

Demand for Fiscal Policy in an Aging Country*

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Preliminary and Incomplete

Abstract

Government debt rose to its highest level in many advanced economies during the Covid-19 crisis. In this paper, we conduct an information provision experiment to understand the public's view on fiscal consolidation. We first document the extent to which the public misperceives the current debt-to-GDP ratio and then examine how information about the correct current debt-to-GDP ratio and/or its future projection affect their fiscal policy views. We find that the public tends to underestimate the current debt-to-GDP ratio and that the correct information increases support for fiscal consolidation. However, information about future projection does not alter the effect of information provision. We also find that younger generations are more likely to underestimate the current debt-to-GDP ratio and less likely to support fiscal consolidation than older generations, but that they are just as sensitive to information provision as older generations. Our results contribute to understanding public attitudes toward fiscal policy in an aging country.

JEL Classification: P16, E60, Z13

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1 Introduction

Government debts have been on the rising trend over the past decades in many advanced economies. Figure 1 depicts this trend for G7 countries. The debt-to-GDP ratio stepped up during the COVID-19 crisis, prompting the discussion for the need for fiscal consolidation. As broad public support is important for any fiscal reform to keep the debt level under control, it is useful to understand how the public forms their views regarding fiscal policy.

In this paper, we investigate how people perceives the current debt-to-GDP ratio and examine how the provision of correct information about the current debt-to-GDP ratio affect affects people's fiscal policy

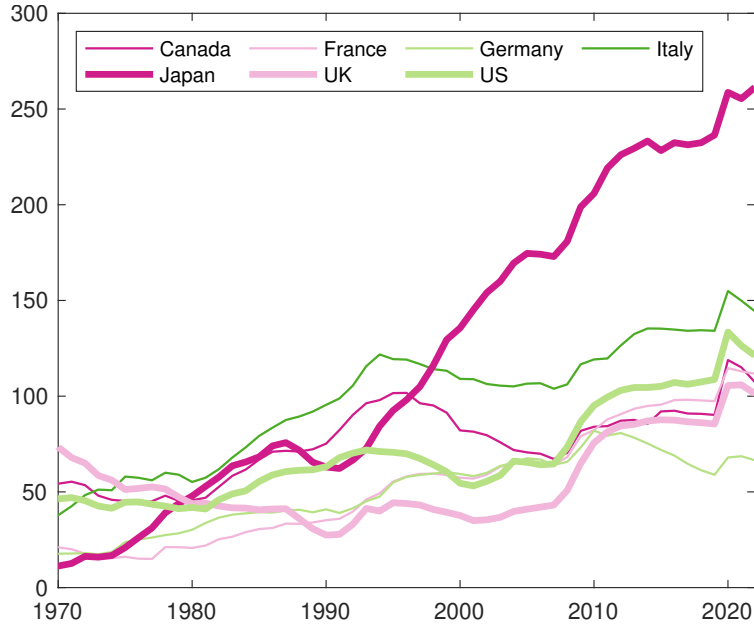
*This experiment is registered in the AEA RCT Registry as AEARCTR-0012973, available at <https://www.socialscienceregistry.org/trials/12973>. All experimental instructions are available upon request. We obtain ethics approval from the University of Tokyo. We are grateful for participants at The 2024 NTU-AS International Symposium on Macroeconomics, The 2nd RISE Workshop on Understanding Macroeconomic Regimes and Their Implications for Modeling and Policymaking, SWET, The R. K. Cho Memorial Conference.

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Source: IMF Public Finances in Modern History Database (Dec 2022)

Figure 1: Debt-to-GDP Ratio for G7 Countries (%)

view. We also study how the provision of a government’s debt-to-GDO projection—either optimistic or pessimistic—affect the people’s fiscal policy view. Throughout the analysis, we pay close attention to the heterogeneity associated with individual attributes, particularly age.

We find that the public tends to underestimate the current debt-to-GDP ratio. Our survey participants on average think that the debt-to-GDP ratio is 175%, whereas the actual ratio was 214%. 85% of the participants underestimate the current debt-to-GDP ratio. Younger generations tend to underestimate the current level of debt-to-GDP ratio by more than older generations.

The participants, even in the control group, tend to think that the debt-to-GDP ratio is too high and should be reduced. However, they do not necessarily show that support for taking some actions needed to reduce the debt—such as reducing spending and raising tax rates—is as strong as support for reducing the debt. Older generations are more likely than younger generations to think (i) that the debt-to-GDP ratio is too high, (ii) that it should be reduced, (iii) that the spending should be reduced, and (iv) that the tax rate should be raised.

We find that the provision of correct information on the current debt-to-GDP ratio raises the support for fiscal consolidation. In contrast, the provision of a projection of the future debt-to-GDP ratio—be it optimistic or pessimistic—does not alter the effect of information provision. Those with a lower perceived debt-to-GDP ratio and female react more to the correct information on the current debt-to-GDP ratio than those with a higher perceived debt-to-GDP ratio and male. We do not find any noticeable age heterogeneity in the effect of information provision.

Our paper is related to the following three strands of the literature.

First, our paper builds on a large literature using information provision experiments to investigate how the public shapes their policy views. [Kuziemko et al. \(2015\)](#) explore the link between information about income inequality and support for tax and transfer policies. [Alesina et al. \(2023\)](#) examine how the perception of immigrants affect support for redistribution policy, while [Alesina et al. \(2021\)](#) and [Haaland and Roth \(2023\)](#)

investigate the effect of perceived racial gaps on race-related policies. [Settele \(2022\)](#) studies the impact of perceived gender wage gaps on policy demand, whereas [Dechezleprêtre et al. \(2022\)](#) study factors influencing attitudes toward climate policies.

Our work is most closely related to [Roth et al. \(2022\)](#) who examine the effects of information provision regarding the current actual debt-to-GDP ratio on the public’s fiscal policy view in the U.S. What differs in our paper from theirs is threefold. First, we study the fiscal policy views in Japan—a country with the highest debt-to-GDP ratio—while they study those in the U.S. Second, we focus on age heterogeneity, while they do not. Third, we study not only the effect of the correction information on the current debt-to-GDP ratio, but also the effect of different projections of the future debt-to-GDP ratio, while they focus on the effect of the former.

Second, our paper is related to the literature using information-provision experiments to understand how the public form expectation in macroeconomics. The one of widely studied areas is inflation expectations of households (for example, [Coibion et al., 2022, 2023](#); [Binetti et al., 2024](#), among others) and firms ([Kumar et al., 2023](#); [Ropele et al., 2024](#); [Baumann et al., 2024](#)).¹ Another strand of literature examines the causal effects of exogenously varying inflation expectations on spending decisions ([Coibion et al., 2024](#); [van Rooij et al., 2024](#)). [Coibion et al. \(2021\)](#) analyze the impact of fiscal consideration (the information on current debts or deficit levels) on household inflation expectation. We differ from these analysis because we conduct an information-provision experiment to understand the public’s views on fiscal policy, as oppose to how they form exectations.

Third, our paper is related to the theoretical literature investigating the effects of fiscal consolidation. [Barnichon et al. \(2022\)](#) and [House et al. \(2020\)](#) investigate the effects of fiscal austerity on output, whereas [Bi et al. \(2013\)](#) study the economic consequences of uncertainties with respect to timing and composition of fiscal consolidation.² [Hansen and İmrohoroğlu \(2016\)](#) and [İmrohoroğlu et al. \(2019\)](#) analyze the various tax reforms for the fiscal sustainability in Japan.

Our paper is particularly closely related to the subset of the theoretical literature on fiscal sustainability that emphasizes the role of demographic changes. See, for example, [Braun and Joines \(2015\)](#), [Hansen and İmrohoroğlu \(2023\)](#), and [Kitao and Mikoshiba \(2024\)](#). These papers investigate the implications of various fiscal policies for the economy, but abstract from the issue of whether these policies have a broad public support. Our paper sheds light on what kind of fiscal reforms the public is likely to support.

The rest of the paper is organized as follows. Section 2 describes the experimental design. Section 3 presents the respondents’ beliefs about the current and future debt-to-GDP ratios. Section 4 shows the respondents’ views on government debt and fiscal policy. Section 5 presents the results of the information provision experiment on fiscal policy view. Section 6 examines more detailed views on fiscal policy. Section 7 concludes.

2 Experimental Design

We collect data on people’s perceptions of the current and future debt-to-GDP ratios and their views on government debt and fiscal policy in Japan through online surveys. We first conduct our main survey from

¹[Weber et al. \(2023\)](#) pool prior RCTs conducted in different countries and times to analyze how households and firms respond to information about inflation under different economic environments. See [D’Acunto and Weber \(2024\)](#) for a recent review for household inflation expectation.

²To list a few, [Blanchard \(2019\)](#), [Ghosh et al. \(2013\)](#), [Jiang et al. \(2024\)](#), [Kocherlakota \(2023\)](#), and [Mehrotra and Sergeyev \(2021\)](#).

February 14 to 22, 2024, and then a follow-up survey four weeks after the main experiment, i.e., from March 11 to 18, 2024.

We screen our respondents based on the instructional manipulation check (IMC) to ensure that they pay proper attention to our survey.³ In addition to those who fail the IMC, we also exclude the respondents who do not complete the survey.

2.1 Main Survey

2.1.1 Current and Future Debt-to-GDP Ratio

We ask the participants' perceptions of the current debt-to-GDP ratio and their projection of the debt-to-GDP ratio 10 years ahead. We provide explanations about what we mean by "debt" and "GDP" in plain language in case the respondents are familiar with those terms.

Before they answer these two questions, we provide our respondents with one of the following two nominal anchors to reduce the possibility of outliers in the response. The first anchor is the debt-to-GDP ratio in Japan in 2010, which is 164% (Anchor 1).⁴ The second anchor is the average debt-to-GDP ratio in Japan from 2002 to 2010, which is 134% (Anchor 2). Respondents are randomly assigned to these two anchors.

2.1.2 Information Provision

We consider a control group and three randomly selected treatment groups. For all four groups, we remind all the respondents about how they answered about the current debt-to-GDP ratio. We provide the respondents in treatment group 1 with the actual current debt-to-GDP ratio (214%). We provide the respondents in treatment group 2 with the actual current debt-to-GDP ratio and a 10-year-ahead projection of the debt-to-GDP ratio by the Cabinet Office of Japan (172%). We call this the optimistic projection. We provide the respondents in the treatment group 3 with the actual current debt-to-GDP ratio and an alternative 10-year-ahead projection of the debt-to-GDP ratio (226%) by the Cabinet Office of Japan. We call this the pessimistic projection .

2.1.3 Views about Fiscal Policy

After the information provision, we ask the respondents three types of questions regarding their views on fiscal policy.

The first type of questions is about fiscal policy at an aggregate level. We ask our respondents their view on (i) whether the government has too much debt, (ii) whether the government should reduce the debt, (iii) whether the government should reduce its spending, and (iv) whether the government should increase its taxes. The responses are on a 5-point Likert scale: "Strongly Disagree," "Disagree," "Neutral," "Agree," and "Strongly Agree."

The second type of questions is about more detailed aspects of fiscal policy. We ask our respondents their views on whether the government should reduce spending on infrastructure, education, childcare, technology, environment, and defense. We ask them their view on (i) whether the government should increase consumption tax, capital gain tax, and inheritance tax, (ii) whether the government should increase

³Details of the IMC and results are in the Appendix.

⁴In our survey, we use the debt-to-GDP ratio announced by the Cabinet Office of Japan because we intend to utilize their long-run forecasts under different scenarios for our treatments. Note that they are different from typical numbers available, for example, from the IMF. The major difference is that those numbers from the Cabinet Office are only concerned about debts held by national and local governments and do not include something related to insurance and pensions.

or reduce social security benefits, and (iii) whether the government should increase income tax rate for each of seven income-tax brackets. The current tax rates associated with these seven income brackets are 5%, 10%, 20%, 23%, 33%, 40%, and 45%.

The third type of questions is about trust in the government. We ask our respondents their views on (i) whether the government is trustworthy, (ii) whether the government spends the tax revenue wisely, (iii) whether the government collects the tax in a forward-looking manner, (iv) whether the current fiscal policy stance is sustainable, and (v) whether the demand for the Japanese Government bond decline in the future in the absence of fiscal consolidation.

2.1.4 Background Information

Finally, we ask respondents about various demographic and socio-economic attributes. Demographic attributes include gender, age, residence, marital status, the number of children under the age of 18, occupation, educational attainment. Socio-economic attributes include household disposable income, holdings of Japanese Government bonds, political stance, and economic literacy.⁵ The coding rule for these variables are discussed in the Appendix.

2.2 Sample Size and Setting

Using a survey company, MyVoice Communications, Inc., we recruit 6,400 respondents who pass the IMC for the main survey. Following the suggestion of [Haaland et al. \(2023\)](#), we have 800 participants in each arm. They are aged from 20 to 79, and they are randomly chosen and stratified such that the age and gender distribution are the same as the latest Population Census in Japan in 2020.

2.3 Follow-up Survey

We conduct the follow-up experiment four weeks after the main experiment to examine whether the information provision has a long-lasting effect on their beliefs. We conduct the follow-up experiment only for those who receive Anchor 1 in the main experiment.⁶ In the follow-up experiment, we ask our respondents their perception of the current debt-to-GDP ratio and their views on detailed components on government spending and taxation.

3 Beliefs about Current and Future Debt-to-GDP Ratios

The left panel of Figure 2 shows the distribution of respondents' perception of the debt-to-GDP ratio in 2022.⁷ According to the left panel of the figure 2, our respondents tend to underestimate the perceived current debt-to-GDP ratio. The mean of the perceived current debt-to-GDP ratio is 175%, about 40 percentage points lower than the actual value of 214%.⁸ 85% of respondents underestimate the actual debt-to-GDP ratio. This underestimation result is consistent with the result of [Roth et al. \(2022\)](#).⁹

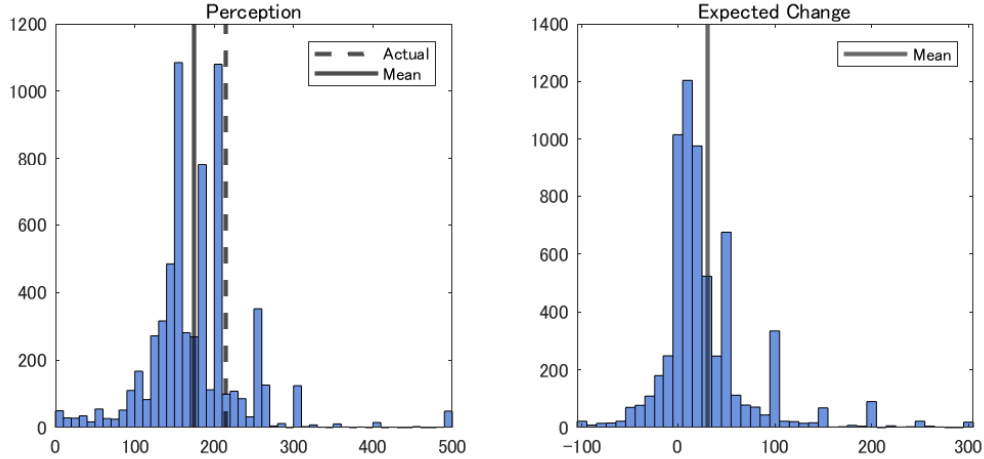
⁵The economic literacy refers to whether a respondent correctly knows the current governor of the Bank of Japan.

⁶We receive 2,958 responses, so that the retention rate is 92%.

⁷We winsorize the respondents' perception about the debt-to-GDP ratio in 2022 at 500 to deal with outliers. This manipulation affects only a few observations because only 28 respondents answered higher than 500.

⁸The median of the the perceived current debt-to-GDP ratio is 170%.

⁹There is a tendency for respondents to answer nice round numbers (e.g., 150%, 200%, 250%, etc.). As a result, we observe spikes at these numbers in Figure 2.



Note: The left panel shows the distribution of the perception of the current debt-to-GDP ratio. The actual debt-to-GDP ratio in 2022 is 214%, which is indicated by the vertical dashed line. The vertical thick line indicates the mean of the perceived debt-to-GDP ratio, which is 175%. We winsorized the perceived debt-to-GDP ratio at 500. There are 28 respondents whose answers are higher than 500%.

The right panel shows the distribution of respondents' expected changes in the debt-to-GDP ratio from 2022 to 2032. The vertical thick line indicates the mean of the expected changes, which is 31 percentage points. The horizontal axis is expected changes in percentage points and it is truncated at -100 percentage points and 300 percentage points. We winsorize the respondents' expected debt-to-GDP in 2032 at 500. No respondents answered higher than 300% and 38 respondents answered are lower than -100% .

Figure 2: Distribution of Perception of Debt-to-GDP Ratio and its Expected Change

The right panel of Figure 2 shows the distribution of respondents' expected changes in the debt-to-GDP ratio over the next 10 years.¹⁰ According to the figure, our respondents tend to expect the debt-to-GDP ratio to increase in the future. The mean expected change is 31 percentage points.¹¹ 74% of our respondents expect the debt-to-GDP ratio to increase. .

To examine whether the perceived debt-to-GDP ratio and the expected changes are systematically correlated with demographic and socio-economic attributes, we conduct a regression analysis. The results are shown in Table 1. According to Table 1, younger generations, who might be expected to be more concerned, actually have a less accurate understanding of the current fiscal situation than their older generations. Age heterogeneity plays a larger role than the differences due to educational attainment or political stance. Moreover, the estimated coefficients for the expected change also increase with age, meaning that the older generations tend to have more pessimistic subjective forecasts than the younger generations.

Table 1 shows other heterogeneities as well. Highly educated individuals, males, people with high economic literacy, and left-wing respondents also tend to think that the current debt-to-GDP ratio is higher and to expect the debt-to-GDP ratio to increase by a larger amount.

– Something more about age heterogeneity in depth

4 Fiscal Policy View

Before examining the effect of information provision, it is helpful to understand how the respondents in the control group view government debt and fiscal policy. Figure 3 shows the distribution of responses from

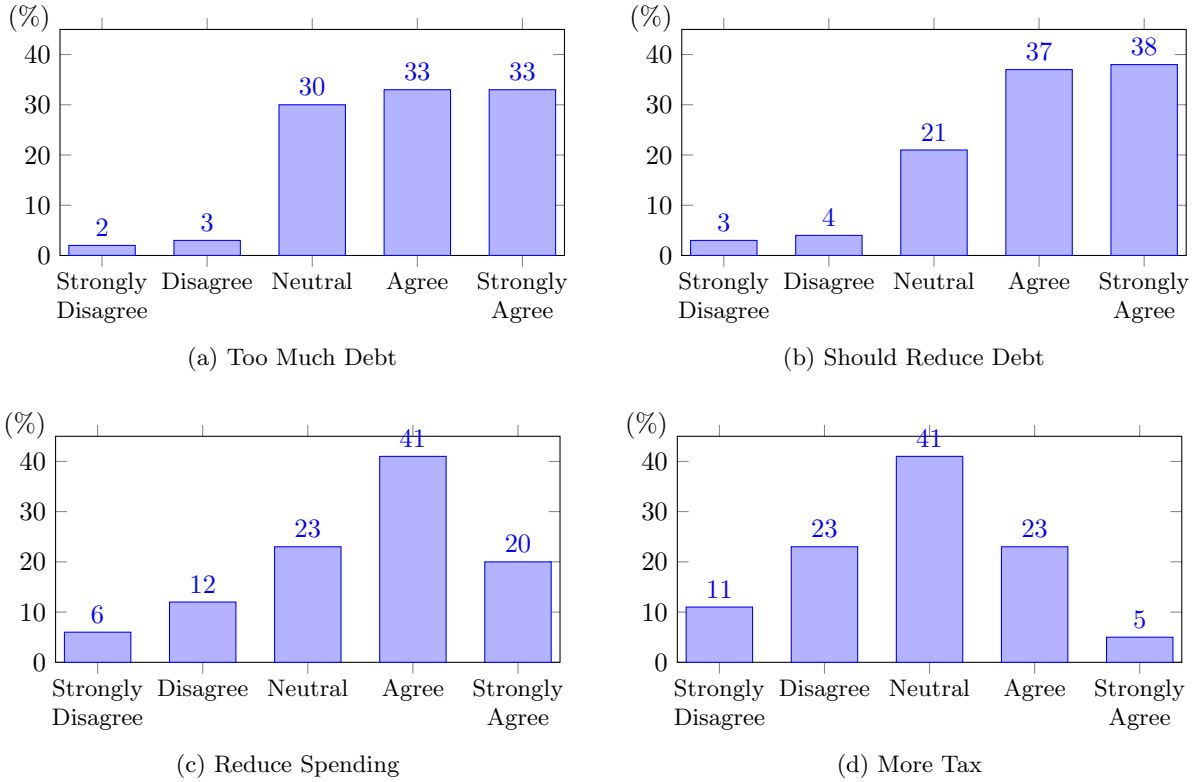
¹⁰We also winsorized the debt-to-GDP in 2023 at 500, above which there are 89 respondents (1.4% of the whole sample).

¹¹The median of expected change is 20 percentage points.

	Current	Exp. Change
(Intercept)	145.976*** (18.733)	76.218** (32.514)
Age30	5.965** (2.862)	5.086 (3.375)
Age40	10.882*** (2.735)	6.893** (3.025)
Age50	14.632*** (2.902)	10.766*** (3.508)
Age60	13.312*** (3.071)	9.137** (4.260)
Age70	16.094*** (3.225)	15.249*** (5.835)
Education	6.676*** (1.564)	9.821*** (2.425)
Employment	-2.287 (1.938)	-1.173 (2.989)
Female	-9.690*** (1.583)	-15.881*** (2.533)
Income	0.286 (1.219)	-3.437 (2.132)
JGB holding	1.835 (3.073)	-1.500 (3.913)
Kid	-2.804 (2.313)	5.584* (3.178)
Literacy	19.823*** (1.608)	12.608*** (2.307)
Married	2.743 (1.865)	-1.485 (3.624)
Left	8.789*** (2.104)	5.206 (3.395)
Right	3.966* (2.051)	0.192 (3.487)
Region1	-0.080 (2.684)	-7.670* (3.928)
Region3	-2.618 (2.148)	-7.966*** (2.856)
Region4	-0.869 (2.076)	-5.590* (3.163)
Region5	4.081 (3.016)	2.620 (4.292)
Region6	-1.527 (2.926)	-9.354** (4.501)

Note: Current refers to the perceived current debt-to-GDP ratio. Exp. Change is the expected change in the debt-to-GDP ratio from 2022 to 2032. AgeXX refers to a dummy variable for the corresponding age group XX. Education is a dummy variable for having a college degree or higher. Employment is a dummy variable for being employed. Female takes the value of 1 if the respondent is female. Income is the logarithm of the household disposable income. JGB is a dummy variable for holding Japanese Government bonds. Kid is a dummy variable for having children under the age of 18. Literacy is a dummy variable for answering the economic literacy question correctly. Married is a dummy variable for being married. Left and Right are dummy variables representing political stance (excluding the middle of the political spectrum). Region X is a dummy variable for living in region X. Region 1 refers to Hokkaido and Tohoku area. Region 2 is Kanto area. Region 3 is Chubu and Hokuriku area. Region 4 is Kinki area. Region 5 is Chugoku and Shikoku area. Region 6 is Kyushu and Okinawa area. Robust standard errors are in parentheses.

Table 1: Correlates with Perceived Debt-to-GDP Ratios and Expected Change



Note: The figures show the distribution of responses from the control group to the statements about government debt and fiscal policy. The vertical axis represents the percentage of respondents for the corresponding answers. The statements are as follows: (a) “The government has too much debt,” (b) “The government should reduce its debt,” (c) “The government should reduce its spending,” and (d) “The government should increase its tax revenue.” The responses are on a 5-point Likert scale: “Strongly Disagree,” “Disagree,” “Neutral,” “Agree,” and “Strongly Agree.”

Figure 3: Views on Government Debt and Fiscal Policy

the control group to the questions about government debt and fiscal policy. We ask their opinions on the following statements: (a) “The government has too much debt,” (b) “The government should reduce its debt,” (c) “The government should reduce its spending,” and (d) “The government should increase its tax revenue.” The responses are on a 5-point Likert scale: “Strongly Disagree,” “Disagree,” “Neutral,” “Agree,” and “Strongly Agree.” These patterns give us some insights into how people view the current situation of the government debt in Japan and how they think about the fiscal policy should be without information provision.

These responses show an interesting pattern of conflicting views on government debt and fiscal policy. The majority of respondents agree that the government has too much debt and that the government should reduce its debt. The majority also agree that the government should reduce its spending. However, the opinion toward lower spending tones down, and some people hesitate to strongly agree with the statement of reducing spending. Furthermore, only 26% of respondents agree that the government should increase its tax revenue. The most desired tax policy is to keep the status quo. Overall, the majority of respondents prefer to cut spending rather than increase taxes for fiscal consolidation.

To investigate the nature of the responses further, we regress them on demographic characteristics. Table 2 presents the detailed results. There is noticeable heterogeneity in the responses across age groups.

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
(Intercept)	2.412*** (0.577)	3.128*** (0.596)	3.174*** (0.653)	1.050* (0.610)
Age30	-0.022 (0.084)	-0.031 (0.091)	0.177* (0.098)	-0.013 (0.094)
Age40	0.080 (0.080)	0.142* (0.086)	0.255*** (0.094)	0.031 (0.090)
Age50	0.201** (0.087)	0.193** (0.090)	0.214** (0.100)	0.207** (0.094)
Age60	0.314*** (0.091)	0.337*** (0.091)	0.227** (0.104)	0.339*** (0.099)
Age70	0.448*** (0.097)	0.468*** (0.101)	0.313*** (0.114)	0.516*** (0.101)
Education	0.116** (0.048)	-0.007 (0.051)	0.035 (0.057)	0.141*** (0.054)
Employment	-0.013 (0.060)	-0.028 (0.062)	-0.065 (0.069)	0.033 (0.065)
Exp. Change	0.002*** (0.001)	0.001 (0.001)	0.001 (0.001)	-0.001 (0.001)
Female	0.084* (0.046)	0.111** (0.050)	0.091 (0.057)	-0.148*** (0.052)
Income	0.031 (0.037)	0.017 (0.038)	-0.006 (0.042)	0.088** (0.039)
JGB holding	0.209** (0.099)	0.094 (0.113)	-0.036 (0.120)	0.246** (0.110)
Kid	-0.006 (0.071)	-0.059 (0.077)	-0.181** (0.085)	0.125 (0.078)
Literacy	-0.034 (0.052)	-0.040 (0.053)	-0.067 (0.060)	0.148*** (0.057)
Married	0.064 (0.058)	0.119* (0.062)	0.171** (0.070)	-0.087 (0.064)
Prior	0.004*** (0.000)	0.002*** (0.000)	0.002*** (0.001)	0.001* (0.001)
Left	0.100 (0.066)	0.099 (0.072)	0.120 (0.084)	-0.053 (0.081)
Right	-0.197*** (0.064)	-0.294*** (0.070)	-0.466*** (0.076)	0.146** (0.068)
Region1	0.030 (0.083)	0.104 (0.081)	-0.045 (0.098)	-0.005 (0.097)
Region3	-0.066 (0.069)	0.032 (0.072)	-0.010 (0.080)	0.026 (0.073)
Region4	0.009 (0.061)	0.032 (0.066)	0.077 (0.074)	0.098 (0.068)
Region5	0.050 (0.094)	0.063 (0.092)	0.102 (0.096)	0.031 (0.092)
Region6	0.003 (0.082)	0.254*** (0.078)	0.287*** (0.105)	0.147 (0.096)

Note: These results are based on the responses of the control group. Positive coefficients mean that respondents agree with the statement. Regressors are the same as those used in Table 1. Robust standard errors are in parentheses.

Table 2: Correlates with Views on Government Debt and Fiscal Policy

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1 (Current)	0.238*** (0.031)	0.133*** (0.032)	0.126*** (0.037)	0.038 (0.035)
Group2 (Current + Optimistic)	0.103*** (0.033)	0.089*** (0.032)	0.068* (0.037)	0.058* (0.035)
Group3 (Current + Pessimistic)	0.144*** (0.032)	0.025 (0.033)	0.038 (0.037)	0.086** (0.034)

Note: Positive coefficients mean that respondents agree with the statement. Group 1 receives the actual debt-to-GDP ratio in 2022. Group 2 receives the actual debt-to-GDP ratio in 2022 and the optimistic forecast. Group 3 receives the actual debt-to-GDP ratio in 2022 and the pessimistic forecast. We control for age, higher education, employment status, expected changes in the debt-to-GDP ratio, gender, income, holding of Japanese Government Bonds, the number of children under 18, economic literacy, marital status, prior beliefs, political stance, and regions. Robust standard errors are in parentheses.

Table 3: Effects of Information Provision on Fiscal Policy View

The older generations are more likely than the younger generations to think that the government has too much debt and that the government should reduce its debt. They are also more likely than the younger generations to think that the government should reduce its spending and that should increase taxes. These results contrast with the view that the older generations are against fiscal consolidation because they are the beneficiaries of the current fiscal policy. Also, one may expect that the young generations collect information about the fiscal situation more than the older generations as the fiscal information may affect their current consumption and saving plan for life after retirement. These results are more consistent with the view that the older generations are altruistic and care about future generations.

Among other attributes, right-wing respondents are less likely to think that the government has too much debt and should reduce it. They are also less likely to favor spending cuts and tax increases. More educated respondents are more likely to think that the government has too much debt and should increase taxes.

5 Effects of Information Provision on Fiscal Policy View

In this section, we discuss the results of our main exercises on how information provision affects their views on fiscal policy.

To examine the effects of information provision, we estimate the following equation:

$$y_i = \alpha + \beta_1 \text{Group1}_i + \beta_2 \text{Group2}_i + \beta_3 \text{Group3}_i + \mathbf{x}'_i \boldsymbol{\gamma} + \varepsilon_i, \quad (1)$$

where y_i represents our outcome variable of a respondent i , and Group1, Group2, and Group3 are dummy variables indicating the treatment groups. A vector \mathbf{x}_i is a set of control variables; it includes age, higher education, employment status, expected changes in the debt-to-GDP ratio, gender, income, holding of Japanese Government Bonds, the number of children under 18, economic literacy, marital status, prior beliefs, political stance, and regions of residence.

The first column of Table 3 shows how the information provision affects respondents' views on the level of the current government debt. According to the table, respondents in all three treatment groups are more likely to think that the government has too much debt than those in the control group (the group with no information provision). Respondents in Group 1 are more likely to view the current debt level as excessive than respondents in Groups 2 and 3. Respondents in Group 3 are more likely to think that the government has too much debt than Group 2.

Interestingly, the provision of pessimistic projection does not make respondents in Group 3 more likely

to view the current debt as excessive (relative to Group 1). This counterintuitive result might be due to the fact that the pessimistic projection for Group 3 might not have been not so pessimistic: The magnitude of the pessimistic forecast for Group 3 is about 10 percentage point increase in the debt-to-GDP ratio, much lower than 31-percentage-point increase expected by the respondents in Group 3 on average.

The second column of Table 3 shows the results for the question about whether the government should reduce its debt. According to the table, respondents in Groups 1 and 2 are more likely to agree that the government should reduce its debt than the control group. The effect is larger for Group 1 than for Group 2. The respondents in Group 3 do not respond to the information provision in a statistically significant way.

The third and fourth columns of Table 3 show how the information provision affects the respondents view on reducing government spending and increasing tax revenue, respectively. Respondents in Group 1 is more likely to agree that the government should reduce its spending than the control group. Respondents in Groups 2 and 3 do not change their views on government spending to the information provision in a statistically significant way. Respondents in Group 3 are more likely to agree that the government should increase its tax revenue than the control group. Respondents in Groups 1 and 2 do not change their view on tax hikes to the information provision in a statistically significant way.

Overall, the three types of information provision tend to make it more likely for respondents to think that the debt level is too high and that the debt should be reduced. However, they do not necessarily make respondents increase their support for spending cuts and tax hikes.

Why does the correct information on the current debt-to-GDP ratio makes people more likely to think that that the debt-to-GDP ratio is too high and that the government debt should be reduced? One possible explanation is that provision of information (which to most respondents means the realization that the current debt-to-GDP ratio is higher than they initially thought) make people think that considerable inefficiency in the way the government conducts fiscal policy. In order to explore this possibility, we ask them (i) if the government can be trusted (trustworthy), (ii) if the Japanese government is making efficient expenditure, considering the future (wise spending), and (iii) if the government is appropriately determining the tax rates and conducting taxation, considering the future (forward-looking tax).

Table 4 denies the concern. The first column shows that the respondents are more likely to believe that the government is trustworthy in response to the information provision, if any. The second and third columns show that the respondents do not change their beliefs about wise spending and forward-looking tax collection.

Furthermore, we ask if the government's primary balance is sustainable and if the demand for Japanese Government Bond will decrease in the future to investigate how the respondents change their view on sustainability in response to the information provision. The fourth and fifth columns do not any change in their belief about sustainability. These findings about trust and sustainability is in line with

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.122*** (0.043)	0.098** (0.046)	0.073 (0.052)	0.076 (0.050)
Group1 × Low Perception	0.247*** (0.063)	0.075 (0.064)	0.106 (0.073)	-0.076 (0.070)
Group2	-0.037 (0.046)	0.055 (0.046)	0.012 (0.052)	0.088* (0.050)
Group2 × Low Perception	0.292*** (0.065)	0.073 (0.065)	0.113 (0.073)	-0.058 (0.070)
Group3	0.005 (0.045)	-0.036 (0.047)	-0.024 (0.053)	0.043 (0.048)
Group3 × Low Perception	0.293*** (0.064)	0.129* (0.066)	0.128* (0.074)	0.088 (0.068)

Note: Low Perception takes one if the perceived debt-to-GDP ratio is below the median. Positive coefficients mean that respondents agree with the statement. Group 1 receives the actual debt-to-GDP ratio in 2022. Group 2 receives the actual debt-to-GDP ratio in 2022 and the optimistic forecast. Group 3 receives the actual debt-to-GDP ratio in 2022 and the pessimistic forecast. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table 5: Effects of Information Provision on Fiscal Policy View: the Role of Perception

	Trustworthy	Wise Spending	Forward-Looking Tax	Not Sustainable	Less Demand for JGB
Group1	0.085** (0.034)	0.056* (0.030)	0.039 (0.032)	0.002 (0.033)	0.026 (0.033)
Group2	0.040 (0.034)	0.043 (0.030)	-0.004 (0.032)	0.004 (0.032)	0.007 (0.033)
Group3	0.088*** (0.034)	0.046 (0.031)	0.020 (0.032)	-0.011 (0.032)	-0.059* (0.033)

Note: Positive coefficients mean that respondents agree with the statements. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table 4: Views on Trust and Sustainability of Government

5.1 Heterogeneous Treatment Effects

To better understand how the information provision affects the views on fiscal policy, we now investigate how differently different groups of people respond to the information provision. For that purpose, we group our respondents into sub-groups according to individual characteristics and estimate the following equation:

$$y_i = \alpha + \sum_{j=1}^3 \beta_j \text{Group}j_i + \sum_{j=1}^3 \eta_j \text{Group}j_i \times H_i + \delta H_i + \mathbf{x}'_i \gamma + \varepsilon_i, \quad (2)$$

“Group” variables are a set of dummy variables representing which treatment group the respondents belong to. H_i is a dummy variable representing which sub-group the respondent is belong to in terms of individual characteristics. As before, \mathbf{x}_i is a vector of control variables.

We begin our analysis of heterogeneous effects of the information provision by investigating how differently respondents with a low and high perceptions of the current debt-to-GDP ratio react to the information provision. Let us define a variable Low Perception $_i$ that takes 1 if the perceived debt-to-GDP ratio of the respondent i is below the median and 0 otherwise. We set $H_i = \text{Low Perception}_i$ in (2). Given that our respondents tends to underestimate the current debt-to-GDP ratio, low perception means more underestimation and high perception means less underestimation.

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.318*** (0.045)	0.207*** (0.046)	-0.138*** (0.052)	0.029 (0.050)
Group1 × Anchor1	-0.160** (0.063)	-0.148** (0.064)	0.025 (0.073)	0.018 (0.070)
Group2	0.232*** (0.046)	0.179*** (0.046)	-0.090* (0.052)	0.042 (0.050)
Group2 × Anchor1	-0.258*** (0.065)	-0.179*** (0.065)	0.043 (0.073)	0.033 (0.070)
Group3	0.227*** (0.046)	0.058 (0.047)	-0.076 (0.052)	0.101** (0.049)
Group3 × Anchor1	-0.167*** (0.064)	-0.067 (0.066)	0.076 (0.074)	-0.031 (0.068)

Note: Anchor 1 is a dummy variable that takes 1 if the respondent receives the debt-to-GDP ratio in 2010 and 0 otherwise. Positive coefficients mean that respondents agree with the statement. Group 1 receives the actual debt-to-GDP ratio in 2022. Group 2 receives the actual debt-to-GDP ratio in 2022 and the optimistic forecast. Group 3 receives the actual debt-to-GDP ratio in 2022 and the pessimistic forecast. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table 6: Effects of Information Provision on Fiscal Policy View: the Role of Anchoring

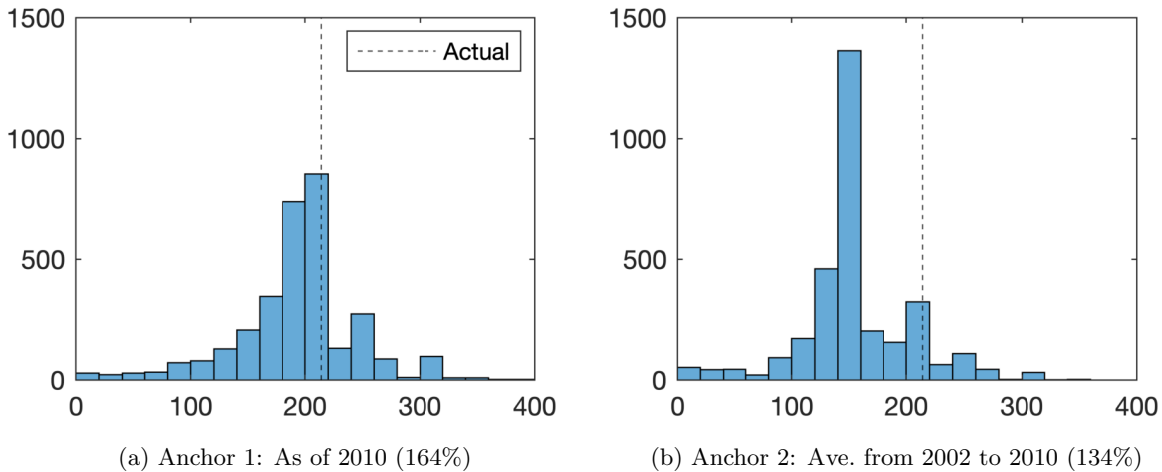


Figure 4: Distributions of Perceived Debt-to-GDP Ratio by Anchoring Types

Table 5 shows the results of this analysis. According to the first column, for the question of whether the level of the government debt is too high, those with low perceptions are more likely to agree that the government has too much debt if they receive the actual debt-to-GDP ratio in 2022. However, for other questions, we do not observe systematic patterns in the role of low perception.

We could also investigate the role of debt-level perception by estimating a similar equation, but with the two sub-groups determined by the type of anchoring information the respondents received. This alternative dummy sub-grouping will speak to the role of debt-to-GDP perception because respondents with Anchoring 1 and Anchoring 2 are systematically different in terms of debt-to-GDP perception. In particular, as shown in Figure 4, the average perception of those who receive Anchor 1 is higher—closer to the actual debt-to-GDP ratio—than that of those who receive Anchor 2.

Table 6 shows the results of this analysis. According to the table, respondents with Anchoring 1 are less likely to respond to the information provision than those with Anchoring 2. This result is consistent with

that result just shown above in Table 5.

We now turn to the analysis of heterogeneous effects of the information provision by investigating how differently respondents with different demographic/economics/social characteristics react to the information provision. We do have many individual characteristics. And the detailed results are presented in the Appendix. Here, we discuss a few key takeaways from the analysis.

We now turn to the analysis of heterogeneous effects of the information provision by investigating how differently respondents with different demographic/economics/social characteristics react to the information provision. We do have many individual characteristics. And the detailed results are presented in the Appendix. Here, we discuss a few key takeaways from the analysis.

First, only a few individual characteristics do play some role in determining the magnitude of the information provision effects. Such individual characteristics are female, and JGB holding. Female respondents are likely to agree that the government has too much debt more significantly than men, in response to the information provision. Interestingly, the respondents who hold JGB revise their fiscal policy view oppositely; they are more likely to disagree that the government has too much debt in response to the information provision. Those estimation results are presented in Appendix C.

Second, most of the individual characteristics do not play an important role in determining the magnitude of the information provision effects. These individual characteristics are education, employment status, income level, kids, economic literacy, marital status, and political stance.

Finally, and most importantly for the purpose of our paper, Age does not seem to play an important role in determining the magnitude of information provision effects. The age heterogeneity appears not in heterogeneous treatment effect but in level terms, as shown in Table 2. The magnitude of the age heterogeneity is typically larger than the treatment effects, and it varies across age groups.

5.2 Follow-Up Survey

We conduct the follow-up survey four weeks after the main survey to examine the persistence of the information provision experiment. We recruit the Anchoring 1 group only in the follow-up survey, and 92.4% of them answered our follow-up survey.

We examine whether our respondents persistently update their perception of the current debt-to-GDP ratio in response to the information provision. To quantify the effect, we consider the following regression:

$$\text{Updating}_i = \beta_0 + \sum_{j=1,2,3} \beta_j \text{Group } j_i \times \text{Bias}_i + \sum_{j=1,2,3} \eta_j \text{Group } j_i + \gamma \text{Bias}_i + \epsilon_i$$

where Updating_i is the difference between the respondent’s posterior and prior about the debt-to-GDP ratio. The Bias_i is the difference between the actual debt-to-GDP ratio and the respondent’s prior. Here, $\{\beta_j\}$ are the coefficients of interest, which measure how much respondents in the treatment group persistently update their perception in response to the information provision.

The obtained estimates are summarized in Table 7. The table shows the respondents in all three groups update their perceptions about the current debt-to-GDP ratio positively at the ratio of around 0.28 but only insignificantly. Notice that this group receives the higher anchoring, and thus, the effects of the information provision in the main experiment are less pronounced in this group in the first place. Therefore, if we conducted the follow-up survey for the Anchoring 2 Group as well, we would likely obtain a larger persistence. This result can be interpreted as a lower bound.

	Update
Group1	-12.158* (6.296)
Group1 × Bias	0.285* (0.164)
Group2	-14.955** (7.004)
Group2 × Bias	0.284 (0.186)
Group3	-8.294 (7.321)
Group3 × Bias	0.280 (0.201)
Bias	0.445*** (0.155)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table 7: Updating

Also, we ask the respondent’s policy view in the follow-up survey as well to see if the effects of the information provision on their view are persistent. Our results in the main experiment are not significant and the results in the follow-up survey is more weakened and become more indistinguishable from zero. Table A12 in the appendix summarizes the results.

Overall, our four-week follow-up survey confirms that the effects of information provision are not significantly persistent. However, this could be due to the sample selection for a follow-up survey.

6 Fiscal Policy Views: Specific Categories

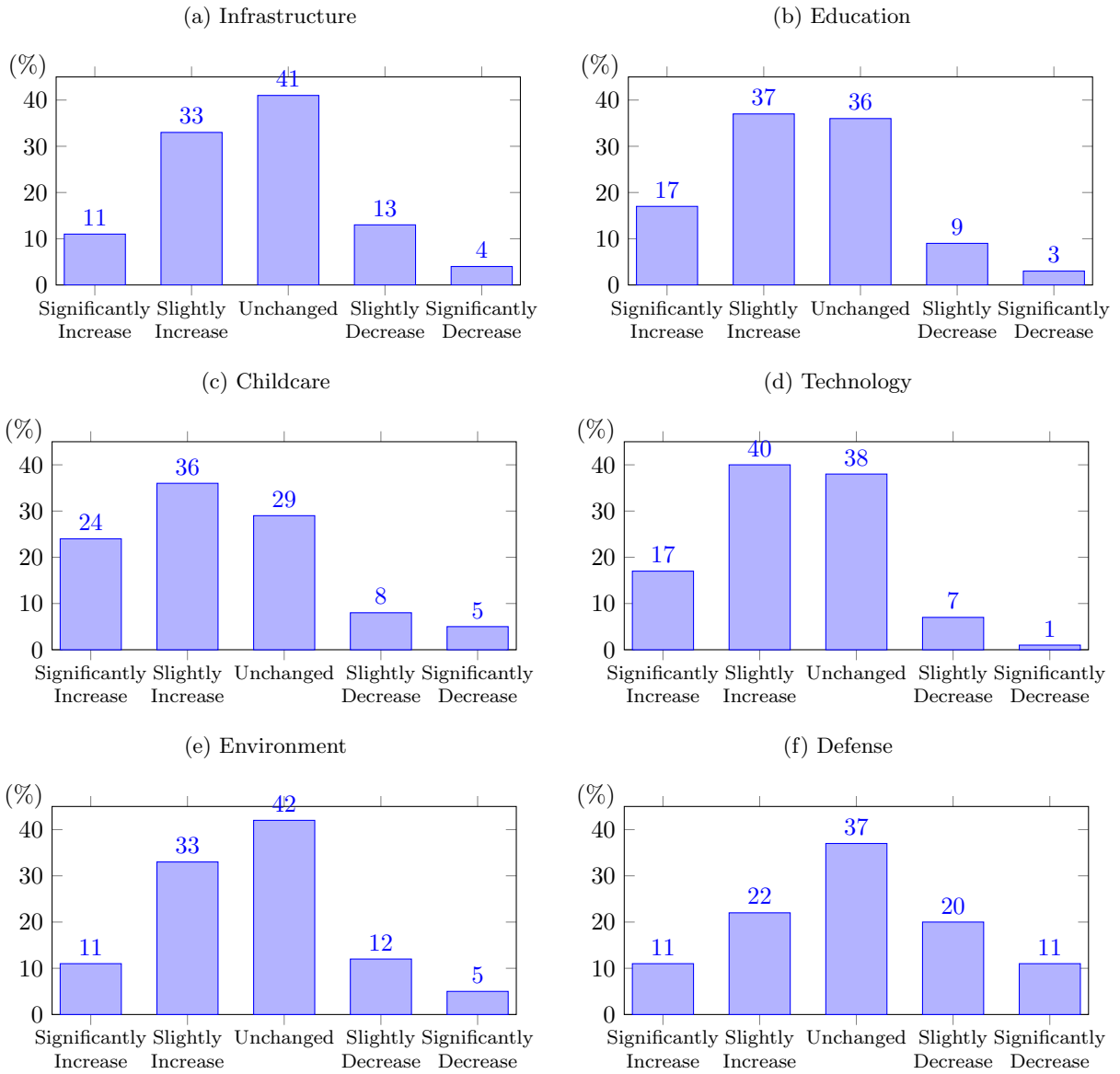
So far, we have considered whether the respondents change their views on the government debt and fiscal policy in a broader sense. We now explore whether the information provision affects the views on more detailed changes in fiscal policy, such as reducing spending in different categories and increasing taxes.

6.1 Different Views on Spending Reforms

We first examine the views on spending reforms. We ask the respondents how they would change government spending in six different categories. The categories are infrastructure, education, childcare, technology, environment, and defense. The respondents can choose from five options: significantly increase, slightly increase, unchanged, slightly decrease, and significantly decrease. Figure 5 shows the distribution of responses from the control group.

Although the respondents agree that the government should reduce its spending in general, the majority of them do not support reducing spending if we ask about specific categories. Indeed, the majority of the respondents think that the government should *increase* spending on education, childcare, and technology.

Table 8 summarizes the results of the effects of the information provision on the views on reducing spending in different categories. Group 1 is more likely to support reducing spending in all categories except for the environment. Although the estimates are statistically significant, one caveat here is that the



Note: The figures show the distribution of responses from the control group to the questions about how to change spending on different categories. The vertical axis represents the percentage of respondents for the corresponding answers.

Figure 5: Views on of Spending Categories

magnitude of the effects is relatively small. The effects of the information provision for Group 2 and Group 3 are somewhat mixed. However, no treatment groups are more likely to support reducing spending in the environment.

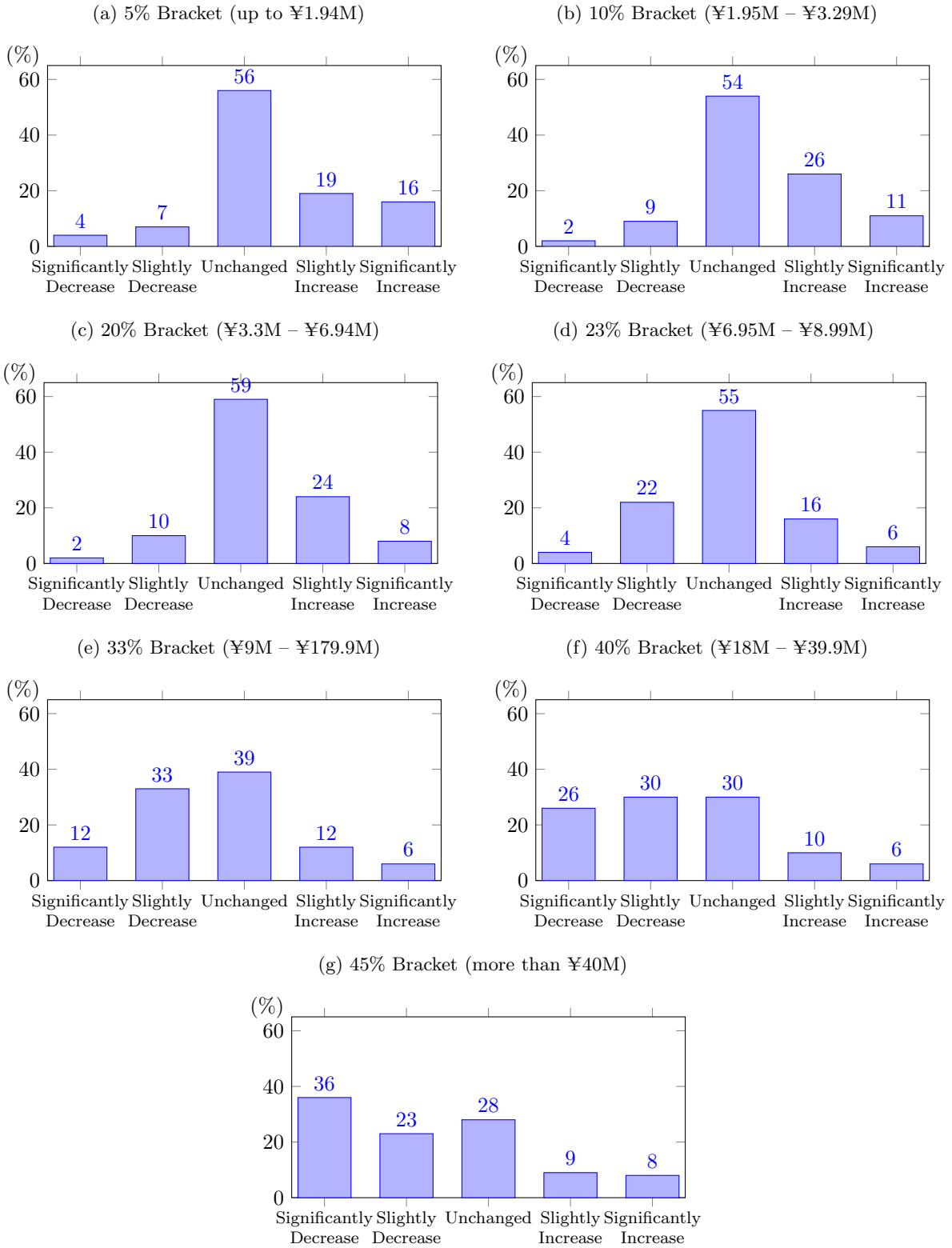
	Infrastructure	Education	Childcare	Technology	Environment	Defense
Group1	0.090*** (0.034)	0.105*** (0.033)	0.079** (0.037)	0.128*** (0.030)	0.038 (0.033)	0.081** (0.037)
Group2	0.065** (0.033)	0.033 (0.033)	0.029 (0.036)	0.077** (0.030)	-0.001 (0.033)	0.074** (0.037)
Group3	0.057* (0.033)	0.097*** (0.033)	0.068* (0.036)	0.076** (0.030)	0.051 (0.032)	0.036 (0.038)

Note: Positive coefficients mean that respondents agree with reducing the corresponding spending categories. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table 8: Effects on Reducing Spending in Different Categories

6.2 Different Views on Tax Increases

We then turn our attention to different income-tax brackets. Figure 6 shows the distribution of responses from the control group to the questions about how to change income tax rates on different tax brackets. The majority of respondents choose the status quo for the first four income brackets, which cover more than 80 percent of the households, and they are in favor of increasing tax rates for the highest two brackets.



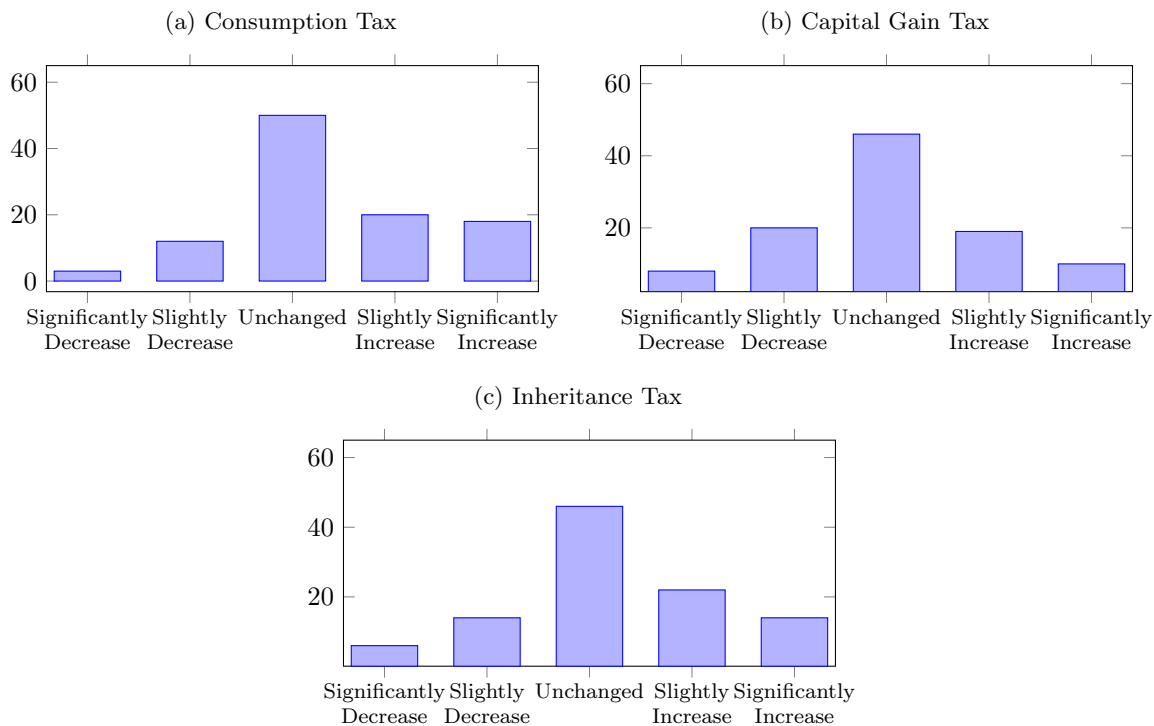
Note: The figures show the distribution of responses from the control group to the questions about changing income tax rates on different tax brackets. The vertical axis represents the percentage of respondents for the corresponding answers.

Figure 6: Views on of Tax Income Brackets

	5%	10%	20%	23%	33%	40%	45%
Group1	0.049 (0.032)	0.038 (0.029)	0.062** (0.027)	0.063** (0.029)	0.062* (0.034)	0.052 (0.039)	0.057 (0.042)
Group2	0.049 (0.032)	0.028 (0.029)	0.023 (0.027)	0.006 (0.029)	-0.008 (0.034)	0.003 (0.039)	0.005 (0.043)
Group3	0.041 (0.031)	0.043 (0.029)	0.064** (0.027)	0.056** (0.029)	0.033 (0.034)	0.050 (0.039)	0.045 (0.042)

Note: Positive coefficients mean that respondents agree with increasing income tax for the corresponding tax brackets. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table 9: Effects on Increasing Income Tax



Note: The figures show the distribution of responses from the control group to the questions about how to change other taxes. The vertical axis represents the percentage of respondents for the corresponding answers.

Figure 7: Views on Other Taxes

Given this status quo tendency for most income-tax brackets, how does the information provision affect their views toward increases in income tax rates? Table 9 shows the results. Group 1 and Group 3 are more likely to support increasing tax rates for the middle-income 20% and 23% brackets. However, the effects are relatively small.

We also ask the respondents about their views on consumption tax, capital gain tax, and inheritance tax as well as their views on social security burdens and benefits. Figure 7 shows the distribution of responses from the control group. The majority of the respondents choose the status quo for all three taxes.

	Consumption Tax	Capital Gain Tax	Inheritance Tax	Reduce SS Benefit	Increase SS Burden
Group1	-0.006 (0.034)	0.014 (0.035)	0.071* (0.037)	0.035 (0.031)	0.038 (0.030)
Group2	0.015 (0.034)	-0.022 (0.035)	0.025 (0.036)	0.030 (0.031)	0.011 (0.030)
Group3	0.018 (0.033)	-0.005 (0.035)	0.054 (0.036)	0.002 (0.030)	0.043 (0.030)

Note: Positive coefficients mean that respondents agree with increasing the corresponding tax burden and social security burden, and with reducing social security benefit. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table 10: Views on Increasing Taxes and Social Security

Table 10 shows the effects of the information provision on the views on increasing other taxes and social security. In general, there are no significant effects of the information provision on the opinions on increasing other taxes and social security. The only exception is that Group 1 is more likely to support increasing the inheritance tax. However, the magnitude of the effects is relatively small.

7 Conclusion

In this study, we have examined the effects of information provision on the views of government debt and fiscal policy. We find that the public underestimates the debt-to-GDP ratio. When we provide the correct debt-to-GDP ratio to respondents, they are more likely to think that the government has too much debt and support fiscal consolidation. Those with a low perception of the current debt-to-GDP ratio tend to react more. When we provide additional (optimistic or pessimistic) forecasts of the debt-to-GDP ratio in the future, the extra information does not systematically affect the views on government debt and fiscal policy.

Although we conjecture that age heterogeneity plays a role in treatment effects, age heterogeneity is more prevalent in the unconditional views on government debt and fiscal policy than in the treatment effects. Although it is natural to imagine that young generations are more concerned about the future and the consequences of high government debt, we find the opposite. Older generations are more likely to think that fiscal consolidation is necessary. However, they do not have a consensus on how to achieve fiscal consolidation. Understanding the reasons behind this discrepancy is an important topic for future research. Furthermore, it is crucial to design a policy that raises young generations' awareness about fiscal sustainability.

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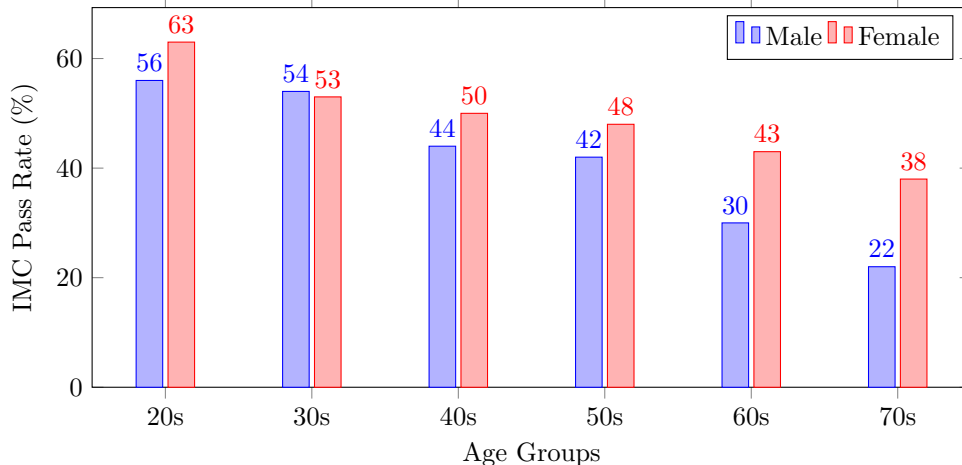


Figure A1: Results of the IMC

A Experimental Details

A.1 Instructional Manipulation Check

We ask the respondents to read the following instructions and answer the subsequent question.

When conducting surveys through online questionnaires, some participants may quickly click on choices and respond without carefully reading the survey questions. This can lead to an increase in random responses, potentially compromising the results of academic research. We encourage participants to read the survey questions carefully and provide more accurate insights into their thoughts. To demonstrate that you have carefully read our questions, please select only the two options, “Completely interested” and “Not interested at all,” regardless of your actual opinion, in the following question.

How interested are you in Japan’s fiscal situation?

- (1) Completely interested
- (2) Very interested
- (3) Slightly interested
- (4) Not very interested
- (5) Not interested at all

Those who pay less attention to the instructions are likely to read the question quickly and select one of the multiple-choice options despite the instructions. We use the IMC to filter out these respondents.

Figure A1 shows the pass rates of the IMC by age group and gender. Female respondents are more likely to pay attention to the survey instructions than male respondents. The pass rate decreases as the age increases.

A.2 Questionnaire

Q1. As of 2022, what percentage do you think is the government debt-to-GDP ratio? The government debt-to-GDP ratio represents how many times the debt of the Japanese government – both central and local governments – (government debt) is compared to the size of the Japanese economy (GDP), which serves as the basis for tax revenue. For example, if the government debt-to-GDP ratio exceeds 100%, then the government’s debt is greater than what the Japanese economy generates in a year.

Anchoring 1 It is worth noting that the average government debt-to-GDP ratio in 2010 was approximately 164%.

Anchoring 2 It is worth noting that the average government debt-to-GDP ratio from 2002 to 2010 was approximately 137%.

_____ %

Q2. In the next ten years, do you think the government debt-to-GDP ratio will increase or decrease?

- (a) It will significantly increase
- (b) It will slightly increase
- (c) It will stay the same
- (d) It will slightly decrease
- (e) It will significantly decrease

Q3. How much do you think the government debt-to-GDP ratio will be ten years from today?

_____ %

Information provision:

Group 1 You answered that the government debt-to-GDP ratio as of 2022 is XXX%. In reality, the government debt-to-GDP ratio as of 2022 is approximately 214%. This means that Japan has a debt (government debt) of about 2.1 times the size of the economy (GDP), which serves as the basis for tax revenue.

Group 2 You answered that the government debt-to-GDP ratio as of 2022 is XXX%. In reality, the government debt-to-GDP ratio as of 2022 is approximately 214%. This means that Japan has a debt (government debt) of about 2.1 times the size of the economy (GDP), which serves as the basis for tax revenue.

Furthermore, according to the "Estimates on Medium to Long-Term Economic and Fiscal Perspectives" released by the Cabinet Office in January 2023, the government debt-to-GDP ratio is predicted to be approximately 172% by the year 2032.

Group 3 You answered that the government debt-to-GDP ratio as of 2022 is XXX%. In reality, the government debt-to-GDP ratio as of 2022 is approximately 214%. This means that Japan has a debt (government debt) of about 2.1 times the size of the economy (GDP), which serves as the basis for tax revenue.

Furthermore, according to the "Estimates on Medium to Long-Term Economic and Fiscal Perspectives" released by the Cabinet Office in January 2023, the government debt-to-GDP ratio is predicted to be approximately 226% by the year 2032.

Group 4 You answered that the government debt-to-GDP ratio as of 2022 is XXX%.

Q4. To what extent do you agree with the following statement? “The current government debt-to-GDP ratio is too high.”

- (a) Completely agree
- (b) Slightly agree
- (c) Neither agreee nor disagree
- (d) Slightly disagree
- (e) Completely agree

Q5. To what extent do you agree with the following statement? “The government should reduce government debt (should engage in fiscal reconstruction)”

- (a) Completely agree
- (b) Slightly agree
- (c) Neither agreee nor disagree
- (d) Slightly disagree
- (e) Completely agree

Q6. Do you intend to buy or have personal government bonds in the future?

- (a) I definitely want to have it
- (b) I would like to have it, to some extent
- (c) Neither yes nor no
- (d) I prefer not to have it
- (e) I definitely don’t want to have it

Q7. Do you think the total amount of government spending should be increased, decreased, or kept as it is?

- (a) It should be significantly increased
- (b) It should be slightly increased
- (c) It should be kept as it is
- (d) It should be slightly decreased
- (e) It should be significantly decreased

Q8. Please share your opinion on whether government spending, categorized by area, should be increased, decreased, or kept as it is.

It should be ...	significantly increased	slightly increased	kept as it is	slightly decreased	significantly decreased
Public structure development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educational support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Declining birthrate countermeasures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry and science & technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Defense and security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Public structure development: Spending on infrastructure development such as roads, bridges, airports, and water supply.
- Educational support: Spending on support for early childhood school education and higher education-related educational support.
- Declining birthrate countermeasures: Spending related to expanding support for households raising children, such as insurance coverage for childbirth expenses and enhancing child allowance (elimination of income restrictions and extension of payment period).
- Industry and Science & Technology: Spending related to enhancing the competitiveness of existing industries, such as semiconductors and AI, and creating next-generation technologies.
- Environmental policy: Spending related to Green Transformation (GX) support.
- Defense and Security: Spending related to strengthening defense capabilities and contributing to the stability of the international environment.

Q9. Do you think the government should increase or decrease the total amount of tax revenue?

- (a) It should significantly increase it
- (b) It should slightly increase it
- (c) Keep it as it is
- (d) It should slightly decrease it
- (e) It should significantly decrease it

Q10. This question concerns income tax. Income tax is a tax applied to the income earned within a year (from January to the end of December). The income tax rate ranges from 5% to 45%, and the higher the amount earned in a year (taxable income), the higher the tax rate becomes. Specifically, there are seven tax brackets based on the income amount (rounded down to the nearest 1,000 yen):

Income	Tax rate
From 1,000 yen to 1,949,000 yen	5%
From 1,950,000 yen to 3,299,000 yen	10%
From 3,300,000 yen to 6,949,000 yen	20%
From 6,950,000 yen to 8,999,000 yen	23%
From 9,000,000 yen to 17,999,000 yen	33%
From 18,000,000 yen to 39,999,000 yen	40%
40,000,000 yen and above	45%

For various income brackets, do you think the income tax rates should be raised, lowered, or kept the same?

It should be ...	significantly raised	slightly raised	kept as it is	slightly lowered	significantly lowered
From 1,000 yen to 1,949,000 yen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From 1,950,000 yen to 3,299,000 yen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From 3,300,000 yen to 6,949,000 yen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From 6,950,000 yen to 8,999,000 yen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From 9,000,000 yen to 17,999,000 yen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From 18,000,000 yen to 39,999,000 yen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Q11. This question concerns consumption tax. The current consumption tax is 10% (8% on some products). Do you think the consumption tax rate in the future should be raised from 10%, lowered, or maintained?
- (a) It should be significantly raised
 - (b) It should be slightly raised
 - (c) It should be maintained
 - (d) It should slightly lowered
 - (e) It should significantly lowered
- Q12. This question concerns financial income taxation. Financial income taxation pertains to the tax on income obtained from financial products such as deposits, stocks, and investment trusts. The tax rate for financial income is a flat 20.315%. Regardless of how high financial income may be, the tax rate remains uniform. In the future, do you think the financial income tax should be raised, lowered, or maintained?
- (a) It should be significantly raised
 - (b) It should be slightly raised
 - (c) It should be maintained
 - (d) It should slightly lowered
 - (e) It should significantly lowered
- Q13. Inheritance tax is a tax imposed on heirs, including spouses, who acquire property through inheritance, based on the inherited assets. In the future, do you think the inheritance tax should be increased, decreased, or maintained?
- (a) It should be significantly increased
 - (b) It should be slightly increased
 - (c) It should be maintained
 - (d) It should slightly decreased
 - (e) It should significantly decreased
- Q14. Social security is divided into areas such as pensions, healthcare, long-term care, and child-rearing, and as the largest expenditure item, it accounts for approximately one third of the national general account expenditures.
- This question concerns social security. Do you think the “benefits” (social security expenditures) should be increased, decreased, or maintained?
- (a) It should be significantly increased
 - (b) It should be slightly increased
 - (c) It should be maintained
 - (d) It should slightly decreased
 - (e) It should significantly decreased

- Q15. This question concerns social security. Do you think the “burden” (taxes and social insurance premiums) related to social security should be increased, decreased, or maintained?
- (a) It should be significantly increased
 - (b) It should be slightly increased
 - (c) It should be maintained
 - (d) It should slightly decreased
 - (e) It should significantly decreased
- Q16. To what extent do you agree with the following statement? “The current government’s spending and taxation levels are not sustainable.”
- (a) Completely agree
 - (b) Slightly agree
 - (c) Neither agreee nor disagree
 - (d) Slightly disagree
 - (e) Completely agree
- Q17. To what extent do you agree with the following statement? “If public debt is not reduced, fiscal sustainability will be lost, and in the future, there is likely to be fewer people willing to buy Japanese government bonds.”
- (a) Completely agree
 - (b) Slightly agree
 - (c) Neither agreee nor disagree
 - (d) Slightly disagree
 - (e) Completely agree
- Q18. To what extent do you agree with the following statement? “The government can be trusted.”
- (a) Completely agree
 - (b) Slightly agree
 - (c) Neither agreee nor disagree
 - (d) Slightly disagree
 - (e) Completely agree
- Q19. To what extent do you agree with the following statement? “The Japanese government is making efficient fiscal expenditures, considering the future.”
- (a) Completely agree
 - (b) Slightly agree
 - (c) Neither agreee nor disagree
 - (d) Slightly disagree

(e) Completely agree

Q20. To what extent do you agree with the following statement? “Considering the future, the government is appropriately determining tax rates and conducting taxation.”

(a) Completely agree

(b) Slightly agree

(c) Neither agree nor disagree

(d) Slightly disagree

(e) Completely agree

Q21. Please indicate your gender.

(a) Male

(b) Female

(c) Prefer not to answer

Q22. Please indicate your age. _____ Years old

Q23. Please indicate where you reside.

• Hokkaido

• Aomori

⋮

• Okinawa

• Other

Q24. Are you married

(a) No (Unmarried / Divorced or Widowed)

(b) Yes

Q25. Do you have children under the age of majority?

(a) One

(b) Two

(c) Three or more

(d) None

Q26. Please indicate your occupation

(a) Company employee/Executive

(b) Self-employed

(c) Specialist (physician, lawyer, hairdresser, designer, etc.)

(d) Public servant

- (e) Student
- (f) Housewife/Househusband
- (g) Part-time work/Temporary worker/Freelancer
- (h) Unemployed/Retired
- (i) Other

Q27. Please indicate your current highest level of education.

- Graduate of elementary school/junior high school
- Graduate of high school
- Graduate of a technical college
- Graduate of a vocational school
- Graduate of a junior college
- University graduate
- Graduate school (master's or doctoral program) graduate.

Q28. Please indicate the annual net income for your entire household (total income for the previous year from January to December, excluding taxes and social insurance premiums).

- (a) Less than 3 million yen
- (b) 3 million yen to less than 4 million yen
- (c) 4 million yen to less than 5.5 million yen
- (d) 5.5 million yen to less than 7.5 million yen
- (e) 7.5 million yen to less than 9.5 million yen
- (f) 9.5 million yen to less than 12 million yen
- (g) 12 million yen and above

Q29. Do you currently own individual government bonds as part of your assets?

- Yes.
- I do not currently own any, but I am considering owning some in the future.
- I do not own any, and I am not considering any.

Q30. In politics, terms such as left-wing and right-wing are used. On a scale where 1 represents left-wing and 10 represents right-wing, where do you think you would place yourself on this scale? Please choose one option from the following:

Left-wing					Right-wing				
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31. Please choose the name of the current Governor of the Bank of Japan from the options below:

- (a) Haruhiko Kuroda

- (b) Masa’aki Shirakawa
- (c) Kazuo Ueda
- (d) Toshihiko Fukui
- (e) I don’t know

B Coding Rule

When we use background questions as controls in the regression analysis, we code them as follows:

- We code household income as the log of mean income in each interval specified by the respondent.
- We code education as a dummy for whether the respondent has at least a Bachelor’s degree.
- We code employment status as a dummy variable, which takes one if they are employed. It takes zero when the respondent claims that s/he is either one of the following classifications: students, housewives/househusbands, or not employed or retired.
- If the respondent declares to have one or more children, a dummy variable is set to one.
- We code gender as a dummy that takes on value one for female respondents.
- We code prior perceptions about the current debt-to-GDP ratio as continuous variables.
- We code age as a continuous variable as well as a set of dummy variables.
- We construct the following six regional dummies to represent the residence of the respondent: (1) Hokkaido and Tohoku, (2) Kanto, (3) Chubu, (4) Kinki, (5) Chugoku and Shikoku, and (6) Kyushu and Okinawa.
- A government bond dummy takes 1 if the respondent holds government bonds as a part of a personal financial portfolio.
- We create two dummy variables for the left and the right in terms of political views. The former takes 1 if the respondent chooses values from 1 to 4 on the Likert scale ranging from 1 to 10. The latter takes 1 if the respondent identifies her/himself from 7 to 10 on the same Likert scale. We exclude political centrists (5 and 6 on the Likert scale).
- A dummy variable for economic literacy takes 1 if the respondent chooses the current Governor of the Bank of Japan correctly.

C Heterogeneous Treatment Effects

This section summarizes various heterogeneous treatment effects. First, Table A1 shows the age heterogeneity of information provision. Although there exist significant heterogeneous treatment effects of Group 2 on “Too Much Debt”, we do not find systematic heterogeneous effects with respect to age. This result means that age heterogeneity exists in the average responses, whose magnitude is stronger than the treatment effects.

Also, we show heterogeneous treatment effects with respect to all demographic information in this subsection. None of them show the systematic effects.

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.369*** (0.101)	0.171 (0.105)	0.022 (0.120)	-0.021 (0.115)
Group1×Age	-0.003 (0.002)	-0.001 (0.002)	-0.003 (0.002)	0.001 (0.002)
Group2	0.319*** (0.106)	0.217** (0.107)	-0.131 (0.120)	0.038 (0.115)
Group2×Age	-0.004** (0.002)	-0.003 (0.002)	0.001 (0.002)	0.000 (0.002)
Group3	0.278*** (0.102)	0.081 (0.107)	0.039 (0.120)	0.099 (0.112)
Group3×Age	-0.003 (0.002)	-0.001 (0.002)	-0.002 (0.002)	-0.000 (0.002)
Age	0.012*** (0.001)	0.012*** (0.002)	-0.007*** (0.002)	0.011*** (0.002)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A1: Heterogeneous Views (Age)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.304*** (0.045)	0.107** (0.045)	-0.132** (0.053)	0.051 (0.049)
Group1×Education	-0.128** (0.063)	0.051 (0.064)	0.012 (0.073)	-0.025 (0.070)
Group2	0.101** (0.047)	0.039 (0.045)	-0.062 (0.052)	0.089* (0.049)
Group2×Education	0.001 (0.066)	0.097 (0.065)	-0.012 (0.073)	-0.059 (0.070)
Group3	0.192*** (0.046)	-0.031 (0.046)	-0.022 (0.054)	0.090* (0.048)
Group3×Education	-0.094 (0.065)	0.108 (0.066)	-0.031 (0.074)	-0.009 (0.068)
Education	0.166*** (0.046)	-0.005 (0.048)	-0.031 (0.054)	0.153*** (0.050)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A2: Heterogeneous Views (Education)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.260*** (0.071)	0.048 (0.075)	0.014 (0.081)	0.154** (0.078)
Group1×Employment	-0.027 (0.080)	0.101 (0.083)	-0.168* (0.090)	-0.140 (0.087)
Group2	0.194*** (0.075)	0.092 (0.074)	0.018 (0.084)	0.151* (0.079)
Group2×Employment	-0.111 (0.083)	-0.004 (0.082)	-0.104 (0.093)	-0.113 (0.088)
Group3	0.221*** (0.072)	0.040 (0.072)	0.027 (0.085)	0.139* (0.077)
Group3×Employment	-0.093 (0.080)	-0.019 (0.081)	-0.079 (0.094)	-0.064 (0.086)
Employment	0.009 (0.058)	-0.043 (0.059)	0.083 (0.067)	0.028 (0.063)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A3: Heterogeneous Views (Employment)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.169*** (0.048)	0.135*** (0.051)	-0.135** (0.056)	0.007 (0.054)
Group1×Female	0.137** (0.063)	-0.005 (0.064)	0.019 (0.073)	0.061 (0.070)
Group2	0.006 (0.050)	0.040 (0.051)	-0.058 (0.055)	-0.002 (0.054)
Group2×Female	0.191*** (0.066)	0.096 (0.065)	-0.020 (0.073)	0.117* (0.070)
Group3	0.035 (0.048)	-0.028 (0.052)	-0.074 (0.055)	0.049 (0.052)
Group3×Female	0.214*** (0.064)	0.104 (0.066)	0.071 (0.074)	0.072 (0.068)
Female	0.065 (0.045)	0.143*** (0.048)	-0.119** (0.054)	-0.151*** (0.050)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A4: Heterogeneous Views (Female)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.229 (0.704)	-0.856 (0.729)	0.511 (0.809)	-0.718 (0.763)
Group1×Income	0.001 (0.046)	0.065 (0.048)	-0.042 (0.053)	0.049 (0.050)
Group2	0.290 (0.728)	-0.801 (0.739)	-0.374 (0.816)	0.321 (0.771)
Group2×Income	-0.012 (0.048)	0.058 (0.048)	0.020 (0.053)	-0.017 (0.050)
Group3	0.968 (0.711)	-0.323 (0.726)	1.048 (0.820)	-0.149 (0.750)
Group3×Income	-0.054 (0.047)	0.023 (0.048)	-0.071 (0.054)	0.015 (0.049)
Income	0.038 (0.034)	0.003 (0.035)	0.003 (0.039)	0.074** (0.036)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A5: Heterogeneous Views (Income)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.249*** (0.032)	0.127*** (0.033)	-0.125*** (0.038)	0.034 (0.036)
Group1×JGB	-0.187 (0.132)	0.087 (0.137)	-0.006 (0.162)	0.060 (0.153)
Group2	0.125*** (0.034)	0.094*** (0.033)	-0.083** (0.038)	0.066* (0.036)
Group2×JGB	-0.364** (0.146)	-0.070 (0.140)	0.216 (0.164)	-0.120 (0.156)
Group3	0.165*** (0.033)	0.029 (0.034)	-0.039 (0.038)	0.082** (0.035)
Group3×JGB	-0.364** (0.152)	-0.068 (0.158)	0.010 (0.167)	0.069 (0.148)
JGB	0.246** (0.098)	0.094 (0.110)	0.059 (0.119)	0.251** (0.109)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A6: Heterogeneous Views (JGB)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.241*** (0.034)	0.127*** (0.035)	-0.114*** (0.040)	0.033 (0.038)
Group1×Kid	-0.017 (0.085)	0.029 (0.086)	-0.064 (0.097)	0.028 (0.094)
Group2	0.099*** (0.036)	0.077** (0.036)	-0.059 (0.040)	0.060 (0.039)
Group2×Kid	0.017 (0.086)	0.062 (0.086)	-0.054 (0.096)	-0.012 (0.093)
Group3	0.127*** (0.035)	0.006 (0.036)	-0.040 (0.041)	0.093** (0.038)
Group3×Kid	0.098 (0.084)	0.105 (0.087)	0.012 (0.097)	-0.042 (0.092)
Kid	-0.045 (0.062)	-0.088 (0.064)	0.097 (0.072)	0.070 (0.066)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A7: Heterogeneous Views (Kid)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.271*** (0.049)	0.146*** (0.048)	-0.076 (0.057)	0.047 (0.055)
Group1×Literacy	-0.054 (0.064)	-0.022 (0.064)	-0.079 (0.074)	-0.014 (0.071)
Group2	0.103** (0.049)	0.039 (0.049)	-0.020 (0.055)	0.061 (0.054)
Group2×Literacy	-0.000 (0.066)	0.083 (0.065)	-0.078 (0.074)	-0.005 (0.071)
Group3	0.198*** (0.048)	0.071 (0.048)	-0.007 (0.057)	0.056 (0.053)
Group3×Literacy	-0.090 (0.065)	-0.078 (0.066)	-0.050 (0.075)	0.050 (0.069)
Literacy	0.054 (0.047)	-0.045 (0.048)	0.063 (0.055)	0.148*** (0.052)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A8: Heterogeneous Views (Literacy)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.275*** (0.047)	0.118** (0.051)	-0.089 (0.057)	0.003 (0.053)
Group1×Married	-0.066 (0.063)	0.026 (0.065)	-0.065 (0.074)	0.062 (0.071)
Group2	0.149*** (0.050)	0.096* (0.052)	-0.102* (0.057)	0.025 (0.055)
Group2×Married	-0.083 (0.066)	-0.012 (0.066)	0.060 (0.075)	0.058 (0.071)
Group3	0.118** (0.048)	-0.002 (0.051)	-0.034 (0.057)	0.082 (0.052)
Group3×Married	0.048 (0.065)	0.049 (0.067)	-0.008 (0.075)	0.006 (0.069)
Married	0.081* (0.049)	0.084 (0.051)	-0.106* (0.058)	-0.084 (0.054)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A9: Heterogeneous Views (Married)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.245*** (0.034)	0.129*** (0.035)	-0.141*** (0.039)	0.022 (0.037)
Group1×Left	-0.049 (0.088)	0.023 (0.088)	0.101 (0.106)	0.102 (0.105)
Group2	0.104*** (0.036)	0.089** (0.035)	-0.063 (0.040)	0.044 (0.037)
Group2×Left	-0.011 (0.092)	0.002 (0.091)	-0.028 (0.105)	0.093 (0.107)
Group3	0.160*** (0.035)	0.031 (0.036)	-0.053 (0.040)	0.068* (0.036)
Group3×Left	-0.105 (0.091)	-0.041 (0.093)	0.102 (0.107)	0.121 (0.105)
Left	0.171*** (0.064)	0.132* (0.070)	-0.137* (0.080)	-0.036 (0.079)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A10: Heterogeneous Views (Left)

	Too Much Debt	Should Reduce Debt	Less Spending	More Tax
Group1	0.216*** (0.034)	0.099*** (0.034)	-0.078* (0.040)	0.030 (0.038)
Group1×Right	0.113 (0.085)	0.176* (0.091)	-0.246** (0.098)	0.039 (0.093)
Group2	0.103*** (0.035)	0.065* (0.034)	-0.054 (0.040)	0.061 (0.038)
Group2×Right	-0.001 (0.094)	0.125 (0.098)	-0.071 (0.102)	-0.014 (0.094)
Group3	0.156*** (0.035)	0.014 (0.035)	-0.007 (0.040)	0.094** (0.037)
Group3×Right	-0.066 (0.090)	0.054 (0.096)	-0.164 (0.101)	-0.044 (0.092)
Right	-0.159** (0.063)	-0.280*** (0.069)	0.477*** (0.074)	0.178*** (0.066)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A11: Heterogeneous Views (Right)

D Follow-Up Survey

Table A12 shows the Anchoring Group1’s view on fiscal policies in the main experiment and follow-up survey. First, we can see that compared to the whole sample shown in Table 3, the information provision on the support of the fiscal policy is less effective in Table A12 because of the higher anchor. The efficacy in the follow-up survey becomes even more obscure in the follow-up survey.

	More Spending	More Spending (Follow-Up)	More Tax	More Tax(Follow-Up)
Group1	0.108** (0.050)	0.028 (0.051)	-0.047 (0.050)	0.031 (0.052)
Group2	0.046 (0.049)	0.040 (0.051)	-0.078 (0.051)	-0.004 (0.051)
Group3	0.013 (0.051)	0.018 (0.051)	-0.065 (0.049)	0.026 (0.052)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A12: Views on fiscal policies (Comparison with Follow-Up)

E Balancing Check

We test whether randomization in our samples successfully balances respondents’ characteristics i) between the three treatment groups and ii) between the control group and the pooled treated groups. Following Roth et al. (2022), we assess the baseline balance for the following characteristics: the debt-to-GDP ratio, gender, age, log income, number of children under 18, employment status, education, government bond holdings, and political stance.

To test the balance between treated and untreated individuals, we use the full sample and conduct the two steps, i.e., individual t-tests and a joint F-test, using one of the treatment indicators.

To see the balance across the treatment groups, we regress each of the characteristics (C_i) on one of the treatment indicators (Treatment $_{k,i}$) which is a dummy variable to distinguish between individuals who

received any information treatment and others who were not treated,

$$C_i = \alpha + \beta_k \text{Treatment}_{k,i} + \epsilon_i$$

Table A14 to A23 summarize the result. We confirm that the samples balance well across the cells except for the prefectures shown in Table A23. However, this is not surprising as we did not assign the cells by the prefectures according to the Census.

	Group1	Group2	Group3	Group4
(Intercept)	0.303*** (0.050)	0.189*** (0.050)	0.243*** (0.050)	0.266*** (0.050)
age	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
JGB holding	-0.002 (0.010)	-0.007 (0.010)	0.007 (0.010)	0.002 (0.010)
edu	-0.001 (0.003)	0.003 (0.003)	-0.001 (0.003)	-0.001 (0.003)
income	-0.002 (0.003)	0.004 (0.003)	-0.000 (0.003)	-0.001 (0.003)
kids	0.004 (0.006)	0.008 (0.006)	-0.002 (0.006)	-0.010 (0.006)
male	0.001 (0.011)	-0.001 (0.011)	-0.001 (0.011)	0.001 (0.011)
married	0.009 (0.014)	0.011 (0.014)	-0.018 (0.014)	-0.002 (0.014)
occupation	-0.001 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
political stance	-0.004 (0.004)	0.000 (0.004)	0.002 (0.004)	0.002 (0.004)
prefecture	-0.001** (0.000)	0.001*** (0.000)	-0.000 (0.000)	0.000 (0.000)

Note: The p-value of a joint F-test when regressing the treatment dummy on all covariates is 0.945.

Table A13: Balancing check: ALL

(Intercept)	50.802*** (0.229)	50.790*** (0.229)	50.810*** (0.229)	50.787*** (0.229)
Group1	-0.019 (0.459)			
Group2		0.027 (0.459)		
Group3			-0.050 (0.459)	
Group4				0.041 (0.459)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A14: Balancing check: Age

(Intercept)	4.635*** (0.026)	4.615*** (0.026)	4.638*** (0.026)	4.636*** (0.026)
Group1	-0.017 (0.052)			
Group2		0.065 (0.052)		
Group3			-0.027 (0.052)	
Group4				-0.021 (0.052)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A15: Balancing check: Education

(Intercept)	3.223*** (0.026)	3.199*** (0.026)	3.225*** (0.026)	3.220*** (0.026)
Group1	-0.026 (0.053)			
Group2		0.073 (0.053)		
Group3			-0.033 (0.053)	
Group4				-0.014 (0.053)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A16: Balancing check: income

(Intercept)	2.783*** (0.008)	2.786*** (0.008)	2.780*** (0.008)	2.782*** (0.008)
Group1	-0.003 (0.016)			
Group2		-0.013 (0.016)		
Group3			0.012 (0.016)	
Group4				0.003 (0.016)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A17: Balancing check: JGB holdings

(Intercept)	3.573*** (0.014)	3.573*** (0.014)	3.575*** (0.014)	3.588*** (0.014)
Group1	0.016 (0.028)			
Group2		0.017 (0.028)		
Group3			0.009 (0.028)	
Group4				-0.042 (0.028)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A18: Balancing check: kids

(Intercept)	0.493*** (0.007)	0.493*** (0.007)	0.493*** (0.007)	0.493*** (0.007)
Group1	-0.000 (0.014)			
Group2		-0.000 (0.014)		
Group3			0.000 (0.014)	
Group4				-0.000 (0.014)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A19: Balancing check: male

(Intercept)	0.558*** (0.007)	0.556*** (0.007)	0.564*** (0.007)	0.557*** (0.007)
Group1	0.003 (0.014)			
Group2		0.012 (0.014)		
Group3			-0.020 (0.014)	
Group4				0.005 (0.014)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A20: Balancing check: married

(Intercept)	6.421*** (0.174)	6.327*** (0.174)	6.284*** (0.174)	6.252*** (0.174)
Group1	-0.400 (0.349)			
Group2		-0.025 (0.349)		
Group3			0.149 (0.349)	
Group4				0.275 (0.349)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A21: Balancing check: occupation

(Intercept)	5.513*** (0.021)	5.499*** (0.021)	5.498*** (0.021)	5.496*** (0.021)
Group1	-0.046 (0.042)			
Group2		0.010 (0.042)		
Group3			0.015 (0.042)	
Group4				0.022 (0.042)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A22: Balancing check: political stance

(Intercept)	19.676*** (0.158)	19.285*** (0.158)	19.568*** (0.158)	19.452*** (0.158)
Group1	-0.723** (0.316)			
Group2		0.842*** (0.316)		
Group3			-0.291 (0.316)	
Group4				0.172 (0.316)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A23: Balancing check: prefecture

F Multiple Hypothesis Testing

Following Roth et al. (2022), we deal with the issues of multiple hypothesis testing.

	Too Much Debt	Should Reduce Debt	Index
Group1	0.238*** (0.032)	0.133*** (0.032)	0.212*** (0.033)
Group2	0.102*** (0.032)	0.089*** (0.032)	0.109*** (0.033)
Group3	0.144*** (0.032)	0.025 (0.033)	0.096*** (0.034)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with the statement.

Table A24: Views on government debt and fiscal policy

	Infrastructure	Education	Childcare	Technology	Environment	Defense	Index
Group1	0.090*** (0.034)	0.105*** (0.034)	0.079** (0.037)	0.128*** (0.030)	0.038 (0.033)	0.081** (0.037)	0.132*** (0.035)
Group2	0.065** (0.033)	0.034 (0.033)	0.030 (0.037)	0.077** (0.030)	-0.001 (0.033)	0.075** (0.037)	0.073** (0.034)
Group3	0.057* (0.033)	0.097*** (0.033)	0.068* (0.037)	0.076** (0.030)	0.051 (0.033)	0.037 (0.038)	0.098*** (0.035)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Positive coefficients mean that respondents agree with reducing the corresponding spending categories.

Table A25: Views on Reducing Spending Categories

	5%	10%	20%	23%	33%	40%	45%	Index
Group1	0.050 (0.032)	0.038 (0.029)	0.062** (0.027)	0.063** (0.029)	0.062* (0.034)	0.052 (0.039)	0.057 (0.042)	0.091*** (0.035)
Group2	0.048 (0.032)	0.028 (0.030)	0.023 (0.028)	0.006 (0.029)	-0.009 (0.034)	0.002 (0.040)	0.005 (0.043)	0.042 (0.036)
Group3	0.041 (0.031)	0.043 (0.029)	0.064** (0.027)	0.056* (0.029)	0.032 (0.034)	0.049 (0.039)	0.044 (0.042)	0.075** (0.034)

Note: Positive coefficients mean that respondents agree with increasing income tax for the corresponding tax brackets. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table A26: Effects on Increasing Income Tax

	5%	10%	20%	23%	33%	40%	45%	Index
Group1	0.050 (0.032)	0.038 (0.029)	0.062** (0.027)	0.063** (0.029)	0.062* (0.034)	0.052 (0.039)	0.057 (0.042)	0.212*** (0.033)
Group2	0.048 (0.032)	0.028 (0.030)	0.023 (0.028)	0.006 (0.029)	-0.009 (0.034)	0.002 (0.040)	0.005 (0.043)	0.109*** (0.033)
Group3	0.041 (0.031)	0.043 (0.029)	0.064** (0.027)	0.056* (0.029)	0.032 (0.034)	0.049 (0.039)	0.044 (0.042)	0.096*** (0.034)

Note: Positive coefficients mean that respondents agree with increasing income tax for the corresponding tax brackets. We include the same control variables as in Table 3. Robust standard errors are in parentheses.

Table A27: Effects on Increasing Income Tax