the median income of individuals in their reference group, which is defined based on their own birth year and gender. Four distinct reference groups are constructed for each respondent: (1) individuals nationwide who share the respondent's birth year, (2) individuals nationwide who share both the respondent's birth year and gender, (3) individuals within the municipality who share the respondent's birth year, and (4) individuals within the municipality who share both the respondent's birth year and gender.

To reduce measurement error and improve comprehension, a map is displayed to help respondents visualise the geographic scope of each group. For the nationwide birth-year group (Group 1), respondents provide their estimate using a free-entry field. This value is then displayed as a fixed slider at the top of the page. Below it, three additional sliders are presented—one for each of the remaining reference groups (Groups 2–4). These sliders are used to collect respondents' estimates for each group, with the fixed nationwide value shown above serving as a visual reference point. An example of the slider-based question interface for Group 2 is shown below (for a male respondent born in 1975).

Perceived relative income position   Respondents are asked to indicate their perceived rank within the income distribution of each reference group. These four groups are the same as those used in the perceived median income question.

The question interface uses a visual "social ladder" to represent percentiles from the bottom (1st) to the top (100th) of the income distribution, following the design used in the questionnaire of Hvidberg et al. (2023). A vertical slider is placed on the right side of the ladder, which respondents can move to indicate their perceived position. As the slider is adjusted, the corresponding percentile value is dynamically displayed.

To reduce confusion and measurement error, respondents are first shown an instructional video explaining how to answer this question. They are also asked to complete a practice item before proceeding to the actual question. An example of the interface is shown below
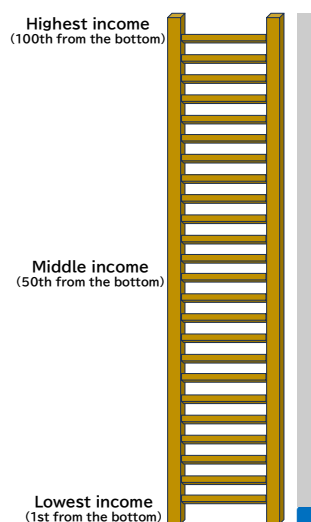
Fairness perceptions within reference groups   Perceived unfairness is measured using two complementary questions. Respondents first evaluate how fair or unfair they perceive income differences to be within each of the four reference groups—identical to those used in the perceived median income and relative income position questions.

The first question asks respondents to rate the fairness of income differences using a 7-point scale ranging from 1 (completely fair) to 7 (completely unfair), with 4 (neither fair nor unfair) as the midpoint. Immediately following this, a second question asks respondents to assess the extent to which these income differences are attributable to luck or effort. "Luck" refers to factors beyond individual control, such as family background, innate talent, social connections, and chance events, whilst "effort" refers to controllable factors such as hard work and personal choices. This question also uses a 7-point scale, ranging from 1 (entirely due to luck) to 7 (entirely due to effort), with 4 (both equally important) as the midpoint.

These questions are designed following the specification used in Hvidberg et al. (2023), allowing for cross-study comparability in measuring fairness perceptions. Although Figure 1 categorises these items under policy preferences, they are included in this subsection due to their conceptual relevance to perceptions of inequality

III-2. Policy preferences

This subsection presents the core outcome variables related to redistribution preferences. To capture multiple dimensions of policy preferences, the survey includes distinct question formats to cover multiple dimensions of the preferences. It includes:

- Preferred income tax rates by income group: Respondents assign tax rates to four income groups using interactive sliders, which dynamically update the total government revenue calculation.
- Preferred allocation of government expenditure: Respondents distribute the total government budget across major policy areas.

These variables are used to assess how perceptions and positional awareness influence policy preferences.

Preferred income tax rates by income groups   To measure preferences for income tax progressivity, respondents are asked to assign tax rates to four income groups using interactive sliders. The groups are defined based on a hypothetical population of 1,000 individuals, to avoid confusion between income percentiles and tax percentages:

- Top 1%: the 10 highest earners
- Next 9%: the next 90 highest earners
- Next 40%: the next 400 earners
- Bottom 50%: the 500 lowest earners

Respondents specify the tax rate they consider fair for each group. As they adjust the sliders, a fifth slider at the bottom automatically updates to show the total tax revenue generated. Respondents can proceed only when the total revenue falls within a predefined range (95–104% of the target revenue), at which point the slider turns green.

The interface is built using actual statistics on income distribution and personal income tax revenue in Japan. Whilst respondents only interact with the sliders, the underlying system incorporates these data to ensure realistic revenue calculations.

The question design is adapted from Alesina et al. (2018), and has also been used in Alesina et al. (2023) and Fukuda and Sasaki (2024), and modified for the Japanese context. The full wording of the question is provided in Appendix C.1.

Preferred government budget allocation   To measure preferences over public spending priorities, respondents are asked to allocate the overall government budget across seven policy areas. The total allocation must sum to 100%, and respondents are instructed to imagine themselves responsible for setting next year's budget for the Japanese government.

The seven categories presented are:
1. Defence and National Security – Expenditure on defence-related activities and overseas operations of the Self-Defence Forces
2. Public Infrastructure – Expenditure on roads, railways, airports, sewage systems, dams, ports, and river embankments
3. Education (Pre-school to Secondary) – Support for children's education, especially for households with limited financial resources
4. Education (Post-secondary) – Support for students in vocational schools, universities, and graduate programmes, especially from low-income households
5. Pensions and Social Welfare – Expenditure on pensions for the elderly and income support for people with disabilities
6. Unemployment and Low-Income Support – Expenditure on unemployment benefits and welfare for low-income households
7. Healthcare and Long-Term Care – Support for medical and care services, including subsidies for treatment costs

Respondents enter their preferred allocation for each category, ensuring the total adds up to 100%. This question design is adapted from Alesina et al. (2018), and has also been used in Alesina et al. (2023) and Fukuda and Sasaki (2024). Whilst Alesina et al. (2023) include an additional category for housing, the present survey follows the same categorisation as Fukuda and Sasaki (2024), including a split between pre-secondary and post-secondary education. The full wording of the question is provided in Appendix C.2.

III-3. Information intervention experiment

This subsection describes the randomised information intervention embedded in the survey. Based upon respondents' self-reported income, birth year, and gender, their actual income rank within the municipal reference group is calculated using administrative tax data, which also enables post-survey validation of self-reported income and demographic information.

There are two types of intervention information provided to randomly assigned respondents:
1. Birth-year reference group: Respondents are shown their actual income rank amongst individuals born in the same year and living in the same municipality, along with the difference between this actual rank and their self-estimated rank.
2. Birth-year and gender reference group: Respondents are shown their actual income rank amongst individuals of the same birth year and gender living in the same municipality, again with the difference from their self-estimated rank.

Respondents are randomly assigned to receive either no information or both types of positional information, prior to answering questions on redistribution preferences, as well as on perceived fairness. This design enables causal identification regarding the impact of positional awareness on policy attitudes. The intervention also allows for the examination of potential mediating mechanisms, such as changes in perceived unfairness or self-positioning. Follow-up data collected six to twelve months later will be used to assess the persistence of these effects over time.

A sample screen of the first type of intervention (birth-year reference group) is shown below.

① Your income position among people born in 1975 living in XX City

Your estimated rank: 78th from the bottom
Actual rank based on your stated income: 73rd from the bottom

You are actually 5 positions lower than you expected.

Highest income
(100th from the bottom)

←Your guess: 78th from the bottom
←Actual rank: 73rd from the bottom

Middle income
(50th from the bottom)

Note:
The map of the municipality, which is supposed to be shown here, has been omitted to protect its confidentiality.

Lowest income
(1st from the bottom)
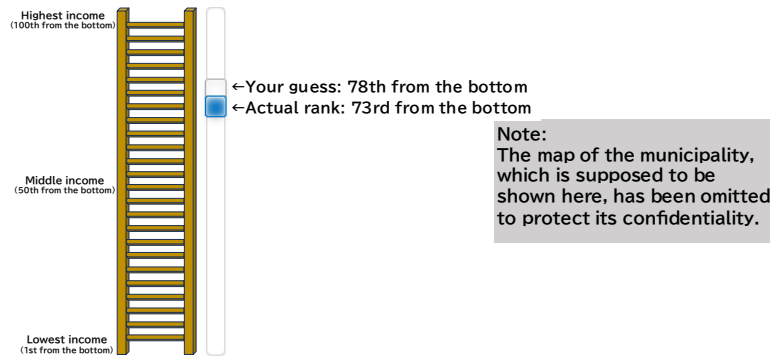
References

Alesina Alberto, Stefani Stantcheva, and Edoardo Teso. 2018. "Intergenerational Mobility and Preferences for Redistribution." *American Economic Review*, 108(2): 521–554.

Alesina Alberto, Armando Miano, and Stefani Stantcheva. 2023. "Immigration and Redistribution." *Review of Economic Studies*, 90(1): 1–39.

Dutz Deniz, Ingrid Huitfeldt, Santiago Lacouture, Magne Mogstad, Alexander Torgovitsky, and Winnie van Dijk. 2025. "Selection in Surveys: Using Randomized Incentives to Detect and Account for Nonresponse Bias." NBER Working Paper, No. 29549 (Revised February 2025).

Fukuda Rui and Dan Sasaki. 2024. "Perceptions on Intergenerational Mobility and Preferences for Redistribution in Spain." AEA RCT Registry. https://www.socialscienceregistry.org/trials/12942

Fukuda Rui. 2025. "Administrative Tax Data of Japanese Municipalities: A Review." CREPE DP, No.177.

Hvidberg Kristoffer B., Claus T. Kreiner, and Stefanie Stantcheva. 2023. "Social Positions and Fairness Views on Inequality." *Review of Economic Studies*, 90(6): 3083–3118.

A. Demographic and socioeconomic characteristics of the target municipality

A: Age-sex distribution (2020)

Share of total population (%)

Age	Females (%)	Males (%)
100+	0.02	0.00
95-99	0.12	0.03
90-94	0.53	0.16
85-89	0.91	0.57
80-84	1.32	1.07
75-79	1.99	1.61
70-74	2.49	2.12
65-69	2.21	1.99
60-64	2.18	2.02
55-59	2.69	2.67
50-54	3.42	3.35
45-49	4.35	4.16
40-44	4.07	4.06
35-39	3.70	3.69
30-34	3.12	3.01
25-29	2.65	2.45
20-24	4.27	3.95
15-19	3.14	3.03
10-14	2.73	2.74
5-9	2.94	3.07
0-4	2.67	2.69

Difference from national average (% pts; nationwide − municipality)

Age	Females	Males
100+	-0.02	0.05
95-99	-0.05	0.30
90-94	-0.13	0.88
85-89	0.14	1.35
80-84	0.44	1.45
75-79	0.50	1.50
70-74	0.95	1.72
65-69	0.96	1.37
60-64	0.73	0.96
55-59	0.48	0.45
50-54	0.09	0.06
45-49	-0.30	-0.39
40-44	-0.75	-0.66
35-39	-0.76	-0.69
30-34	-0.41	-0.40
25-29	-0.05	0.02
20-24	-1.50	-1.71
15-19	-0.83	-0.82
10-14	-0.67	-0.54
5-9	-1.10	-0.87
0-4	-0.94	-0.83

B: Educational attainment (2020)

(Upper value = Nationwide averages; lower value = Target municipality)

Males

Age	≦High school	Two-year college	≧Four-year college	Students	Unknown
25-34	0.30 / 0.18	0.10 / 0.08	0.38 / 0.65	0.01 / 0.03	0.21 / 0.06
35-44	0.36 / 0.19	0.11 / 0.09	0.34 / 0.63	0.00 / 0.00	0.18 / 0.08
45-54	0.43 / 0.26	0.11 / 0.11	0.30 / 0.55	0.00 / 0.00	0.16 / 0.09
55-64	0.47 / 0.29	0.07 / 0.07	0.34 / 0.57	0.00 / 0.00	0.12 / 0.07
65+	0.62 / 0.47	0.03 / 0.03	0.21 / 0.37	0.00 / 0.00	0.13 / 0.13

Females

Age	≦High school	Two-year college	≧Four-year college	Students	Unknown
25-34	0.27 / 0.16	0.20 / 0.18	0.34 / 0.58	0.01 / 0.02	0.18 / 0.06
35-44	0.32 / 0.17	0.27 / 0.29	0.25 / 0.45	0.00 / 0.00	0.16 / 0.08
45-54	0.42 / 0.26	0.29 / 0.39	0.15 / 0.26	0.00 / 0.00	0.13 / 0.09
55-64	0.51 / 0.38	0.26 / 0.35	0.13 / 0.19	0.00 / 0.00	0.10 / 0.08
65+	0.71 / 0.60	0.09 / 0.15	0.05 / 0.09	0.00 / 0.00	0.15 / 0.16

C: Household types (2020)

	Share in overall households				Share in nuclear family households	Share in single-parent households	Share in three-gen. households
	Elderly members only	Nuclear families	With under-18 y/o member(s)	Three-generations	With under-18 y/o member(s)	With under-18 y/o member(s)	With under-18 y/o member(s)
Nationwide averages	0.24	0.54	0.19	0.04	0.31	0.89	0.56
Target municipality	0.14	0.56	0.27	0.02	0.45	0.89	0.57

D: Industry (2021)

(Upper value = Nationwide averages; lower value = Target municipality)

	Establishments	Employees	Employment share within females	Employment share within males	Employment share within industries — Females	Regular-workers	Females in regular-workers
Overall	1.00 / 1.00	1.00 / 1.00	1.00 / 1.00	1.00 / 1.00	0.44 / 0.52	0.88 / 0.92	0.45 / 0.53
Agriculture and Forestry, and fisheries	0.01 / 0.00	0.01 / 0.00	0.01 / 0.00	0.01 / 0.00	0.29 / 0.51	0.67 / 0.89	0.34 / 0.50
Mining and Quarrying of Stone and Gravel	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00	0.15 / 0.13	0.84 / 0.63	0.14 / 0.20
Construction	0.09 / 0.10	0.06 / 0.05	0.03 / 0.02	0.09 / 0.07	0.19 / 0.23	0.77 / 0.79	0.18 / 0.22
Manufacturing	0.08 / 0.03	0.14 / 0.04	0.10 / 0.02	0.18 / 0.05	0.30 / 0.36	0.92 / 0.87	0.30 / 0.38
Electricity, Gas, Heat Supply and Water	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00	0.14 / 0.44	0.97 / 1.00	0.14 / 0.44
Information and Communications	0.01 / 0.01	0.03 / 0.00	0.02 / 0.00	0.04 / 0.00	0.28 / 0.34	0.94 / 0.77	0.28 / 0.36
Transportation and Postal Services	0.02 / 0.01	0.05 / 0.05	0.02 / 0.02	0.08 / 0.08	0.20 / 0.22	0.95 / 0.99	0.20 / 0.22
Wholesale and Retail Trades	0.23 / 0.29	0.19 / 0.26	0.20 / 0.28	0.17 / 0.23	0.49 / 0.56	0.88 / 0.94	0.50 / 0.57
Finance and Insurance	0.02 / 0.01	0.02 / 0.01	0.03 / 0.01	0.02 / 0.01	0.55 / 0.55	0.96 / 0.96	0.57 / 0.57
Real Estate and Goods Rental and Leasing	0.07 / 0.08	0.03 / 0.02	0.02 / 0.02	0.03 / 0.02	0.41 / 0.48	0.65 / 0.60	0.42 / 0.50
Scientific Research, Professional and Technical Services	0.05 / 0.05	0.04 / 0.07	0.03 / 0.04	0.04 / 0.10	0.34 / 0.31	0.84 / 0.92	0.35 / 0.32
Accommodation	0.01 / 0.00	0.01 / 0.00	0.01 / 0.00	0.01 / 0.00	0.55 / 0.50	0.87 / 1.00	0.55 / 0.50
Eating and Drinking Services	0.11 / 0.10	0.07 / 0.09	0.08 / 0.10	0.05 / 0.08	0.57 / 0.58	0.82 / 0.95	0.59 / 0.59
Living-related and Personal Services	0.07 / 0.07	0.02 / 0.02	0.03 / 0.03	0.02 / 0.01	0.63 / 0.70	0.69 / 0.81	0.66 / 0.74
Amusement and Recreation	0.01 / 0.01	0.01 / 0.01	0.01 / 0.01	0.01 / 0.01	0.47 / 0.49	0.90 / 0.96	0.48 / 0.49
Education and Learning Support	0.04 / 0.07	0.05 / 0.15	0.07 / 0.14	0.04 / 0.15	0.55 / 0.50	0.93 / 0.93	0.55 / 0.49
Medical and Health Care and Welfare	0.09 / 0.10	0.14 / 0.18	0.23 / 0.25	0.07 / 0.11	0.71 / 0.71	0.92 / 0.95	0.74 / 0.72
Compounding Services	0.01 / 0.00	0.01 / 0.00	0.01 / 0.00	0.01 / 0.01	0.40 / 0.41	0.96 / 1.00	0.41 / 0.40
Other services (except Government)	0.07 / 0.06	0.08 / 0.04	0.08 / 0.04	0.09 / 0.05	0.41 / 0.51	0.90 / 0.91	0.42 / 0.53
State and Local Government (not elsewhere classified)	0.01 / 0.00	0.03 / 0.02	0.02 / 0.02	0.04 / 0.02	0.30 / 0.43	1.00 / 1.00	0.29 / 0.43

FIGURE A-1

Demographic and socioeconomic indicators of the target municipality relative to national averages (panels A–D)

Source: Population Census 2020 and Economic Census 2021, e-Stat.

Notes: (1) The differences in population shares by age and sex in the right-hand figure of Panel A are calculated as *(Census − Tax)* and expressed in percentage points. (2) Figures in Panels B to D are reproduced from Fukuda (2025, Appendix C).

B. Questions on personal income and expectations

B1. Annual personal income

Q8. We would like to ask about your personal pre-tax annual income for the past year (1 January to 31 December 2024). Please enter the total amount for each of the four income categories below, using units of 10,000 yen. If the amount for any category is less than ¥4,999, please enter "0". Note: You will not be able to proceed to the next question unless all fields are completed.

Notes:

1. How to estimate your income

If you do not know your annual income, please estimate it by multiplying your monthly income by 12 and adding any bonuses. If you had negative income from business or other sources, please enter the amount with a minus sign (e.g. "−50").

2. Do not include the following types of income:

Non-taxable income: e.g. maternity benefits, child allowances, unemployment benefits, workers' compensation for leave, public assistance, disability or bereavement pensions

Income not declared in a tax return: e.g. income subject to separate withholding tax (such as interest or dividends), undeclared miscellaneous income, financial support or informal transfers from family members (e.g. remittances, gifts)

One-off income: e.g. life insurance payouts, retirement allowances, proceeds from the sale of property or shares

3. If you have reference documents, please use the sample image below to help you fill in the amounts. If you do not have such documents, please enter approximate figures.

(1) Gross employment income (annual) Please enter your total pre-tax income earned through employment, including salary, wages, and bonuses. Income from part-time jobs and executive compensation should also be included. Reference documents: Certificate of income and tax withholding, payslips, copy of tax return	(in ¥10,000 units)
(2) Net business income (annual) Please enter the net income from business activities, calculated by subtracting necessary expenses (e.g. purchases, employee wages) from total revenue, including self-consumed or gifted goods. Income from farming, livestock, fishing, and forestry should be included. Reference document: Copy of tax return	(in ¥10,000 units)
(3) Income from assets (annual) Please enter the total income from renting out property (e.g. houses or land), and from interest or dividends on savings, bonds, and shares that were declared in your tax return. Do not include proceeds from selling property or shares, withdrawn savings, or insurance payouts. Reference documents: Copy of tax return, bankbook, dividend statements	(in ¥10,000 units)
(4) Miscellaneous income (annual) If you declared any miscellaneous income in your tax return, please enter the total amount. Reference document: Copy of tax return	(in ¥10,000 units)

B2. Forecasted personal income

19_1. Forecast of personal income for next year (2026)

Compared to your personal pre-tax annual income last year (January–December 2024), how do you expect your income to change next year (January–December 2026)? Based on the income you reported for 2024, we have automatically calculated a range of possible income scenarios. For each scenario, please indicate the probability (in %) that you believe it will occur.

Note: The total of all probabilities must add up to 100%.

Income Change Scenario	Estimated Income Range（¥10,000 units）	Probability (%)
Increase of 15% or more	●●JPY or more	_____% (1)
Increase of 10–15%	●●JPY – ●●JPY	_____% (2)
Increase of 3–10%	●●JPY – ●●JPY	_____% (3)
Increase of 1–3%	●●JPY – ●●JPY	_____% (4)
No change (±1%)	●●JPY – ●●JPY	_____% (5)
Decrease of 1–3%	●●JPY – ●●JPY	_____% (6)
Decrease of more than 3%	●●JPY or less	_____% (7)
Total	—	_____%

C. Questions on preferences for redistribution

Your views on public policies

In the following block, you will be asked to consider how government revenue and expenditure relate to the implementation of public policies. For the purpose of this exercise, please assume that the overall level of government spending is fixed and cannot be changed. You will be asked to share your views on the following two topics:
- The appropriate distribution of tax burdens to finance government spending (public policies)
- How government resources (expenditure) should be allocated across different policy areas

C1. Preferred income tax rates across income groups

Q27. Views on income tax across income levels

We would like to ask your views on income tax for people at different income levels. The government raises revenue through income tax to fund public policies and services. In your opinion, **what level of tax burden is fair for people with different income levels in order to finance public spending?**

Income tax* refers to the proportion of your income paid to the government as tax. For example, if you earn ¥4,000,000 and pay ¥400,000 in income tax, your tax rate is 10%. In this case, the government's tax revenue is JPY 400,000.

> * For the purposes of this question, we assume that government revenue comes solely from personal income tax. Personal income tax is deducted from individual income. To simplify the scenario, other taxes such as consumption tax, direct or indirect taxes are excluded.

Now, imagine a population of 1,000 people divided into four income groups:
- Top 1%: the 10 highest earners
- Next 9%: the next 90 highest earners
- Next 40%: the next 400 earners
- Bottom 50%: the 500 lowest earners

Please use the sliders below to **indicate the income tax rate you believe each group should pay.**

As you adjust the sliders for each income group, a fifth slider below will automatically update to show the total tax revenue collected. **You can proceed to the next question only when the revenue target is met and the slider turns green.**

① 最も収入が多い 10 人が負担するべき所得税率
0%　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　100%
0%

② 次に収入が多い 90 人が負担するべき所得税率
0%

③ 次に収入が多い 400 人が負担するべき所得税率
0%

④ 最も収入が少ない 500 人が負担するべき所得税率
0%

政府の税収調達（自動計算・目標額 = 95〜104）
0
税収が不足しています（目標 95〜104）

C2. Preferred allocation of government budget

Q28. Allocation of government budget

Next, we would like to ask your views on how the overall government budget (including both local and national government spending) should be allocated.

Imagine you are responsible for deciding next year's budget for the Japanese government. Please allocate the budget across the following seven areas. Assume the total budget is 100%. Your allocations must add up to 100%.

> **(1) Defence and National Security** – Expenditure on defence-related activities and overseas operations of the Self-Defence Forces
> **(2) Public Infrastructure** – Expenditure on roads, railways, airports, sewage systems, dams, ports, and river embankments
> **(3) Education (Pre-school to Secondary)** – Support for children's education, especially for households with limited financial resources
> **(4) Education (Post-secondary)** – Support for students in vocational schools, universities, and graduate programmes, especially from low-income households
> **(5) Pensions and Social Welfare** – Expenditure on pensions for the elderly and income support for people with disabilities
> **(6) Unemployment and Low-Income Support** – Expenditure on unemployment benefits and welfare for low-income households
> **(7) Healthcare and Long-Term Care** – Support for medical and care services, including subsidies for treatment costs

Please enter your allocation for each category:
(1) Defence and National Security: _____%
(2) Public Infrastructure: _____%
(3) Education (Pre-school to Secondary): _____%
(4) Education (Post-secondary): _____%
(5) Pensions and Social Welfare: _____%
(6) Unemployment and Low-Income Support: _____%
(7) Healthcare and Long-Term Care: _____%
Total: _____%