Preferences of Voters and Young People for Political Parties, Policies, Demeny Voting System, and the Ministry of the Future Preliminary Results of Survey of Voters and Young People Held Two Days Before the 46th General Election

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Introduction

This paper compiles the results of an Internet survey held two days before the 46th general election on December 16, 2012. The survey aims were to find out voter preference of policies and political parties and the extent of support for Demeny voting system and establishment "Ministry of the Future". We also asked the same questions to young people 16 to 19 years old, i.e., citizens who are not able to vote but are the future generation of Japan. The interpret the result by organizing the respondents into several groups: voters who have at least one underage child, those whose children are all adults, those who have no children, and young people 16 to 19 years old having no voting rights. The survey form is attached as an appendix.

Distribution of political parties supported by the respondents is very close to the voting results of the actual proportional representation election. However, compared to the actual results, the number of supporters of New Komeito is significantly lower and that of Your Party notably higher. Among young respondents aged 16 to 19, 31.17% chose to abstain, and the number is higher than 9.47% for the eligible voter respondents, but lower than the actual abstention rate of 40.68% (that is, survey respondents have high turnout). Surprisingly, the distribution of parties chosen by young people is similar to that of the actual proportional representation election.

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As for the Demeny voting system, young people aged 16 to 19 show the highest percentage (41.8%) of support for the system, higher than voters with underage children⁵ (35.6%) who will have more voting rights in the system. Most hesitant voters (20.8%) are those whose children are all adults. In any group, the dominant objection to the system is that such a vote by a parent on behalf of the dependent child is regarded as a proxy vote.

We first look at voter and young peoples' policy preferences. Responses for pension, medical care, education and childrearing differ according to having children or not and the children's ages. Responses for nuclear energy and science and technology budgets depend on the ages of the voters themselves. Based on the response, young people aged 16 to 19 are for small-government oriented. They are also the age group showing the highest percentages in support of nuclear power and opposition to Trans-Pacific Partnership (TPP), while the elderly are the highest in the percentages against nuclear power and support TPP. However, compared to other policies, support for TPP are affected by having children or not and children's ages, which reflects the complexity of TPP. The policy of promoting science and technology is seen as important by the elderly group, so their percentage in favor of the budget increase is the highest among the groups, while the young have the opposite tendency. Economy, employment, consumption tax, and finance are considered key policies by many respondents regardless of their ages and having children or not.

The Ministry of the Future is a concept of a government agency⁶ with the mission of securing benefits for future generations in the process of policymaking. Establishment of the Ministry is mainly supported by eligible voters with children and young people aged 16 to 19, especially by those aged 16 to 17. Voters with no children tend to be negative about it. The responses also suggest that among eligible voters with children, those with grandchildren are inclined to decide their priority policies considering the grandchild generation rather than the children generation. It is understandable that the existence of grandchildren has more

 $^{^5}$ We will use "voters with children" to mean "voters with at least one child under 20".

⁶ Description of the survey: Decision-making by the current generation (today's adults) has a significant impact on unborn future generations. The current generation can engage in dialogs and negotiate but cannot with the future generation. Therefore, as an organization for reflecting the voices of the future generation, the "Ministry of the Future" is a possible option. The Ministry is to exert direct and indirect influence on policymaking by the current generation from the viewpoint of the future generation.

influence on those with adult children than those with underage children.

From the logit analyses, we find that significant determinant of the support for the Demeny voting system and the Ministry of the Future is gender, particularly males in favor of the Democratic Party of Japan and in favor of the Japan Restoration Party. Age is significant for the support of the Demeny voting system, but not for the support of the Ministry of the Future. It is probably because there are two groups in the in the current generations: those who receive benefits and those who do not from the Demeny voting system, depending on age. On the other hand, all existing generations are in the same position relative to the generation whose benefits are protected by the Ministry of the Future.

Description of Survey Respondents

The survey was held with five groups of respondents from monitors registered with a survey company. Members of the five groups were selected using preliminary questions and existing information.

Croup		Number of	Average
Group		Respondents	Age
А	Voters with at least one underage children	1030	40.16
B1	Voters with only adult children	515	61.39
B2	Voter with no children	515	37.59
C1	16 to 17 year olds	515	16.57
C2	18 to 19 year olds	515	18.63

Table 1. Respondent Characteristics

A is a group of voters (20 years and over) who have at least one child under 20 year of age. All voters in this group will cast at least one proxy vote for each dependent child in the Demeny voting system. Among voters who are not eligible for the proxy vote, the B1 group consists of whose children are all adults and the B2 group consists of voters with no children. The B2 group is comprised of younger voters who are potential parents and older voters who did not become parents, but the average age suggests that the former accounts for a larger part of the group. The National Referendum Law for amending the constitution gives voting rights to people aged 18 or older, so we divided the young people into two groups: those aged 18 to 19 who have voting rights in referendums but not in national elections and those aged 16 to 17 who have no voting rights at all. We chose age 16 as cutoff for under aged because the Parliament of the European Union has recommended that EU member states raise the age of voter eligibility to 16 years.

Respondents' Preference for Political Parties

Table 2 summarizes the responses to question No. 2: "Which political party will you vote for in the proportional representation in election on December 16?" The abstention rate of respondents with voting rights in the survey ("no vote"/"total respondents who can vote") was only 9.47%, which indicates that the survey respondents consisted of active participants in the election because the actual turn out rate in the Lower House election was 59.32%. Note that the respondents are monitors who chose to take the survey. However, abstainers in the actual election might be included in the respondents who answered, "I don't want to answer," but even if such respondents all do not cast a vote, the turn out rate still reaches over 70%. The distribution of political parties supported by the respondents in Table 2 excludes responses of "I don't want to answer" and "no vote." Compared to the distribution of votes in the actual proportional representation election on December 16, the respondents gave less support to New Komeito and more favored Min-na-no Toh (Your Party). This is the same phenomenon observed in a previous survey held in 2011. Both surveys were conducted by the same survey company, so the tendency may be attributed to the monitors registered with the company.

The respondents aged 16 to 19 consisted of a lower percentage of people who refused to answer but a higher abstention rate than those with voting rights. Young people gave more support to the Liberal Democratic Party and the Democratic Party of Japan and less support to the Japan Restoration Party than eligible voters did. Except the lower support to New Komeito, young people's preference for political parties is close to the result of the actual proportional representation election. If the preference of young people aged 16 to 19 for the political parties is similar to that of all the electorate, it could be said that the bias caused by using the Internet is smaller in younger people. Or, it also can be assumed that, although young people's preference of the Internet from the electorate, the bias generated by the use of the Internet offsets the difference. In any case, interpretation of the results requires caution, and further analyses with other information and the respondents' data are

necessary.

	Re	sults of 46th Gene	ral Election		Survey Respondents		
	Total	Small Electoral District	Proportional Representation District		Eligible Voters	Aged 16 to 19	
Social Democratic Party	0.42	0.33	0.56		1.72	1.21	
Democratic Party of Japan	11.88	9.00	16.67		11.96	17.79	
Liberal Democratic Party	61.25	79.00	31.67		29.74	35.58	
Japanese Communist Party	1.67	0.00	4.44		4.56	2.59	
Ishin (Japan Restoration Party)	11.25	4.67	22.22		25.18	20.55	
New Komeito	6.46	3.00	12.22		4.03	4.84	
Min-na (Your Party)	3.75	1.33	7.78		13.28	8.81	
Happiness Realization Party	0.00	0.00	0.00		0.26	1.21	
New Party Daichi	0.21	0.00	0.56		0.93	0.86	
Tomorrow Party of Japan	1.88	0.67	3.89		6.94	3.97	
Japan Renaissance Party	0.00	0.00	0.00		0.73	0.86	
New Party Nippon	0.00	0.00	0.00		0.20	0.00	
People's New Party	0.21	0.33	0.00		0.46	1.73	
Independents	1.04	1.67	_	Total	100.00	100.00	
Other parties	0.00	0.00	0.00	Abstention rate	9.47	31.17	
Total	100.00	100.00	100.00	Refuse to answer	17.09	12.62	

Table 2: Election Results and Survey Responses

Demeny Voting System

Table 3: Objections to Demeny Voting System and Reasons of Objection

	Not oppose (support the system)	Unfair to people with no children	Impossible to allow a proxy vote	No guarantee that parents cast proxy votes for benefits of children	People may have children for increasing their number of votes	Other	Total
Overall average	33.1	15.1	32.5	15.7	1.0	2.5	100
Voters with underage children	35.6	15.2	32.6	14.3	0.6	1.7	100
Voters with adult children	20.8	14.0	48.3	13.4	0.0	3.5	100
Voters with no children	23.1	20.2	34.6	18.1	1.0	3.1	100
Aged 16 to 17	45.0	14.6	19.0	17.1	1.9	2.3	100
Aged 18 to 19	38.6	11.7	28.0	17.1	2.1	2.5	100

The highest percentage (45.0%) of people supporting the system is shown by young people aged 16 to 17, which is higher than eligible voters with underage children (35.6%) who will have more votes to cast (see the Table 3). The lowest percentage (20.8%) is found in voters whose children are adults. This seems to be related to the effect of age. In fact, there is a tendency that the percentage of support decreases inversely with age (see Table 4). One of the reasons for the objection, "unfair to people with no children," is cited most (20%) by voters with no children, which is understandable. "Impossible to allow a proxy vote" is selected most (48.3%) by voters whose children are adults, and the percentage tends to increase with age.

	Not oppose (support the system)	Unfair to people with no children	Impossible to allow a proxy vote	No guarantee that parents casts proxy votes for child"s benefit	People may have children for increasing their number of votes	Other	Total
Overall Average	33.1	15.1	32.5	15.7	1.0	2.5	100
Aged 12 to 19	41.9	13.0	23.5	17.1	2.0	2.4	100
Aged 20 to 24	25.9	14.8	29.6	28.4	0.0	1.2	100
Aged 25 to 29	30.3	14.1	33.1	17.6	3.5	1.4	100
Aged 30 to 34	31.2	14.6	34.4	17.0	0.4	2.4	100
Aged 35 to 39	33.1	17.0	30.9	15.1	0.6	3.2	100
Aged 40 to 44	32.5	18.0	32.5	15.5	0.3	1.3	100
Aged 45 to 49	28.7	18.0	34.5	15.7	0.8	2.3	100
Aged 50 to 54	27.8	19.0	40.5	10.7	0.0	2.0	100
Aged 55 to 59	26.7	15.2	44.8	11.5	0.0	1.8	100
Aged 60 or older	20.6	13.4	49.1	12.2	0.0	4.7	100

Table 4: Demeny Voting System and Age Groups

Ministry of the Future

In any group, nearly a quarter selected "hard to decide" (see Table 5). It may be because such a Ministry is a brand-new concept. The highest percentage (52.4%) of people taking a positive stance ("support" or "rather support") is held by young people aged 16 to 17, and the negative stance ("oppose" or "rather oppose") is most (33%) often taken by voters with no children. Among voters with children, those who have grandchildren are more positive than others. However, eligible voters with underage children and grandchildren are only 18 people, so caution is advised in

the interpretation of the numbers. Seemingly, there is no big difference among all groups for the pros and cons of the Ministry, unlike the Demeny voting system.

	Having Grandchildren	Total	Support	Rather Support	Rather Oppose	Oppose	Hard to Decide	Total
All respondents		3090	7.3	35.6	18.1	14.7	24.3	100.0
All votors with shildren	Yes	269	8.6	38.7	20.8	16.0	16.0	100.0
All voters with children	No	1276	7.2	33.8	18.2	14.4	26.4	100.0
Votor with underga	All	1030	7.0	36.0	17.1	13.4	26.5	100.0
voter with underage	Yes	18	5.6	66.7	11.1	5.6	11.1	100.0
Children	No	1012	7.0	35.5	17.2	13.5	26.8	100.0
	All	515	8.3	31.8	21.7	17.3	20.8	
Voter with adult children	Yes	251	8.8	36.7	21.5	16.7	16.3	100.0
	No	264	8.0	27.3	22.0	17.8	25.0	100.0
Voter with no chil	dren	515	3.9	29.1	21.6	20.2	25.2	100.0
Aged 16 to 17		515	9.5	42.9	13.2	10.5	23.9	100.0
Aged 18 to 19		515	8.2	37.9	17.9	13.2	22.9	100.0

Table 5: Support for Establishment of the Ministry of the Future

Table 6: If you make a decision important for the entire society, mainly whichgeneration would you keep in mind?

	Having Grandchildren	Total	Current generation (today's grown-up generation)	Child generation	Grandchild generation	Future generation beyond grandchildren	Total
All respondents		3090	23.5	47.3	14.8	14.3	100.0
All votors with childron	Yes	269	13.8	27.9	38.3	20.1	100.0
All voters with children	No	1276	17.8	55.3	13.1	13.9	100.0
Voters with underage children	All	1030	17.7	59.1	10.8	12.4	100.0
	Yes	18	22.2	55.6	22.2	0.0	100.0
	No	1012	17.6	59.2	10.6	12.6	100.0
	All	515	15.9	33.2	30.9	20.0	100.0
Voters with adult children	Yes	251	13.1	25.9	39.4	21.5	100.0
	No	264	18.6	40.2	22.7	18.6	100.0
Voters with no children		515	34.8	37.7	9.9	17.7	100.0
Aged 16 to 17		515	28.5	47.0	12.8	11.7	100.0
Aged 18 to 19		515	26.6	47.8	13.8	11.8	100.0

A notable influence from having children or grandchildren is seen in responses to the question of which future generations to keep in mind when evaluating policies that would affect future generations (see Table 6). Of the voters with underage children, 59.1% would consider the children's generation. Compared to those with no grandchildren, voters with grandchildren are more likely to consider grandchildren's generation. Voters with no children consider all generations almost equally. It is interesting that 47% of respondents under 18 years old think about the child generation. The explanation given in the survey is that the current generation means today's adult generation, so there are two possibilities that those under 18 regard themselves as the child generation, or they consider the generation of their own children. The high teens are often described as "neither adult nor child", so their viewpoints on policies are also mixed.

Policy Preference

For around 40% of people in all groups, "Economy & Employment" (see Graph 1) is the most important policy. Voters with underage children emphasize "Education." Both eligible voters with adult children and with no children have nearly 10% of people valuing "Pension." These two groups (B1, B2) are voters that will not have any proxy votes for their children in the Demeny voting system. Interestingly, although the average age of voters with no children in the survey is relatively low (see Table 1), they attach importance to pensions. The distribution of priority







Similar tendencies are revealed in the support for an increase in pension benefits and a decrease in the individual's share of medical expenses (see Tables 7 and 8). For both policies, the majority of people in all groups support no change with around 40% for pension and 48% for medical expenses. Young people aged 16 to 18 show slightly lower support for an "increase in pension benefits" and a "decrease in an individual's share of medical expenses." Such increases and decreases mean more resource allocation to the elderly, so the responses are reasonable (the order of policies is random on the survey form, and the probability that the two policies appear in a row is two-ninths). The group with largest support for the aforementioned increase and decrease is voters with underage children, which is reasonable but unexpected because their average age is not the highest.

(%)	Increased	Unchanged	Decreased	l don't know	Total
Overall	34.7	41.3	12.9	11.1	100
Voter with underage children	37.0	38.0	12.5	12.5	100
Voter with adult children	35.1	46.2	12.6	6.0	100
Voter with no children	35.5	41.4	13.0	10.1	100
Aged 16 to 17	33.8	41.2	12.6	12.4	100
Aged 18 to 19	29.7	43.3	14.0	13.0	100

Table 7: The pension benefits should be

The group most emphasizing the pension (see Graph 1) does not necessarily support the increase in pension benefits, so they must consider no change or decrease very important.

(%)	Increased	Unchanged	Decreased	l don't know	Total
Overall	12.2	48.4	34.9	4.4	100.0
Voter with underage children	13.0	45.2	37.8	4.0	100.0
Voter with adult children	15.7	46.4	35.7	2.1	100.0
Voter with no children	15.1	49.5	31.7	3.7	100.0
Aged 16 to 17	9.9	49.9	33.2	7.0	100.0
Aged 18 to 19	6.6	54.2	33.4	5.8	100.0

Table 8: Individual's share of medical expense should be

On the other hand, young people aged 16 to 17 least support raising the consumption tax, showing a higher percentage in support of lowering the tax (see Table 9). In addition, based on the young people's preferences for policies about pensions and medical expenses, they seem to favor small government compared to other groups. We plan more regression analyses in the future to shed light on this issue.

(%)	Raised	Unchanged	Lowered	l don't know	Total
Overall	26.2	60.3	10.0	3.6	100.0
Voter with underage children	25.0	61.8	10.0	3.2	100.0
Voter with adult children	38.1	52.4	7.4	2.1	100.0
Voter with no children	23.3	58.4	13.4	4.9	100.0
Aged 16 to 17	21.2	62.5	11.7	4.7	100.0
Aged 18 to 19	24.7	64.5	7.6	3.3	100.0

 Table 9: The current 5% consumption tax rate should be

We find that young people are most positive toward nuclear power (see Table 10). Their proportion that support of increasing dependence on nuclear power is highest and that of zero use is lowest. However, including young people, all groups show that the majority favors decreasing but maintaining a certain dependence on nuclear power. Meanwhile, about 30% of voters with adult children support zero use. This is because the attitude toward dependence on nuclear power is remarkably different by ge (see Table 11). The reason preferences of voters with underage children and those with no children are similar is probably because they are close in age.

(%)	Unchanged	Decreased but maintained somewhat	Decreased to zero	l don't know	Total
Overall	13.7	52.7	25.2	4.0	100.0
Voter with underage children	13.0	52.2	27.4	3.1	100.0
Voter with adult children	9.1	55.9	31.5	0.8	100.0
Voter with no children	13.8	50.5	27.6	4.3	100.0
Aged 16 to 17	15.1	52.6	18.3	7.0	100.0
Aged 18 to 19	17.9	52.4	19.0	5.6	100.0

 Table 10: Dependence on nuclear power should be

	Increased	Unchanged	Decreased but maintained somewhat	zero	l don't know	Total
Overall	4.5	13.7	52.7	25.2	4.0	100.0
Aged 12 to 19	5.9	16.5	52.6	18.7	6.3	100.0
Aged 20 to 24	2.5	22.2	51.9	14.8	8.6	100.0
Aged 25 to 29	1.4	17.6	52.8	23.2	4.9	100.0
Aged 30 to 34	1.6	13.4	61.7	19.0	4.3	100.0
Aged 35 to 39	5.0	10.1	50.8	29.0	5.0	100.0
Aged 40 to 44	6.3	14.2	47.6	29.0	2.8	100.0
Aged 45 to 49	3.8	11.9	48.3	34.5	1.5	100.0
Aged 50 to 54	3.9	13.2	52.7	28.8	1.5	100.0
Aged 55 to 59	3.6	12.1	51.5	32.7	0.0	100.0
Aged 60 or older	3.4	6.3	56.9	33.1	0.3	100.0

Table 11: Dependence on nuclear power should be

As expected, a significantly high percentage of eligible voters with underage children support increasing the child allowance and education budget (see Table 12 and 13). The group with second highest proportion is young people aged 16 to 19, whose preferences for the policies, including support for no change and a decrease, are similar to those of eligible voters with underage children. On the other hand, two groups having no Demeny proxy votes - voters with adult children and those with no children - show similar preferences. Whether currently raising children or not is a main factor affecting the attitude toward these policies.

(%)	Increased	Unchanged	Decreased	l don't know	Total
Overall	27.7	41.1	23.8	7.4	100.0
Voter with underage children	41.6	42.0	13.0	3.4	100.0
Voter with adult children	15.9	41.9	34.6	7.6	100.0
Voter with no children	13.8	39.2	33.2	13.8	100.0
Aged 16 to 17	27.4	41.7	21.6	9.3	100.0
Aged 18 to 19	26.0	39.6	27.4	7.0	100.0

Table 12: The amount of child allowance should be

(%)	Increased	Unchanged	Decreased	l don't know	Total
Overall	41.7	44.3	8.5	5.5	100.0
Voter with underage children	55.6	35.9	5.3	3.1	100.0
Voter with adult children	35.3	50.3	11.3	3.1	100.0
Voter with no children	29.3	48.0	13.6	9.1	100.0
Aged 16 to 17	37.1	47.6	7.0	8.3	100.0
Aged 18 to 19	37.5	48.2	8.3	6.0	100.0

Table 13: Education budget (for primary, junior high and high schools)should be

The highest percentage of respondents in support of increasing the science and technology budget and participating in TPP (see Tables 14 and 15) is voters with adult children. Meanwhile, the lowest percentages in favor are young people. The majority of voters with adult children prefers the increase in the science and technology budget and that is because their average age is higher. Among young people aged 16 to 19, a high percentage of over 10% responded, "I don't know," which is consistent with their lack of concern for the policy. Considered together with Graph 1, higher interest in science and technology results in support, not great concern that science and technology is over budgeted. Again, over 10% of young people selected "I don't know" in the question about TPP participation, but they gave less support and more opposition to participation in TPP than eligible voters. Preferences for the TPP participation policy are even different among the three groups of eligible voters, which reflect the influence from participation in TPP varies by position as consumers and as workers.

(%)	Increased	Unchanged	Decreased	l don't know	Total
Overall	42.3	42.1	7.0	8.7	100.0
Voter with underage children	39.3	45.2	8.0	7.5	100.0
Voter with adult children	54.2	35.7	6.2	3.9	100.0
Voter with no children	44.5	40.0	6.8	8.7	100.0
Aged 16 to 17	35.0	44.5	7.2	13.4	100.0
Aged 18 to 19	41.6	41.7	5.6	11.1	100.0

Table 14: Budget for science and technology should be

(%)	Support	Oppose	Hard to decide	l don't know	Total
Overall	24.7	23.0	41.9	10.4	100.0
Voter with underage children	25.5	19.2	45.4	9.8	100.0
Voter with adult children	41.7	13.2	40.0	5.0	100.0
Voter with no children	24.1	24.7	42.5	8.7	100.0
Aged 16 to 17	14.4	29.3	40.2	16.1	100.0
Aged 18 to 19	16.7	32.4	37.9	13.0	100.0

Table 15: Participation in TPP (Trans-Pacific Partnership)

As for lowering the voting age, the majority in any group favors no change (see Table 16). About 30% of people in each group support lowering the age to 18 years. The percentage is especially high in young people and voters with adult children. The support for lowering the voting age to 16 years is very low in all groups, including young people aged 16 to 17 who are the ones to gain politically form the change. Among young people aged 16 to 17, 6.2% support lowering the voting age to 16 years old, while only 2.7 do in those aged 18 to 19. It is interesting that, although it is small, there is a difference between the two groups of young people.

(%)	Lowered to age 18 (people aged 18 or older are eligible)	Lowered to age 16 (people aged 16 or older are eligible)		Total
Overall	31.8	3.7	3.5	100.0
Voter with underage children	29.2	4.2	3.5	100.0
Voter with adult children	39.2	1.0	1.2	100.0
Voter with no children	28.7	4.1	2.7	100.0
Aged 16 to 17	34.4	6.2	5.8	100.0
Aged 18 to 19	30.1	2.7	4.1	100.0

Table 16: Minimum voting age should be

Grandchildren and Preferences for Policies

Voters with children (A and B1) were asked whether they had grandchildren or not. The voters with grandchildren were supportive of the increasing the total amount of pension benefits and expressed less opposition to decreasing benefits, compared to those with no grandchildren. In addition, voters with grandchildren showed higher support for a decrease in the education budget and childrearing allowance than those with no grandchildren. The results appear as if voters with grandchildren are less positive about shifting resources to future generations, but they show a higher percentage of support for raising the consumption tax, so there seems to be other reasons. Preferences for policies on pensions do not reveal clear distinctions among age groups, so the the existence of children or grandchildren is very important. Detailed analyses are required in the future.

All groups have about 10% favoring a reduction in the current 5% consumption tax rate, while the percentage in support of a raise in the tax rate increases as age increases from about 20% of the group aged 30 to 35 to more than 40% of those aged 60 or older.

Analyses of the Groups Supporting the Demeny Voting System and the Ministry of the Future

Descriptive analysis in the proceeding paragraphs demonstrated that both voter age and childrearing status (young children, adult children or no children) are relevant for determining support for Demeny voting system and the Ministry of the Future. But interpretation is difficult because voter age and childrearing status are related. In this section we clarify the characteristics of those supporting the systems with regression analyses. Specifically, we estimate logit models where endogenous variable takes value of 1 for selecting support or rather support for the Demeny voting system and the Ministry of the Future, and 0 for selecting other (oppose, rather oppose, or I don't know), and the explanatory variables of age, occupation, and whether the respondents had children or not. The estimation of logit model enables the identification of separate influences from each factor on the preferences for the Demeny voting system and the Ministry of the Future.

The explanatory variables used in the analyses are summarized in Table 17. Besides age and children, the respondent's residential area, occupation, gender, and political party to support are added as variables. The residential area is to consider the environment surrounding the respondent (e.g. average income level and employment conditions). The political party supported is also included in the explanatory variables, although strictly it should be regarded as an endogenous variable.

Table 17: Explained and Explanatory Variables used in Logit Estimation

Endogenous Variables

Demeny voting system	If supporting or rather supporting establishment of the Ministry of the Future,
	"Demeny voting system" = 1, if selecting others, "Demeny voting system" = 0
Ministry of the Future	If supporting or rather supporting establishment of the Ministry of the Future,
	"Ministry of the Future" = 1, if selecting others, "Ministry of the Future" = 0

Explanatory Variables					
Male	Gender dummy variable. If the respondent is male, "male" = 1, if female,				
	"male" = 0				
Age	The respondent's age				
No children	Dummy variable for whether having children or not. If the respondent				
	has no children, "no children" = 1, if having children, "no children" = 0				
Regional dummy variable	Dummy variable for residential area of the respondent. Kanto is				
Hokkaido, Tohoku, Chubu,	excluded as a base region.				
Kinki, Chugoku, Shikoku,					
Kyusyu					
Occupation dummy variable	Dummy variable for occupation of the respondent. Public officer is				
Business owner	excluded as a base occupation.				
Employee	For business manager and company executive				
Self-employed worker	For company employee (including administrative and engineering jobs)				
Housewife/househusband	For self-employed worker				
Freelance professional	For housewife/househusband				
Student	For freelance professional				
Part-time worker	For student				
Unemployed	For part-time worker				
	For unemployed person				
Dummy variable for political	Dummy variable for political party likely to support in the next Lower				
party to support	House election. Liberal Democratic Party is excluded as a base party.				
Social Democratic Party	For person planning to vote for Social Democratic Party				
Democratic Party of Japan	For person planning to vote for Democratic Party of Japan				
Japanese Communist Party	For person planning to vote for Japanese Communist Party				
Japan Restoration Party	For person planning to vote for Japan Restoration Party				
New Komeito	For person planning to vote for New Komeito				
Tomorrow Party of Japan	For person planning to vote for Tomorrow Party of Japan				
Other parties	For person planning to vote for Other parties				
Non-voter	For person planning not to vote for any party				

The estimation results of logit models with explained variables of the Demeny voting system and the Ministry of the Future are shown in Table 18. First, the results for the Demeny voting system reveal that the male dummy has a positive coefficient and is statistically significant. It suggests that male respondents have a higher percentage in support of the Demeny voting system than females. At the same time, we find that age and respondents with children have significant impacts. The older respondents and those with no children have a higher tendency to oppose the voting system. In particular, the coefficient of whether or not respondents have children indicates, if other conditions are the same, that people with children have a 62% higher probability of supporting the voting system than those with no children. Meanwhile, the residential area does not show a statistically significant difference. As for occupation, only the housewife/househusband has a statistical significance with a higher percentage opposing the Demeny voting system than public officers. The reason is not due to the factors of age and children because these factors are already controlled in the estimation models. Probably it is because of the higher (or lower) income level of the housewife/househusband respondents than other occupations.

With respect to the political party support, the respondents supporting the Democratic Party of Japan and the Japan Restoration Party reveal a significantly higher rate in support of the Demeny voting system than those favoring other parties. In addition, those responding as likely non-voters also show a higher rate of supporting the voting system. We can only speculate on the reason, but, perhaps because those supporting the two parties and the likely non-voters share the desire of breaking through the conventional system established by the Liberal Democratic Party after the end of the World War II (although even the former ruling Democratic Party of Japan was not able to achieve it), they show a higher percentage in support for the Demeny voting system.

Endogenous Variable	Demeny Voting System		Ministry of the Future		
Explanatory Variable	Coefficient	Standard Deviation	Coefficient	Standard Deviation	
Male	0.268***	0.098	0.199**	0.094	
Age	-0.028***	0.005	-0.005	0.004	
No children	-0.644***	0.131	-0.346***	0.118	
Hokkaido	0.107	0.174	-0.412**	0.173	
Tohoku	-0.004	0.182	-0.175	0.174	
Chubu	0.014	0.115	0.118	0.109	
Kinki	-0.176	0.112	-0.181*	0.105	
Chugoku	0.024	0.177	-0.186	0.170	
Shikoku	-0.025	0.249	0.172	0.234	
Kyusyu	-0.251	0.156	0.280*	0.143	
Business owner	0.113	0.323	-0.288	0.312	
Employee	0.154	0.167	0.197	0.155	
Self-employed worker	0.024	0.236	0.277	0.213	
Housewife/househusband	-0.367*	0.196	0.040	0.178	
Freelance professional	0.441	0.378	-0.196	0.379	
Student	0.277	0.198	0.688***	0.188	
Part-time worker	0.071	0.210	0.256	0.195	
Unemployed	-0.057	0.260	0.136	0.231	
Social Democratic Party	0.468	0.377	0.060	0.367	
Democratic Party of Japan	0.391***	0.142	0.588***	0.136	
Japanese Communist Party	-0.093	0.267	0.077	0.235	
Japan Restoration Party	0.310***	0.118	0.284**	0.111	
New Komeito	0.372	0.234	0.121	0.226	
Tomorrow Party of Japan	0.146	0.208	0.245	0.191	
Other parties	0.138	0.141	0.249*	0.131	
Non-voter	0.291**	0.116	-0.166	0.114	
Constant term	0.256	0.290	-0.414	0.267	
	Log likelihoo	od= -2061.48	Log likelihood= -1919.70		
	Number of s	samples = 3090	Number of samples=3090		

Table 18: Estimation Results of Logit Models

***, ** and * respectively represents level of statistical significance, 1%, 5% and 10%.

As for the estimation results of the model for the Ministry of the Future, the results from

gender, age, and political party to support are the same as those of the Demeny voting system, but the results from residential area and occupation are very from Demeny voting. Another similarity is that the male dummy has a positive coefficient and statistical significance, which attests that a higher percentage of females selects "I don't know." Age has no statistical significance, but the respondents with no children have a higher percentage in no support of or in opposition to the concept of the Ministry of the Future.

We find that each residential area reveals some characteristics. Compared to those in the Kanto area, the respondents living in Hokkaido and Kinki showed less preference for the Ministry while those in Kyusyu favored it. It might be related to the macroeconomic factors of income level and changes of employment conditions. In addition, the results from occupation find that students offer much more support for the concept of the Ministry (compared to public officers), even when considering other conditions such as age. It is also found that the housewife/househusband shows significantly less support for the Ministry (compared to public officer). With respect to political party to support, the respondents in favor of the Democratic Party of Japan, the Japan Restoration Party, and "other parties" showed a significantly higher percentage in support of the Ministry of the Future. As with the case of support for Demeny voting system, the group who wants to change the status quo also support the Ministry concept.

Closing Remarks

We have introduced a summary of the survey results through descriptive statistics and ad-hoc regression model analyses. The respondents' attitudes toward the pension system and TPP participation cannot be explained just by their ages or whether the respondents have children or not. This suggests that voters evaluate the policies by considering the dynamic issues of human investment and resource distribution to offspring. Analyses assuming such models are required in the future.

Young people are negative to transfers of income (pension, medical care, and child allowance) and oppose the consumption tax. They appear to favor small government. That may be reasonable considering the transfers of income are most irrelevant to young people among other generations, as they are healthier and completed compulsory education. Their opposition to TPP participation maybe from

fear of unemployment from participation. The tendency contrasts with that of the elderly who are likely to be retired. The elderly voters and those with children show more support for TPP participation probably because they appreciate lower prices of consumer goods, which are expected from the elimination of tariffs from TPP participation. The elderly's high expectations for science and technology is consistent with their support of zero dependence on nuclear power, while young people's indifference to science and technology is compatible with their support of maintaining dependence on nuclear power.

Political parties supported by young people are very close to the actual results of the proportional representation election. Even more than the eligible voter respondents, the distribution of the parties by young people resembles actual results. In a national election in 2009 in Germany, young people under 18 years old took a straw poll via the Internet (u18.org). Compared to the actual results of the election, the poll showed higher support for the Greens, but their support of right wing parties was also higher than the actual results, and the support for progressive parties was slightly lower. It means that young people did not show distinctive characteristics, such as more conservative or progressive, than actual voters. Rather, they revealed higher support for Animal Protection and Pirates (a party by Internet activists). That is, young people favor parties whose policies are narrow and clear, and whose party names reflect their policies. Apparently, the tendency of young people in Germany is different from young people under 20 years of age in Japan.

Finally, it is further interesting to also consider the results of regression analyses for attributes of groups in support of the concepts of the Demeny voting system and the Ministry of the Future. Whether the respondents have children or not largely affects the pros and cons of the Demeny voting system and the Ministry of the Future. The age has no influence on both concepts, but it is found that young students generally support them. As mentioned previously, the survey finds an apparent conservative attitude in young people reflected in the higher support of nuclear power and the greater opposition to TPP participation. However, if their choice is reflection of lack of knowledge or uncertainty from lack of information, it is important to introduce a system or an institution so that excessive or unwarranted risk aversive behavior can be avoided. Need for new systems by the young people is consistent with the fact that groups that favor the Democratic Party of Japan and the Japan Restoration Party show a higher percentage in support of the two concepts.

We plan to analyze how voters' attitudes toward policies are related to their individual attributes and how the attributes affect support of political parties and preferences for the future.

<u>References</u>

Aoki, R, Vaithianathan, R, 2012. "The Intergenerational Politics and Economics – Based on Results of Survey for Election," *CIS DP No.540*

Aoki, R, 2012. "How the Demeny Voting System is Supported – Based on Survey for Policies and Political Parties," *NIRA Monograph Series No. 36*.

Kinderlobby Switzerland, 2011. "One child - One vote. Children's Suffrage is Discovering a Generation," *Berne*.

APPENDIX

Survey for Election

Conducted on December 14 and 15, 2012

Questions for Screening

1. [To respondents aged 20 or older (eligible voters)] Do you have at least one child under 20 years of age?

- A) YES Group A Eligible for extra votes in the Demeny 1,000 respondents
- B) NO Group B Ineligible for extra votes in the Demeny 1,000 respondents
 - 2. [To respondents who selected NO in the previous question] Do you have a child/children?
- A) YES Group B1 500 respondents
- B) NO Group B2 500 respondents

Questions for Survey

1. Select three policies below that you think are most important and indicate the

rank. [Note: the order of items is random]

1.	Medical & Nursing Care	1	2	3
2.	Nuclear Power	1	2	3
3.	Science & Technology	1	2	3
4.	Pension	1	2	3
5.	Finance & Consumption Tax	1	2	3
6.	Childrearing Support	1	2	3
7.	Environment & Energy	1	2	3
8.	Food Safety	1	2	3
9.	Diplomacy & Security	1	2	3
10.	Economy & Employment	1	2	3
11.	Education	1	2	3

2. Which political party will you vote for in the proportional representation election held on December 16? [Note: the order of items 1 to 13 is random]

1. Social Democratic Party

2. Democratic Party of Japan

- 3. Liberal Democratic Party
- 4. Japanese Communist Party
- 5. Japan Restoration Party (Ishin)
- 6. New Komeito
- 7. Your Party (Min-na)
- 8. Happiness Realization Party
- 9. New Party Daichi
- 10. Tomorrow Party of Japan
- 11. Japan Renaissance Party
- 12. Happiness Realization Party
- $13. \ensuremath{\,\text{People's}}\xspace$ New Party
- 14. Will not vote
- 15. I don't want to answer

3. Select the answer that most accurately describes why you chose it in the

previous question Q2 (select one reason only)

- 1. Support its policies
- 2. Always vote for the party
- 3. Support the party leader
- 4. A candidate/candidates (except the party leader) to support belong(s) to the party
- 5. Other
- 4. [To Group A and B1] How many children do you have?
- 5. [To Group A and B1] Fill in the year and month your child/ children was/ were born.

Year and Month of	Month,	Month,	Month,	Month,	Month,	Month,
children's birth	year	year	year	year	year	year

6. [To Group A and B1] Do you have a grandchild/ grandchildren?

* If you have 10 or more children, fill in for up to the 9th child.

- 1. **Yes**
- 2. **No**
- 7. [To Group A] If voting rights are granted to people under 20 years old and you have the right to cast two votes for yourself and for your child, for which party you would cast the vote for your child in the proportional representation election held on December 16? (select one party only)

* If you have two or more children under 20 years old (in which case two or more voting rights are granted) answer how you will vote on behalf of your youngest child.

[Note: the order of items 1 to 13 is random]

- 1. Social Democratic Party
- 2. Democratic Party of Japan
- 3. Liberal Democratic Party
- 4. Japanese Communist Party
- 5. Japan Restoration Party
- 6. New Komeito
- 7. Your Party
- 8. Happiness Realization Party
- 9. New Party Daichi
- 10. Tomorrow Party of Japan
- 11. Japan Renaissance Party
- 12. Happiness Realization Party
- 13. People's New Party
- 14. No vote
- 15. I don't want to answer

There is an election system called "Demeny voting system" in which voting rights are granted to people under 20 years old and the parents (strictly either parent) can cast two votes for oneself and for the child. (If having several children under 20 years old, the parent cast as many votes as the number of the children.)

8. Which is the reason that you oppose the Demeny voting system?

Not oppose

1. Not oppose (support the system)

Oppose

- 2. Unfair to people with no children
- 3. Should not allow a proxy voting
- 4. No guarantee that parents cast proxy votes for benefits of children
- 5. People may have children for increasing their number of votes
- 6. Other

Select one that most accurately describes your thought on each policy.

9. The pension benefit should be

- 1. Increased
- 2. Not changed
- 3. Decreased
- 4. I don't know

10. Individual's share of medical expense should be

- 1. Increased
- 2. Not changed
- 3. Decreased
- 4. I don't know

11. The current 5% consumption tax rate should be

- 1. Raised
- 2. Not changed
- 3. Lowered
- 4. I don't know

12. The dependence on nuclear power should be

- 1. Increased
- 2. Not changed
- 3. Decreased but maintained somewhat

- 4. Zero
- 5. I don't know

13. Minimum voting age should be

- 1. Not changed (people aged 20 or older are eligible)
- 2. Lowered to 18 years old (people aged 18 or older are eligible)
- 3. Lowered to 16 years old (people aged 16 or older are eligible)
- 4. I don't know

14. The amount of child allowance should be

- 1. Increased
- 2. Not changed
- 3. Decreased
- 4. I don't know

15. Education budget (for primary, junior high and high schools) should be

- 1. Increased
- 2. Not changed
- 3. Decreased
- 4. I don't know

16. Budget for science and technology should be

- 1. Increased
- 2. Not changed
- 3. Decreased
- 4. I don't know

17. Participation in TPP (Trans-Pacific Partnership)

- 1. Support
- 2. Oppose
- 3. Hard to decide
- 4. I don't know

- 18. Our decision may have some impact on the child generation, grandchild generation, or unborn future generation. If you make a decision important for the entire society, such as on environment and energy issues, mainly which generation below would you keep in mind?
 - 1. Current generation (today's grown-up generation)
 - 2. Child generation
 - 3. Grandchild generation
 - 4. Future generation beyond grandchildren

Decision-making by the current generation (today's adults) has a significant impact on unborn future generations. The current generation can engage in dialogs and negotiate but cannot with the future generation. Therefore, as an organization for reflecting the voices of the future generation, the "Ministry of the Future" is a possible option. The Ministry is to exert direct and indirect influence on policymaking by the current generation from the viewpoint of the future generation.

19. Establishment of such Ministry of the Future

- 1. Support.
- 2. Rather support
- 3. Rather oppose.
- 4. Oppose.
- 5. Hard to decide.

If the "Ministry of the Future" is established, which role and authority would be desirable to be held by the Ministry?

20. First, about the role. Rank each role below in order of necessity to the Ministry.

- 1. Information gathering (ranking)
- 2. Survey analysis (ranking)
- 3. Awareness campaign (ranking)
- 4. Policymaking (ranking)
- 5. Coordination among ministries and agencies (ranking)
- 6. Other (ranking)

21. Specify the role of "Other" in the previous question.

* If you do not think of a particular role, write down "nothing in particular."

22. Next is about Ministry's authority. Rank each authority below in order of necessity to the Ministry.

- 1. To state opinions to policies made by other ministries and
- 2. To limit policies made by other ministries and agencies.(ranking)
- 3. To reject policies made by other ministries and agencies.(ranking)
- 4. To restrict companies and individuals (ranking)
- 5. Other (ranking)
- 23. Specify the role of "Other" in the previous question.

* If you do not think of a particular authority, write down "nothing in particular."

24. Select one below that you want to most preserve or protect for the generation 100 years later.

- 1. Prosperous economy
- 2. Beautiful nature
- 3. Abundant resources & energy
- 4. Excellent medical technology and health system
- 5. Prominent science & technology
- 6. Rich culture

Other (