

“When do Elites Favor Franchise Extension? Evidence from Japanese Attitude to Demeny Voting”

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What is Demeny Voting?

- Parents of young children have extra votes equal to number of young children
- = Child has a vote + parents votes on child's behalf
- = Children's suffrage + proxy voting

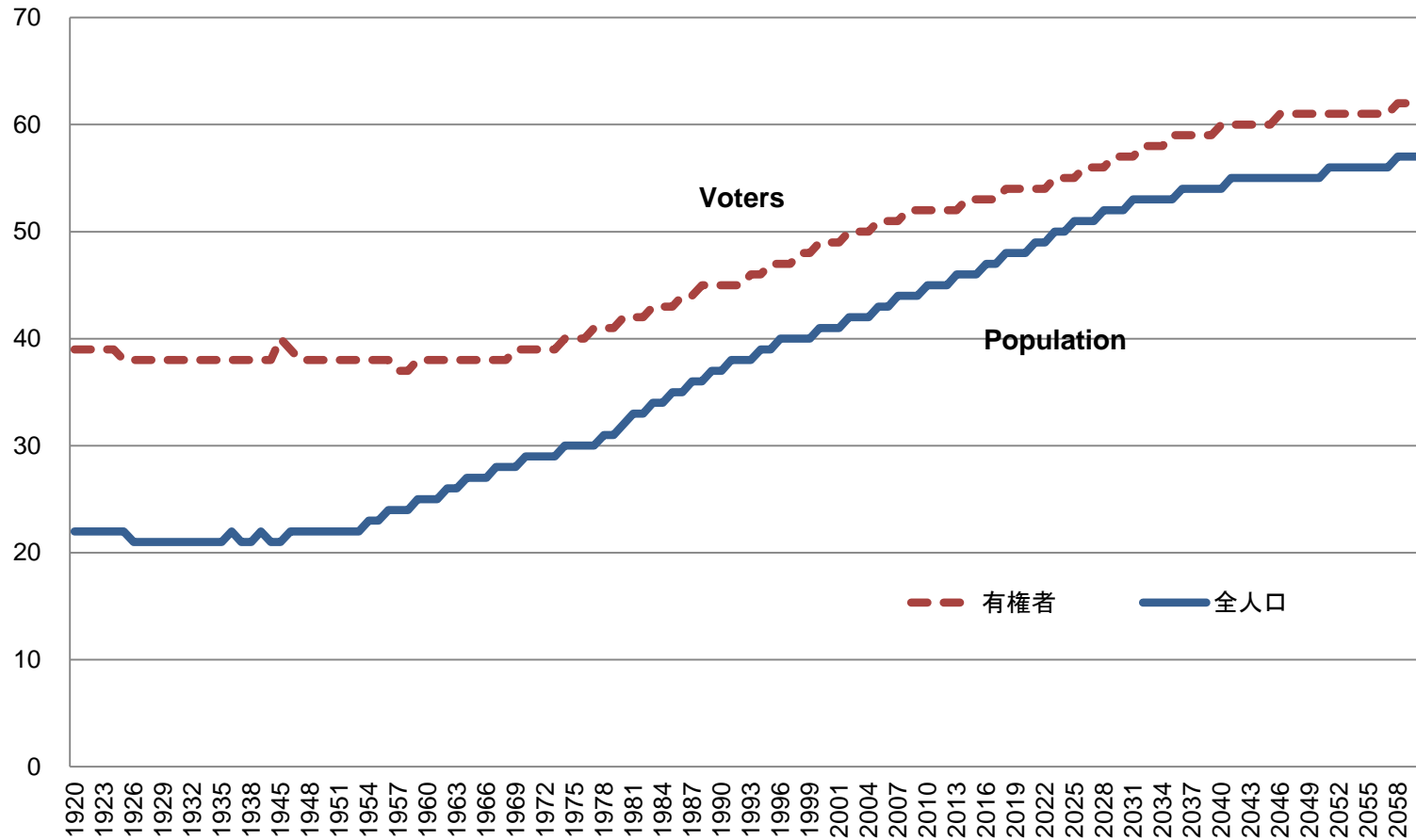
Past Suffrage Extensions

- Change in economic and social environment made franchise expansion beneficial to incumbent voters
 - Acemoglu & Robinson 2000. "Why Did the West **Extend the Franchise**? Democracy, Inequality, and Growth in Historical Perspectives," QJE
 - Lizzeri & Persico 2004 "Why Did the Elites **Extend the Suffrage**? Democracy and the Scope of Government, with an Application to Britain's "Age of Reform," QJE
 - Doepke & Tertilt, 2009. "**Women's Liberation**: What's in it for Men ?" QJE

Recent Social and Political Change

- Intergenerational redistribution has become public policy
 - Pension
 - Public education
- Intergenerational redistribution is a political issue
- But not all members are represented in the political process (Preston effect)
- Leads to **children's suffrage** (Demeny Voting)

Median Age of Population and Voters



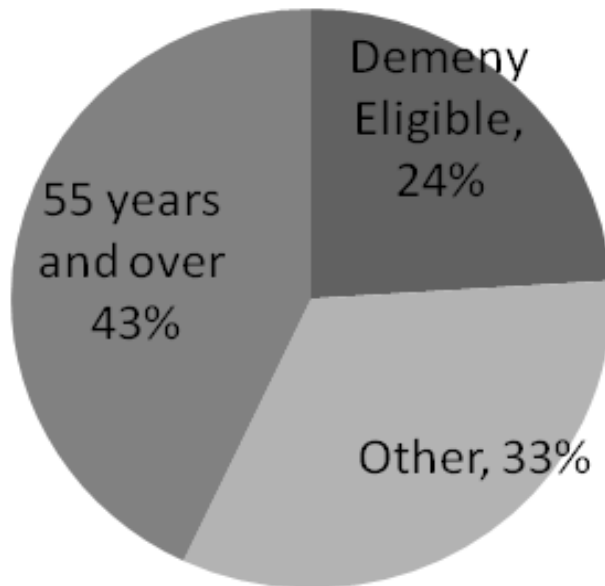
出所 総務省、社会保障人口問題研究所(中出生率、中死亡率推計)

Demeny Voting

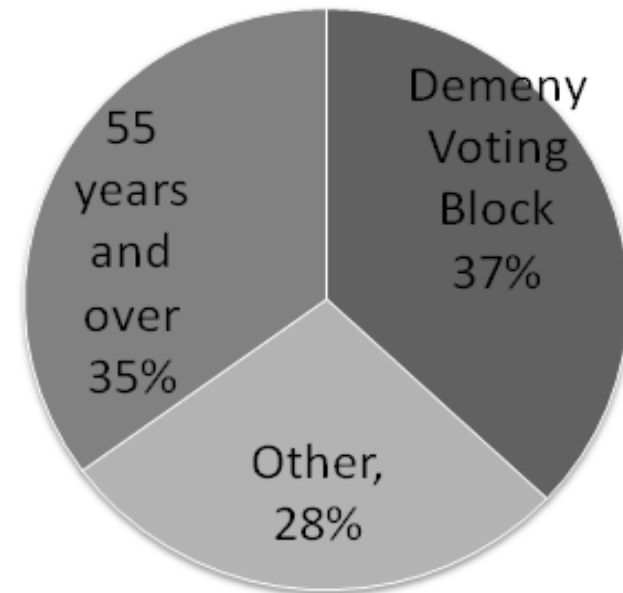
- Remedy the Preston Effect
 - Low fertility and longevity = aging age structure
 - Older voters dictate voter preference
- Make possible commitment to policies that benefit future (generation)
 - Eliminate “free riding” among **current generation**
- = Benefits current generation

Simulation

Non-Demeny Voting Current System



Demeny Voting Rule



Survey 1 (Internet)

- December 29, 2011
- Voters (children, old children, no children)
- Questions on
 - Policies, political parties
 - Demeny voting
- Objectives
 - Preston effect ?
 - Policy and political party preference

Survey 2 (Internet)

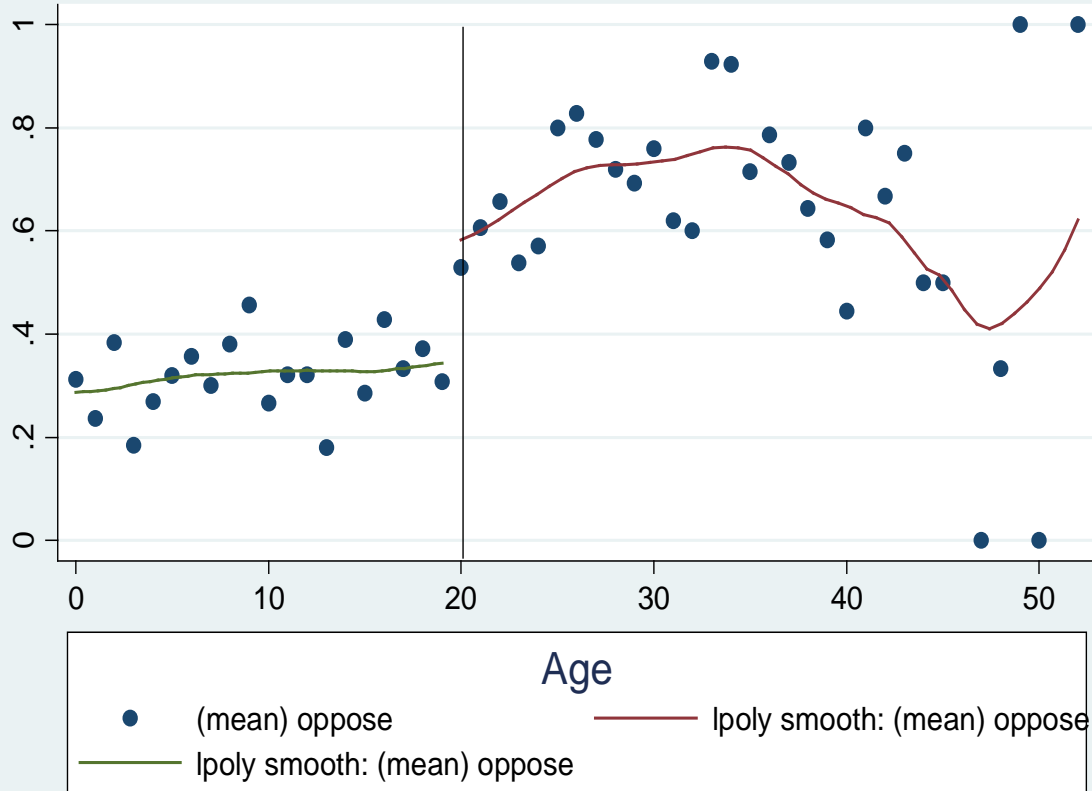
- Immediately before general election
 - December 14, 2012 (election was 16th)
- Voters + the young (16-19 year olds)
- Questions on
 - Policies, political parties
 - Demeny voting, Ministry of Future
- Objectives
 - Policy and political party preference of the young

Survey 2 Respondents

Survey 1

Group		No. of respondents	Average age
A1	Voter, At least one child under 20	1030	40.16
A2	Voter, All children are adults	515	61.39
B	Voter, No child	515	37.59
C1	16–17 year olds	515	16.57
C2	18–19 year olds	515	18.63
	Total	3090	

Opposition to Demeny Voting



Survey 1

Break can be verified by
 "Quandt likelihood ratio" test
 in Time Series

Break occurs at T=20

Figure 1: Opposition to Demeny Voting and age of youngest child

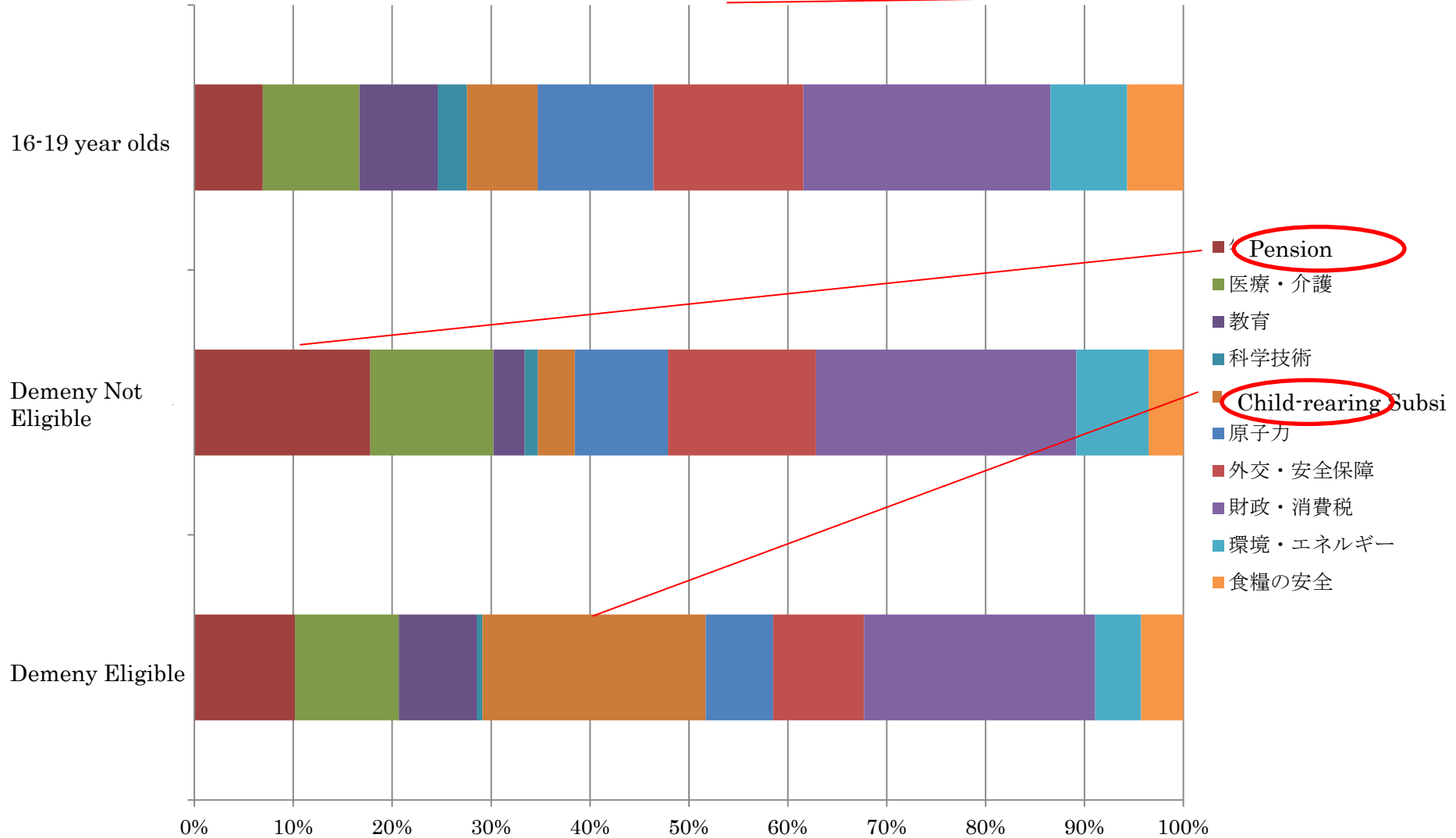
Vaithianathan, Aoki and Sbai, 2012 "Support for Peaceable Franchise Extension: Evidence from Japanese Attitude to Demeny Voting"

- $E(\text{Oppose}) = \beta_0 + \beta_1 \text{MinimumAge} + \beta_2 \text{AgeDummy}^T$
- where $\text{AgeDummy}^T = 1$ if $\text{MinimumAge} \geq T$
0 otherwise.

	Estimated coefficients
Minimum Age of Children	0.0031 (0.0002)
AgeDummy ²⁰	0.300*** (0.0491)
Constant	0.292*** (0.0222)
Observations	1545

Expected value for Oppose
0.292 before Age 20
0.592 after Age 20
 (better than 0.1% significance)

Most and 2nd Important Policy (excluding Economy, Employmen)



Survey 1 Question: Which policy is most or 2nd most important ?

Variable	Pension		Child-rearing Support		Education	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Civil servant						
Manager, COE	-0.231	-0.53	0.0833	0.11	-0.282	-0.48
Firm (clerical)	-0.412	-1.17	0.708	1.5	-0.692	-1.54
Firm (engineering)	-0.317	-0.92	0.338	0.71	-0.872	-1.92
Firm(other)	-0.318	-0.87	0.435	0.86	-1.592**	-2.6
Self employed	-0.713	-1.81	0.46	0.82	-0.449	-0.91
Independent professional	-0.923	-1.32	0.906	0.99	-0.187	-0.23
Full time housewife	-0.164	-0.53	0.315	0.71	-0.830*	-2.11
Part time employment	-0.626	-1.7	0.199	0.4	-0.514	-1.16
Student						
Other	-0.413	-1.03	-0.217	-0.29	-1.208	-1.75
Unemployed	0.222	0.57	0.455	0.51	-1.355	-1.66
Sex	-0.124	-0.91	-0.113	-0.66	-0.293	-1.4
Age	.0368***	5.4	-0.123***	-10.46	-0.0247*	-2.26
Number of children	-0.288**	-3.07	0.286**	2.63	0.00902	0.07
Constant	-2.367***	-5.23	2.411***	3.84	-0.632	-1.00

Table 17: Policy Choice Regression

* 95%, ** 99%, ***99.99%

Aoki and Viathinathan, 2012 "Intergenerational Voter Preference Survey - Preliminary Results" CIS DP540

	Actual Results of 46 th General Election (Dec 16, 2012)			Survey Results	
	Total	Local	Proportional	Voters	16-19 yrs
社民 SDP	0.42	0.33	0.56	1.72	1.21
民主 JDP	11.88	9.00	16.67	11.96	17.79
自民 LDP	61.25	79.00	31.67	29.74	35.58
共産 Com	1.67	0.00	4.44	4.56	2.59
維新 Ishin	11.25	4.67	22.22	25.18	20.55
公明 Komei	6.46	3.00	12.22	4.03	4.84
みんな Min	3.75	1.33	7.78	13.28	8.81
幸福 Happiness	0.00	0.00	0.00	0.26	1.21
大地 Daichi	0.21	0.00	0.56	0.93	0.86
未来 Mirai	1.88	0.67	3.89	6.94	3.97
改革 Kaikaku	0.00	0.00	0.00	0.73	0.86
新日本 New Jp	0.00	0.00	0.00	0.20	0.00
国民 Kokumin	0.21	0.33	0.00	0.46	1.73
無所属 No aff	1.04	1.67	—	Total	100.00
諸派 Other	0.00	0.00	0.00	Not voting	9.47
Total	100.00	100.00	100.00	Refuse	17.09
					12.62

Reasons for objecting Demeny Voting	Not Object = Support	Unfair to those without children	Object to proxy voting	Parent may not vote on behalf of children	People will have children to have extra votes	Other	Total
	33.1	15.1	32.5	15.7	1.0	2.5	100
	35.6	15.2	32.6	14.3	0.6	1.7	100
	20.8	14.0	48.3	13.4	0.0	3.5	100
	23.1	20.2	34.6	18.1	1.0	3.1	100
	45.0	14.6	19.0	17.1	1.9	2.3	100
	38.6	11.7	28.0	17.1	2.1	2.5	100

30% support

Voting Age

(%)	As Is (20 and over)	Lower to 18 and older	Lower to 16 and over	Don't know	Total
30% support					
Total	61.0	31.8	3.7	3.5	100.0
Voter, young child	63.1	29.2	4.2	3.5	100.0
Voter, adult child only	58.6	39.2	1.0	1.2	100.0
Voter, no child	64.5	28.7	4.1	2.7	100.0
16-17 year olds	53.6	34.4	6.2	5.8	100.0
18-19 year olds	63.1	30.1	2.7	4.1	100.0

	Pension				
	Total	Increase	As is	Decrease	Don't know
age	3090	34.7	41.3	12.9	11.1
12~19	1029	31.8	42.3	13.2	12.7
20~24	81	30.9	37.0	8.6	23.5
25~29	142	31.7	43.7	12.0	12.7
30~34	253	33.6	41.9	10.7	13.8
35~39	317	36.6	37.2	13.9	12.3
40~44	317	37.5	32.8	17.0	12.6
45~49	261	36.0	43.3	14.2	6.5
50~54	205	42.0	33.7	13.7	10.7
55~59	165	35.8	41.8	17.6	4.8
60 +	320	36.3	53.4	5.9	4.4

	Consumption tax rate 5%				
	Total	Increase	As is	Decrease	Don't know
age	3090	26.2	60.3	10.0	3.6
12~19	1029	22.9	63.5	9.6	4.0
20~24	81	19.8	65.4	9.9	4.9
25~29	142	13.4	68.3	13.4	4.9
30~34	253	20.9	66.0	10.3	2.8
35~39	317	23.7	60.9	12.0	3.5
40~44	317	24.3	59.9	12.0	3.8
45~49	261	26.8	59.0	9.2	5.0
50~54	205	33.2	54.1	9.8	2.9
55~59	165	36.4	53.3	9.1	1.2
60 +	320	42.2	48.8	6.9	2.2

	Child-rearing subsidy				
	Total	Increase	As is	Decrease	Don't know
age	3090	27.7	41.1	23.8	7.4
12~19	1029	26.6	40.7	24.5	8.2
20~24	81	23.5	40.7	23.5	12.3
25~29	142	43.7	35.2	9.9	11.3
30~34	253	39.5	43.9	10.7	5.9
35~39	317	40.7	38.8	15.8	4.7
40~44	317	33.1	40.7	19.6	6.6
45~49	261	21.5	40.2	29.9	8.4
50~54	205	13.7	39.0	37.1	10.2
55~59	165	15.8	44.8	34.5	4.8
60 +	320	17.8	45.6	31.3	5.3

	Education (primary, secondary)				
	Total	Increase	As is	Decrease	Don't know
age	3090	41.7	44.3	8.5	5.5
12~19	1029	37.3	47.8	7.7	7.2
20~24	81	32.1	44.4	12.3	11.1
25~29	142	48.6	34.5	9.2	7.7
30~34	253	46.2	42.7	6.3	4.7
35~39	317	50.2	38.2	7.6	4.1
40~44	317	47.6	38.2	8.2	6.0
45~49	261	48.7	38.7	8.4	4.2
50~54	205	39.5	43.4	11.7	5.4
55~59	165	33.3	52.7	12.1	1.8
60 +	320	37.8	51.6	8.8	1.9

More support than
child-rearing

Pension

(%)	Increase	As is	Decrease	Don't know	Total
Total	34.7	41.3	12.9	11.1	100
Voter, young children	37.0	38.0	12.5	12.5	100
Voter, adult children	35.1	46.2	12.6	6.0	100
Voter, no children	35.5	41.4	13.0	10.1	100
16~17 year olds	33.8	41.2	12.6	12.4	100
18~19 year olds	29.7	43.3	14.0	13.0	100

Children do not make
a difference

Consumption tax rate 5%

(%)	Increase	As is	Decrease	Don't know	Total
Total	26.2	60.3	10.0	3.6	100.0
Voter, young children	25.0	61.8	10.0	3.2	100.0
Voter, adult children	38.1	52.4	7.4	2.1	100.0
Voter, no children	23.3	58.4	13.4	4.9	100.0
16~17 year olds	21.2	62.5	11.7	4.7	100.0
18~19 year olds	24.7	64.5	7.6	3.3	100.0

Child-rearing subsidy

(%)	Increase	As is	Decrease	Don't know	Total
Total	27.7	41.1	23.8	7.4	100.0
Voter, young children	41.6	42.0	13.0	3.4	100.0
Voter, adult children	15.9	41.9	34.6	7.6	100.0
Voter, no children	13.8	39.2	33.2	13.8	100.0
16~17 year olds	27.4	41.7	21.6	9.3	100.0
18~19 year olds	26.0	39.6	27.4	7.0	100.0

Children are parents' responsibility ?

Education (Primary, Secondary)

(%)	Increase	As is	Decrease	Don't know	Total
Total	41.7	44.3	8.5	5.5	100.0
Voter, young children	55.6	35.9	5.3	3.1	100.0
Voter, adult children	35.3	50.3	11.3	3.1	100.0
Voter, no children	29.3	48.0	13.6	9.1	100.0
16~17 year olds	37.1	47.6	7.0	8.3	100.0
18~19 year olds	37.5	48.2	8.3	6.0	100.0

More support than child-rearing
subsidy

Grand-child ?	Pension				
	Total	Increase	As is	Decrease	Don't know
Yes	269	37.9	48.0	8.2	5.9
No	1276	36.1	39.2	13.5	11.3

Grand-child ?	Child-rearing subsidy				
	Total	Increase	As is	Decrease	Don't know
Yes	269	23.8	48.7	22.3	5.2
No	1276	35.0	40.6	19.7	4.7

Grand-child ?	Education (primary, secondary)				
	Total	Increase	As is	Decrease	Don't know
Yes	269	41.6	45.4	11.5	1.5
No	1276	50.4	39.7	6.4	3.4

Summary

- Both **age** and having **children** matter
- Grand-children matters
 - Happy to support grand-children (public support of education and child-rearing not important)
 - Do not want to burden grand-children (expect public support in old age = **Free-riding**)

	Nuclear Power Generation					
	Total	Increase	As Is	Decrease but not 0	Zero	Don't know
age	3090	4.5	13.7	52.7	25.2	4.0
12~19	1029	5.9	16.5	52.6	18.7	6.3
20~24	81	2.5	22.2	51.9	14.8	8.6
25~29	142	1.4	17.6	52.8	23.2	4.9
30~34	253	1.6	13.4	61.7	19.0	4.3
35~39	317	5.0	10.1	50.8	29.0	5.0
40~44	317	6.3	14.2	47.6	29.0	2.8
45~49	261	3.8	11.9	48.3	34.5	1.5
50~54	205	3.9	13.2	52.7	28.8	1.5
55~59	165	3.6	12.1	51.5	32.7	0.0
60 +	320	3.4	6.3	56.9	33.1	0.3

	Science and Technology				
	Toatl	Increase	As Is	Decrease	Don' t know
age	3090	42.3	42.1	7.0	8.7
12~19	1029	38.2	43.1	6.4	12.2
20~24	81	45.7	35.8	4.9	13.6
25~29	142	34.5	43.7	8.5	13.4
30~34	253	34.4	49.0	7.5	9.1
35~39	317	35.3	45.7	9.5	9.5
40~44	317	41.0	45.4	8.5	5.0
45~49	261	44.8	39.8	8.8	6.5
50~54	205	51.2	39.5	4.4	4.9
55~59	165	49.1	41.8	4.8	4.2
60 +	320	61.3	30.6	5.3	2.8

Participation in TPP

	Total	Support	Object	Not Sure	Don't know
age	3090	24.7	23.0	41.9	10.4
12~19	1029	15.5	30.9	39.1	14.6
20~24	81	13.6	24.7	44.4	17.3
25~29	142	18.3	17.6	49.3	14.8
30~34	253	20.6	19.4	44.7	15.4
35~39	317	19.6	24.9	44.5	11.0
40~44	317	31.9	17.0	44.5	6.6
45~49	261	31.0	20.7	44.1	4.2
50~54	205	31.2	23.4	38.5	6.8
55~59	165	35.8	15.8	43.6	4.8
60 +	320	45.9	11.9	39.4	2.8

ご清聴ありがとうございました

References

- 青木玲子・上須道徳・西條辰義「若者と有権者の政党政策選択・ドメイン投票方式・将来省 - 第46回総選挙前々日の有権者と若者のアンケートから」 CIS DP581 2013年1月
- Aoki and Viathinathan, 2012. "Intergenerational Voter Preference Survey - Preliminary Results" CIS DP540
- Vaithianathan, Aoki and Sbai, 2012. "Support for Peaceable Franchise Extension: Evidence from Japanese Attitude to Demerit Voting," in progress