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Impact of Policy Uncertainty on Consumption and Saving Behavior: Evidence from a survey on consumers*

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Abstract

In Japan, uncertainty over the social security and tax system is termed as a source of stagnant household consumption at the aggregate level. This study presents empirical evidence on this issue by using original survey data of 10,000 individuals. The results indicate that individuals are highly uncertain over the future course of social security policies, and the impacts of such uncertainty on their life are perceived to be large. The policy uncertainty induces increased saving driven by a precautionary motive, and the effect is prominent for low-income individuals. These results suggest that improving long-term predictability in the social security and tax system may contribute toward stimulating household consumption.

Keywords: Policy uncertainty, Precautionary saving, Tax policy, Social security system

JEL Classification: D12, D14, D84, E21, E62, E66, H31, H55, H68

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1. Introduction

The impacts of uncertainty over future income and employment on household consumption and saving behavior have been widely studied by focusing on savings driven by precautionary motives (see surveys of the literature on consumption and saving, e.g., Abel, 1990; Hayashi, 1997; and Attanasio, 1999).¹ Empirical studies on this issue typically deal with (1) the income uncertainty individuals or households face (e.g., Guiso et al., 1992; Bertola et al., 2005; Feigenbaum and Li, 2015) and (2) uncertainty over macroeconomic variables such as GDP and inflation (e.g., Loayza et al., 2000; Mody et al., 2012; Bachmann et al., 2015).²

However, of late, studies on the impacts of “economic policy uncertainty” on macroeconomic performance and firm behavior such as investment and hiring of employees have been increasing rapidly (see Bloom, 2014 for a survey). Empirical studies on Japanese firms in this context include the work of Morikawa (2016a, b), which shows that uncertainty over economic policies such as tax, social security, and trade policy have significant impacts on firms’ managerial decisions regarding investments and hiring of employees.

As with the impact on firms’ investment behavior, policy uncertainty may have a “wait-and-see” effect on consumption, particularly the purchase of durable goods. However, empirical studies about the impact of “policy uncertainty” on household consumption have been scarce.³ A rare example of such a study is Giavazzi and McMahon (2012), which analyzes the relationship between political uncertainty and household saving in Germany. They find that household saving increased significantly following the heightened political uncertainty in the 1998 general elections, which was one of the closely fought elections in post-war Germany.⁴

This study collects original survey data on 10,000 individuals and presents empirical findings

¹ Theoretical models of precautionary saving have been established since the representative works by Leland (1968) and Sandmo (1970).

² A large number of empirical studies in Japan indicate the practical importance of precautionary saving among Japanese households (e.g., Ogawa, 1991; Horioka and Watanabe, 1997; Saito and Shiratsuka, 2003). However, these studies do not deal with the effect of “policy” uncertainty.

³ Some studies analyze the uncertainty of social security policy. For example, Kashin *et al.* (2015) measure ex-post uncertainty of the social security system in the U.S. Luttmer and Samwick (2015) and Kitao (2016) simulate the impact of uncertainty over the pension system on economic welfare. However, these analyses do not use household (individual) level micro data.

⁴ In Japan, Ito (2016), using originally constructed “political instability index,” estimates a VAR model of time-series macroeconomic variables. He indicates that the index negatively affects not only equipment investment and residential investment but also the consumption of durable goods.

on the subjective uncertainty of various economic policies and the impact of the policy uncertainty on consumption and saving behavior of households. A novelty of this study is measuring and comparing policy uncertainties across various policy areas such as the tax policy, pension system, and health care system.

The results indicate that subjective uncertainty over the future course of the social security system and its impact on household behavior is very high. Uncertainty over social security and the tax system increases household savings driven by precautionary motive and the effect is stronger among low-income households.

The remainder of this paper is structured as follows. Section 2 explains the survey data used in this study and the method of analysis. Section 3 reports the tabulation results of the survey on the subjective uncertainties over economic policies and their impact on households. Section 4 presents regression results on the relationship between the measure of policy uncertainty and consumption/saving behavior. Section 5 summarizes the study's conclusions and discusses the implications of the analysis.

2. Survey Design and Method of Analysis

The data used in this study is taken from the "Survey of Life and Consumption under the Changing Economic Structure and Policies" designed by the author of this paper and conducted by the Rakuten Research, Inc., contracted out by the Research Institute of Economy, Trade and Industry (RIETI). The survey was conducted in late November 2016. The number of samples is 10,000, randomly chosen from the 2.3 million registered monitors in Rakuten Research, Inc., stratified by gender, age, and region (prefecture) in accordance with the population estimates published in 2014 (Statistics Bureau, Ministry of Internal Affairs and Communications). The distribution of the sample by individual characteristics (gender, age categories, household income classes, working status, and whether possessing own residence or not) is shown in **Table 1**.

Although the survey questionnaires are wide-ranging, this paper uses items related to policy uncertainty and consumption behavior: perception about uncertainties over the future of various economic policies and their impacts on living, consumption, and saving, as well as individual characteristics including gender, age, and income. In order to ensure comparability with the study based on a firm survey (Morikawa, 2016b), wordings of the questionnaires and the multiple-choice style answers have been kept similar to those of the firm survey.

Specific questionnaires and choices are as follows. Regarding the perception about policy uncertainty, the surveyor asked respondents to indicate the degree of uncertainty they perceive about the future course of economic policies by selecting from the following three choices: (1)

“high degree of uncertainty,” (2) “moderate degree of uncertainty,” and (3) “no significant degree of uncertainty.” Economic policies covered by the survey mainly focus on tax and the social security system, because the purpose is to investigate the consumption and saving behavior of individuals.⁵ To be specific, the following nine areas are surveyed: (1) income tax, (2) consumption tax, (3) inheritance and gift tax, (4) pension system, (5) health care system, (6) long-term care system, (7) childcare system, (8) labor market policies (e.g., laws and regulation on temporary agency workers, minimum wages), and (9) privacy protection laws and regulations.

The next questionnaire is on the impacts of economic policy uncertainty on living (consumption and working). Specifically, for the nine economic policy areas, respondents were asked to select from three choices: (1) “significantly affected,” (2) “somewhat affected,” and (3) “hardly affected.”

For conducting a quantitative analysis, we calculate a summary measure of each economic policy uncertainty by assigning 1 for a “high degree of uncertainty,” 0.5 for a “moderate degree of uncertainty,” and 0 for “no significant degree of uncertainty,” and then construct an “uncertainty score” as the sample mean. In a similar manner, we calculate a summary measure of the impact of policy uncertainties, by assigning 1 for “significantly affected,” 0.5 for “somewhat affected,” and 0 for “hardly affected,” to construct an “impact score” as the sample mean.

Regarding the impact of uncertainty over tax and social security system on consumption, the survey asked, “Is the uncertainty over tax and social security system affecting your consumption?” The choices are (1) “suppressing consumption” and (2) “no impact on consumption.”

In addition, the survey includes a hypothetical question on consumption and saving behavior. The questionnaire is “when your earning or household income increases in the future, which is your priority of disposal?” The choices are (1) “increase spending for goods such as electric appliances, vehicle, and clothing,” (2) “increase spending for services such as travelling, eating out, and recreation,” (3) “increase saving,” and (4) “I don’t know.” In this paper, we use the third choice as a discrete measure of respondents’ preference for saving.

Using the responses to the questions explained above, we present simple cross-tabulation results by individual characteristics such as gender and age classes, followed by OLS regressions, where uncertainty and impact scores are used as dependent variables and gender (female dummy), age, and household annual income (converted to logarithmic value) are used as explanatory variables.⁶ Obviously, the interest in the analysis is to find out what type of individuals perceive

⁵ The survey questionnaires and the choices of the firm survey used in Morikawa (2016b) are the same with the present study for individuals. However, the specific policies included in the firm survey are different. For example, business licensing, environmental regulations, land-use and zoning regulations, corporate laws and regulations, and international trade policy are included in the firm survey. On the other hand, in the firm survey, tax policy and social security system are not disaggregated into sub-categories.

⁶ In the survey, household annual income is categorized into 14 classes consistent with the official statistics “Employment Status Survey” (Statistics Bureau, Ministry of Internal Affairs and

and are affected by which policy uncertainties.

On the impact of policy uncertainty on consumption and saving behavior, we conduct simple probit estimations, where we assign one for the responses “suppressing consumption” and “increase saving” and zero for the other responses. The explanatory variables in these estimations are gender (female dummy), working status (a dummy for those who are working), dummies for age classes in ten-year intervals (the reference category is 40-49), dummies for household annual income classes (the reference category is 5 to 5.99 million yen), a dummy for possessing own residence, and expected income growth rate. Then, the policy uncertainty score is added to the baseline models.

Among these variables, expected income growth rate is the response expressed in percentage terms to the questionnaire “how do you expect your household’s annual income (inclusive of tax) five years ahead will increase/decrease?” This variable is included as a regressor to control expected future income, which is important in extracting the pure impact of policy uncertainty on consumption/saving after accounting for the effect of mean change in expected income. The measure of policy uncertainty, the main explanatory variable, is the simple average of the uncertainty scores in nine policy areas or, alternatively, the simple average of the uncertainty scores in six policies related to tax and the social security system. The interests of the analysis are the difference by individual characteristics as well as the coefficient for the policy uncertainty measures.

3. Uncertainties over Policies: Overview

The simple tabulation results of perceived uncertainty over nine policy areas are presented in **Table 2A**. The number of respondents is just 10,000. This table indicates the percentages of the three choices—1) “high degree of uncertainty,” (2) “moderate degree of uncertainty,” and (3) “no significant degree of uncertainty”—as well as the uncertainty scores. The uncertainty scores are between 0.827 (pension system) and 0.603 (childcare system) and the simple average is 0.669.⁷

Communications). Specifically, annual income is classified into (1) less than JPY 1 million; (2) JPY 1 to 1.99 million; (3) JPY 2 to 2.99 million; (4) JPY 3 to 3.99 million; (5) JPY 4 to 4.99 million; (6) JPY 4 to 4.99 million; (7) JPY 5 to 5.99 million; (8) JPY 6 to 6.99 million; (9) JPY 7 to 7.99 million; (10) JPY 8 to 8.99 million; (11) JPY 9 to 9.99 million; (12) JPY 10 to 12.49 million; (13) JPY 12.5 to 14.99 million; (13) JPY 15 to 19.99 million; and (14) JPY 20 million or more. The central values of the annual income classes are converted to logarithmic form. In this calculation, “less than JPY 1 million” and “JPY 20 million or more” are treated as JPY 500,000 and JPY 22.5 million, respectively.

⁷ The uncertainty scores are generally higher than the scores obtained from a firm survey of similar design (Morikawa, 2016b). Although the surveyed policies are different, the simple average of the firms’ uncertainty scores is 0.480.

The policies with a high degree of subjective uncertainty are pension system, long-term care system, and health care system. The majority of respondents evaluate these three policies related to the social security system as “high degree of uncertainty” and the percentages of the choice “no significant degree of uncertainty” are less than 10%.

The results for the impacts of economic policy uncertainty on living are reported in **Table 2B**. By descending order, uncertainties over the pension system, consumption tax, health care system, and long-term care system are regarded to largely impact living. In an aging society, uncertainty over the future course of social security policies, in addition to their relatively high uncertainty, seem to have a strong influence on Japanese people.

The above results are for all respondents, but it is natural to expect the responses to be different according to individual characteristics. Simple OLS regressions to explain uncertainty scores of nine policy areas and the synthesized uncertainty score calculated as the mean of these nine scores are reported in **Table 3A**. The explanatory variables are gender (female dummy), age, and household income (expressed in log). According to these estimations, females show greater subjective uncertainty over seven policy areas out of the nine areas. However, the magnitude of the differences by gender is small (around 0.02).

The sign and size of the coefficients for age and household income are very different by policy areas. The coefficients for age are positive and significant for the long-term care system and health care system, reflecting elderly people’s anxiety over the future of the social security system. In contrast, the coefficients for age are negative and significant for childcare, labor market policies, and income tax. Expectedly, elderly people include those who are retired and nearing retirement. However, the size of the coefficients is quantitatively small: the differences in the uncertainty scores by one standard deviation (about 15 years), different age, is around 0.01 to 0.02.⁸ These figures are far smaller than the coefficients for the constant terms.

The significant coefficients for household income are the pension system (positive), consumption tax (negative), childcare (negative), labor market policies (negative), and privacy protection laws and regulations (negative). However, the quantitative differences in uncertainty scores by income are small: the differences in uncertainty scores by one standard deviation, different income, are associated with around 0.01.⁹

Overall, differences by observable individual characteristics are detected in some policy areas, but the quantitative magnitude explained by these characteristics is relatively small. In other words, overall differences in the subjective uncertainty over economic policies are dominated by within-group (unobservable) differences. Furthermore, differences among policy areas cannot be

⁸ The mean and standard deviation of the age of the sample (10,000) are 49.3 and 14.7 years, respectively.

⁹ The mean and standard deviation of the household income are 6.16 and 0.79, respectively.

explained by the observable individual characteristics used in the analysis.

The results of a similar estimation to explain impact scores are presented in **Table 3B**. According to the results, the coefficients for females are positive and significant for eight policy areas with an exception of income tax, indicating that females are relatively concerned about the impact of policy uncertainties on their living. In comparison with the results for the uncertainty score, the size of the coefficients is large.

The coefficients for age are significant for eight policy areas except consumption tax, but the signs are different by policies. The sign of the coefficients is positive and significant for all policies related to the social security system (pension, health care, and long-term care). Among tax policies, the sign is positive for inheritance and gift tax, but negative for income tax. The coefficient for labor market policies is negative and highly significant. As expected, these results reflect the different policy interests by the respondents' phases in the life cycle. The coefficients are quantitatively large: one standard deviation, higher age, is associated with 0.03 to 0.09 larger impact scores.

The coefficients for household income are positive and significant for income tax and inheritance and gift tax as naturally expected. One standard deviation, higher income, is associated with around 0.03 to 0.04 larger impact scores of these policies. On the other hand, impact scores related to social security system have weak relationships with household income.

To summarize, a large number of Japanese individuals are highly uncertain over the future of social security policies and the effects of such uncertainty on their life are perceived to be large. However, the perceived policy uncertainty is not firmly linked with observable individual characteristics and within-group heterogeneity is dominant. On the other hand, perceived impact of policy uncertainty has a relatively stronger association with gender, age, and income, and the pattern by policy areas is generally consistent with the life cycle of individuals.

4. Policy Uncertainty and Consumption/Saving

This section presents findings on the relationship between policy uncertainty, particularly uncertainty over tax and social security system, and consumption/saving behavior. First, we report responses to the questionnaire "Is the uncertainty over tax and social security system affecting your consumption?" The percentage of those who responded as "suppressing consumption" is 69.8% and the difference by gender is small (**Table 4**). The percentages of his/her consumption affected by policy uncertainty are larger for higher age categories, but even for age in 20s and 30s, the figures are not small (62.8% and 67.8%).

Next, we run simple probit models to observe the relationship between the negative effect of

policy uncertainty on consumption and individual characteristics. As the dependent variable, we assign one for the response “suppressing consumption” and zero otherwise. The results of the estimated marginal effects expressed in percentage term are reported in **Table 5**. The individual characteristics used as explanatory variables include gender (female dummy), working status, age categories in ten years interval, household annual income categories, a dummy for possessing own residence, and expected income growth. The reference categories for the dummy variables are male, in their 40s, annual income of 5 to 5.99 million yen, and living in a rented residence.

Column (1) of the table is the baseline specification to indicate whose consumption is curbed by policy uncertainty. The estimated marginal effects for females who are currently working and having annual income less than 5 million yen are positive and significant, which means that precautionary savings of these individuals’ are raised by tax/social security policy uncertainty. On the other hand, the marginal effects for the younger generation (in the 20s and 30s) with an annual income of 10 million yen or more are negative and significant, indicating that consumption of these individuals is less affected by policy uncertainty. The coefficient for expected income growth is also negative and significant. Other things being equal, consumption of those who expect higher household income in the future tends to be unaffected by policy uncertainty. Among these variables, the size of the marginal effects for household income is systematic and quantitatively large, suggesting a regressive nature of tax/social security policy uncertainty.

Columns (2) and (3) are the estimation results including combined policy uncertainty scores as additional explanatory variables. Columns (2) and (3) use the overall uncertainty score calculated as a mean of nine policy areas and six policy areas related to tax/social security policies, respectively. The estimated coefficients for policy uncertainty scores are positive and significant at the 1% level. The size of the marginal effects for these uncertainty score is not small: one standard deviation, greater policy uncertainty, is associated with about 11% higher probability of curbing consumption.¹⁰ Since addition of the uncertainty scores does not fundamentally affect the coefficients for other individual characteristics, subjective policy uncertainty affects his/her consumption independent of the other individual characteristics.

Table 6 is the percentage of responses as “increase saving” to the hypothetical question “when your earnings or household income increases in the future, which is your priority of disposal?” Those who responded, “I don’t know” (11.4% of the sample) are excluded from this calculation. The majority (56.5%) expresses priority of additional income for savings. By age categories, the percentage of age 60 or over is relatively small, which is consistent with the standard life cycle model of consumption.

We run the probit model to explain this saving intention by individual characteristics as well as

¹⁰ The standard deviations of the combined uncertainty scores for overall (nine policy areas) and for tax/social security (six policy areas) are 0.2418 and 0.2484, respectively.

the policy uncertainty scores (**Table 7**). The figures in this table indicate estimated marginal effects expressed in percentage terms. Column (1) is the baseline estimation result that does not include a measure of policy uncertainty. Females have higher orientation to save, while aged 50 or higher and high-income individuals have weaker orientation to save. After accounting for other variables, the coefficient for possessing own residence is negative and significant, suggesting stronger saving propensity of renters for future purchase of own residence. The coefficient for expected income growth is negative and highly significant, indicating that those who do not expect income growth (or decline in income) have higher propensity to save.

Columns (2) and (3) are the results adding the combined policy uncertainty scores as explanatory variable. The estimated coefficients for the policy uncertainty scores are positive and significant at the 1% level. Quantitatively, one standard deviation, greater policy uncertainty, is associated with about 2% higher probability of expressing priority on saving.

Taken together, these results suggest that policy uncertainty, particularly uncertainty over tax and the social security system, has a detrimental effect on household consumption, and removing the uncertainty over the outlook of these policies is likely to contribute toward stimulating domestic demand.

5. Concluding Remarks

In spite of improving labor market conditions indicated by low unemployment rate and high job opening rate, movement of household consumption remains stagnant in Japan. This study collects original survey data on individuals and presents findings on the subjective uncertainty over various economic policies and on the impact of policy uncertainty on consumption and saving behavior of households.

The major results can be summarized as follows. First, individuals are highly uncertain over the future course of social security policies and the effects of such uncertainty on their living are perceived to be large. Second, the policy uncertainty strengthens households' propensity to save through a precautionary motive, and the effect is prominent for low-income individuals. These results suggest that improving medium- to long-term predictability in the social security and tax system may contribute toward expanding household consumption.

Although this study presents novel findings on the relationship between policy uncertainty and consumption/saving behavior, a major limitation of this study is that it depends on cross-sectional survey-based information. As a result, this study does not present the quantitative impact of policy uncertainty on macroeconomic movements of consumption and savings, for example, how much the stagnant aggregated consumption is explained by policy uncertainty. We acknowledge this as

an important topic for future research.

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Table 1
Distribution of respondents by individual characteristics

Individual characteristics		%
Gender	Male	49.3%
	Female	50.7%
Age class	20-29	13.2%
	30-39	16.6%
	40-49	19.6%
	50-59	16.4%
	60 or over	34.1%
	Household annual income	Less than 1 million JPY
1 to 1.99 million JPY		5.5%
2 to 2.99 million JPY		10.1%
3 to 3.99 million JPY		14.3%
4 to 4.99 million JPY		13.7%
5 to 5.99 million JPY		11.1%
6 to 6.99 million JPY		9.2%
7 to 7.99 million JPY		7.7%
8 to 8.99 million JPY		5.5%
9 to 9.99 million JPY		5.1%
10 to 12.49 million JPY		5.8%
12.5 to 14.99 million JPY		2.7%
15 to 19.99 million JPY		2.1%
20 million JPY or over	1.8%	
Working status	Working	65.8%
	Not working	34.2%
Residence	Possessing own residence	71.7%
	Renting	28.3%

(Note) The sample comprises all respondents (N=10,000).

Table 2

Policy uncertainty and the impact on living

A. Perceived policy uncertainty

	(1) High degree of uncertainty (%)	(2) Moderate degree of uncertainty (%)	(3) No significant degree of uncertainty (%)	(4) Uncertainty score
1. Income tax	36.7%	49.7%	13.6%	0.616
2. Consumption tax	46.4%	40.3%	13.3%	0.666
3. Inheritance and gift tax	38.5%	47.7%	13.8%	0.624
4. Pension system	70.4%	24.6%	5.0%	0.827
5. Health care system	47.5%	43.1%	9.5%	0.690
6. Long-term care system	51.4%	40.5%	8.1%	0.716
7. Childcare system	34.1%	52.3%	13.5%	0.603
8. Labor market policies	40.1%	48.5%	11.4%	0.644
9. Privacy protection	41.2%	45.0%	13.9%	0.637

(Note) The uncertainty score in column (4) is calculated as the sample mean of “high degree of uncertainty”=1.0, “moderate degree of uncertainty”=0.5, and “no significant degree of uncertainty”=0.

B. Impact of policy uncertainty on living

	(1) Significantly affected (%)	(2) Somewhat affected (%)	(3) Hardly affected (%)	(4) Impact score
1. Income tax	45.0%	40.4%	14.6%	0.652
2. Consumption tax	62.6%	30.9%	6.5%	0.780
3. Inheritance and gift tax	28.4%	39.3%	32.3%	0.480
4. Pension system	63.6%	29.1%	7.3%	0.782
5. Health care system	57.3%	35.2%	7.5%	0.749
6. Long-term care system	46.8%	39.7%	13.5%	0.667
7. Childcare system	20.7%	28.8%	50.5%	0.351
8. Labor market policies	33.3%	38.2%	28.4%	0.525
9. Privacy protection	33.4%	46.8%	19.8%	0.568

(Note) The impact score in column (4) is calculated as the sample mean of “significantly affected”=1.0, “somewhat affected”=0.5, and “hardly affected”=0.

Table 3

Individual characteristics and the uncertainty and impact scores

A. Uncertainty scores

	(1) Income tax	(2) Consumption tax	(3) Inheritance and gift tax	(4) Pension system	(5) Health care system
Female	0.0244 *** (0.0067)	0.0230 *** (0.0070)	0.0125 * (0.0068)	0.0171 *** (0.0057)	0.0053 (0.0065)
Age	-0.0007 *** (0.0002)	-0.0002 (0.0002)	-0.0003 (0.0002)	-0.0002 (0.0002)	0.0008 *** (0.0002)
Household income (log)	0.0030 (0.0043)	-0.0104 ** (0.0044)	0.0064 (0.0043)	0.0118 *** (0.0036)	0.0009 (0.0041)
Const.	0.6206 *** (0.0297)	0.7292 *** (0.0309)	0.5944 *** (0.0301)	0.7541 *** (0.0253)	0.6432 *** (0.0289)

	(6) Long-term care system	(7) Childcare system	(8) Labor market policies	(9) Privacy protection	(10) Combined score
Female	0.0127 ** (0.0064)	0.0000 (0.0066)	0.0217 *** (0.0066)	0.0402 *** (0.0069)	0.0174 *** (0.0048)
Age	0.0016 *** (0.0002)	-0.0017 *** (0.0002)	-0.0012 *** (0.0002)	0.0004 (0.0002)	-0.0002 (0.0002)
Household income (log)	-0.0007 (0.0040)	-0.0090 ** (0.0042)	-0.0143 *** (0.0042)	-0.0197 *** (0.0044)	-0.0035 (0.0031)
Const.	0.6327 *** (0.0282)	0.7402 *** (0.0291)	0.7784 *** (0.0291)	0.7189 *** (0.0305)	0.6902 *** (0.0214)

(Notes) OLS estimation results with standard errors in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. The sample is all respondents (N=10,000).

B. Impact scores

	(1) Income tax	(2) Consumption tax	(3) Inheritance and gift tax	(4) Pension system	(5) Health care system
Female	0.0037 (0.0070)	0.0347 *** (0.0061)	0.0257 *** (0.0078)	0.0329 *** (0.0062)	0.0477 *** (0.0063)
Age	-0.0033 *** (0.0002)	0.0003 (0.0002)	0.0008 *** (0.0003)	0.0029 *** (0.0002)	0.0023 *** (0.0002)
Household income (log)	0.0459 *** (0.0044)	-0.0013 (0.0039)	0.0397 *** (0.0049)	0.0060 (0.0039)	0.0048 (0.0040)
Const.	0.5321 *** (0.0310)	0.7574 *** (0.0271)	0.1820 *** (0.0343)	0.5832 *** (0.0274)	0.5817 *** (0.0278)

	(6) Long-term care system	(7) Childcare system	(8) Labor market policies	(9) Privacy protection	(10) Combined score
Female	0.0322 *** (0.0068)	0.0164 ** (0.0075)	0.0381 *** (0.0073)	0.0785 *** (0.0071)	0.0344 *** (0.0048)
Age	0.0062 *** (0.0002)	-0.0083 *** (0.0003)	-0.0095 *** (0.0003)	-0.0018 *** (0.0002)	-0.0012 *** (0.0002)
Household income (log)	0.0076 * (0.0043)	0.0143 *** (0.0048)	0.0008 (0.0046)	-0.0160 *** (0.0045)	0.0113 *** (0.0031)
Const.	0.3006 *** (0.0300)	0.6659 *** (0.0332)	0.9699 *** (0.0324)	0.7155 *** (0.0315)	0.5876 *** (0.0214)

(Notes) OLS estimation results with standard errors in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. The sample comprises all respondents (N=10,000).

Table 4
Impact of uncertainty over tax and social security system on consumption

Age, gender	Suppressing consumption	No impact on consumption
All	69.8%	30.3%
Gender		
Male	68.5%	31.5%
Female	71.0%	29.0%
Age		
20-29	62.8%	37.2%
30-39	67.8%	32.2%
40-49	70.9%	29.1%
50-59	71.7%	28.3%
60 or over	71.8%	28.2%

(Note) The sample comprises all respondents (N=10,000).

Table 5

Probit estimation results (marginal probability of “suppressing consumption”)

	(1)	(2)	(3)
Combined policy uncertainty score		46.4% ***	
Tax/social security policy uncertainty score			44.0% ***
Female	2.4% **	1.3%	1.4%
Working	3.3% ***	2.5% **	2.5% **
20-29	-8.7% ***	-5.8% ***	-5.3% ***
30-39	-3.6% **	-3.1% *	-2.8% *
50-59	1.4%	2.2%	2.2%
60 or over	-0.6%	0.7%	0.6%
Less than 1 million JPY	3.6%	4.2% *	4.6% *
1 to 1.99 million JPY	8.8% ***	9.6% ***	10.0% ***
2 to 2.99 million JPY	7.2% ***	7.6% ***	7.9% ***
3 to 3.99 million JPY	7.0% ***	6.9% ***	7.1% ***
4 to 4.99 million JPY	4.1% **	3.7% **	3.8% **
6 to 6.99 million JPY	-0.2%	0.1%	0.1%
7 to 7.99 million JPY	-3.2%	-3.1%	-3.2%
8 to 8.99 million JPY	-2.3%	-1.0%	-0.9%
9 to 9.99 million JPY	-1.2%	-0.7%	-0.8%
10 to 12.49 million JPY	-9.0% ***	-8.4% ***	-8.6% ***
12.5 to 14.99 million JPY	-9.6% ***	-9.4% ***	-9.3% ***
15 to 19.99 million JPY	-16.9% ***	-15.8% ***	-15.9% ***
20 million JPY or over	-21.3% ***	-19.8% ***	-19.6% ***
Possessing own residence	-0.7%	0.0%	0.0%
Expected income growth	-6.2% ***	-4.8% **	-4.6% **

(Notes) Probit estimation results indicating marginal effects. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Reference categories are male, non-worker, age in the 40s, household income of 5 to 5.99 million yen, and renter. The sample comprises all respondents (N=10,000).

Table 6

Percentages choosing “increase saving” when income increases

Age, gender		
All		56.5%
Gender	Male	52.7%
	Female	60.1%
Age	20-29	61.9%
	30-39	67.4%
	40-49	65.1%
	50-59	61.1%
	60 or over	40.9%

(Notes) Those who responded “I don’t know” are excluded from this calculation. The sample comprises all respondents (N=10,000).

Table 7

Probit estimation results (marginal probability of “increase saving”)

	(1)	(2)	(3)
Combined policy uncertainty score		8.2% ***	
Tax/social security policy uncertainty score			7.0% ***
Female	7.7% ***	7.6% ***	7.6% ***
Working	0.1%	0.0%	0.0%
20-29	-3.7% *	-3.3% *	-3.3% *
30-39	2.2%	2.3%	2.3%
50-59	-4.1% **	-3.9% **	-3.9% **
60 or over	-26.1% ***	-25.8% ***	-25.9% ***
Less than 1 million JPY	1.5%	1.4%	1.5%
1 to 1.99 million JPY	-2.2%	-2.1%	-2.0%
2 to 2.99 million JPY	0.1%	0.1%	0.2%
3 to 3.99 million JPY	-3.0%	-3.0%	-3.0%
4 to 4.99 million JPY	-4.1% *	-4.2% *	-4.2% *
6 to 6.99 million JPY	-1.8%	-1.7%	-1.7%
7 to 7.99 million JPY	-2.5%	-2.5%	-2.5%
8 to 8.99 million JPY	-8.3% ***	-8.0% ***	-8.1% ***
9 to 9.99 million JPY	-3.5%	-3.4%	-3.4%
10 to 12.49 million JPY	-12.6% ***	-12.4% ***	-12.5% ***
12.5 to 14.99 million JPY	-11.7% ***	-11.7% ***	-11.7% ***
15 to 19.99 million JPY	-16.3% ***	-16.1% ***	-16.2% ***
20 million JPY or over	-16.1% ***	-15.9% ***	-15.9% ***
Possessing own residence	-3.5% ***	-3.4% ***	-3.4% ***
Expected income growth	-11.8% ***	-11.5% ***	-11.5% ***

(Notes) Probit estimation results indicating marginal effects. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Reference categories are male, non-worker, age in the 40s, household income of 5 to 5.99 million yen, and renter. The sample comprises all respondents (N=10,000).