Robustness Tests of Incentive Compatible Referenda:

Consequential Probability, Group Size, and Value-cost Difference

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Abstract:
Consequentiality is getting considerable attention in the recent contingent valuation literature. This paper uses an induced-value experiment to provide robustness tests of the incentive compatibility of binary probabilistic referenda by varying consequential probability, group size, and net gain. Overall, we find strong support for the robustness of incentive compatibility of consequential contingent valuation referenda, in the sense that a small percentage (4%) of the total votes violated the condition. However, we find statistically significant systematic errors associated with a small consequential probability and a small, positive value-cost spread.

Keywords: Consequentiality; Group size; Value-cost spread; Incentive compatibility; Contingent valuation referendum
JEL Codes:

1. Introduction

Consequentiality is getting considerable attention in the recent contingent valuation (CV) literature, especially as a means of eliminating differences between actual and stated choice behaviors (Poe and Vossler, 2011). A theory based on expected utility maximization suggests that a single shot, binary CV referendum with a majority decision rule is incentive compatible if the referendum is consequential in the sense that the probability of project provision and payment increases with the success of the referendum (Carson and Groves, 2007; Mitani and Flores, 2010). A growing body of experimental evidence also suggests that consequentiality of the referendum outcome is the most robust and effective means of making CV referenda incentive compatible (Landry and List, 2007; Poe and Vossler, 2011). A typical experiment, which investigates the impact of consequentiality, manipulates consequentiality utilizing probabilistic referenda where binding probabilities ranging from 0 to 1 (Carson et al., 2004). These experiments find no evidence of voting difference for non-zero binding probabilities (i.e. $0<p<1$) and a binding referendum (i.e. $p=1$) (Carson et al., 2004; Landry and List, 2007; Mitani and Flores, 2010).

While theory in this line of reasoning suggests that behaviors do not change as long as the probability is positive, the smallest binding probability in the experiments is usually 0.2 at the least and greater in some experiments. When agents face a choice between two alternatives, expected utility theory predicts that the only difference (i.e. positive or negative) in expected utility matters for the individual decision, where consequentiality guarantees the difference exists as long as the utility of each outcome is not indifferent, and the pivotality preserves the difference in expected utility, as shown in the next section. However, subjects facing decision-making in field applications may consider the magnitude of the difference, i.e. not only the sign but also the size. Thus, one can easily imagine that actual voting behavior may deviate from optimal choices made by rational agents when the expect gain from voting is close to (or smaller than) the cost[1] of voting.

[1] The cost of voting means any cost caused by making a voting decision, including a cognitive task of judging which alternative is better, time to make a vote, and/or participation in the voting decision.

The question we raise in this paper is: Do consequential binary CV referenda still ensure incentive-compatible behavior when an expected gain from voting becomes very small?

We investigate three factors that decrease the expected gain from voting: consequential probability, group size, and value-cost spread. To focus on the sensitivity to these factors, we control for the cost side of voting by setting it as minimum and constant through our induced-value experiment. While theory suggests a one-shot, binary, consequential CV referendum is robust against lower expected gain from voting as long as it is positive, some evidence suggests that these factors could increase errors in incentive-compatible behavior. First, the lower probability of binding decreases the expected gain from a truth revealing voting, which may cause more errors. The smallest binding probability in the previous experiments was 0.2, suggesting that we may overlook circumstances where the probability is smaller than 0.2, which can be more realistic in the field applications. Indeed, more violations at a small probability level (0.01) are reported (Mitani and Flores, 2010). Also, the literature investigating the causes of underinsurance against low-probability, high-loss events relative to high-probability, low-loss events conjectures that people often fail to distinguish between a very low probability and zero probability (Kunreuther et al., 2001; Kunreuther and Pauly, 2004). These findings motivate us to check the behavior at a very small probability in our context. In this paper, we test the robustness against the low probability by varying the probability of consequentiality across the range of 0.01 to 0.25.

Second, increasing group size reduces the probability that a subject is pivotal, implying a smaller difference between revealing his/her preference and voting randomly. The political science literature shows that turnout goes down in larger electorates (Levine and Palfrey, 2007) and that a lower probability of being pivotal decreases the revealing preference for monetary interests over other-regarding interests (Kamenica and Egan, 2011). Pivotality is a key element of making binary referenda incentive compatible, and the group size directly decreases the probability of being pivotal at least when information about other members' preferences is constant over the group size, implying that the expected utility difference diminishes as the group size goes to infinity. We test the group size effects on the violation frequency of the incentive compatible condition, by varying the group size from 1 to 45.

Third, a smaller value-cost spread (i.e. net realized benefit) directly reduces the expected monetary gain from voting. Obviously, no agent cares about a referendum vote (i.e. indifference) if his/her value is equal to the cost, regardless of the consequential probability and pivotal probability. Again, theory argues that differences in expected utility matter, implying the size of the differences does not matter even it is close to zero as long as it is not zero. However, experimental findings stand in contrast to this theoretical prediction: more frequent deviations from optimal decisions are observed in a smaller value-cost difference (Taylor et al., 2001; Vossler and McKee, 2006), which is more consistent with our intuition. To further investigate, we vary the value-cost difference to test the robustness of incentive compatible CV referenda.

In this paper, we test the robustness of incentive compatible probabilistic referenda. No previous research systematically tests the effects of small consequential probabilities, group size, or value-cost in probabilistic referenda.[2] We find strong support for the robustness of incentive compatibility of consequential CV referenda, in the sense that a small percentage (4%) of the total votes violated the incentive compatible condition. However, our analysis detects statistically significant systematic violations associated with a very small probability of binding and a small, positive net benefit. The rest of the paper is organized as follows. The next section outlines the theoretical framework. Section 3 documents our experimental design. Section 4 reports the results, followed by concluding remarks in Section 5.

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[2] Bohara et al. (1998) tested the effect of providing a group size "reminder" (the group size was constant at 5 subjects in a group) on voting responses in an induced-value real binary referendum. Taylor et al. (2001) and Vossler and McKee (2006) investigated the relationship between the frequency of violating the incentive compatible condition and the value-cost distances in real (i.e. consequential probability is one) and hypothetical (i.e. the probability is zero) referenda.

2. Theoretical Background

This section provides a simple theoretical framework to clarify how three factors of interest affect the size of the difference in expected utility in a single, binary CV referendum. We consider a probabilistic referendum (PR) with a majority vote implementation rule. Let subject i endowed by a wealth y face a voting choice between the status quo (a no vote), which results in the endowment y, and the project (a yes vote), which provides his/her valuation of the project v_i measured in monetary terms with a coercive payment of the cost c_i. If more than 50% of the total N subjects vote yes on the proposition "pay the cost of $\$c_i$ to receive his/her value of $\$v_i$," then the referendum passes. If not, the referendum fails and everyone receives the status quo of $\$y$. Given the referendum passes, the referendum outcome will be binding with a consequential probability of p which results in $y + v_i - c_i$, or the referendum is not binding with a probability $(1 - p)$, which results in the endowment y.

We consider a model where subjects form a subjective probability that they are pivotal, similar to the model that Vossler and Evans (2009) employ. Let us assume that the subject has an increasing utility function of the monetary payoff: U. The expected utility given the referendum passes (PASS) is defined as follows:

$$EU_{PASS} = p\, U(\mathrm{y} + v_i - c_i) + (1 - p)\, U(y). \quad (1)$$

The utility given the referendum fails (SQ) is as follows:

$$U_{SQ} = U(y). \quad (2)$$

Let EU_{di} be subject i's expected utility from voting decision d_i = {YES, NO} = {1, 0}. Let η_i^P, $\eta_i^{NP:PASS}$, and $\eta_i^{NP:SQ}$ be the subjective probability that subject i is pivotal, the subjective probability that subject i is not pivotal and the referendum passes, and the subjective probability that subject i is not pivotal and the referendum fails, respectively.[3] Subject i's expected utility from voting decision is given by

$$EU_{di} = \eta_i^P \{ d_i\, EU_{PASS} + (1 - d_i)\, U_{SQ} \} + \eta_i^{NP:PASS}\, EU_{PASS} + \eta_i^{NP:SQ}\, U_{SQ}. \quad (3)$$

Now, consider the expected utility difference between voting yes and no:

$$EU_{YES} - EU_{NO} = \eta_i^P (EU_{PASS} - U_{SQ}). \quad (4)$$

By substituting equation (1) and (2), we have:

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[3] We assume that the sum of these three probabilities equals to one.

$$EU_{YES} - EU_{NO} = \eta_i^P \{ p\, U(y + v_i - c_i) + (1 - p)\, U(y) - U(y) \}. \quad (5)$$

This indicates that if the probability that a subject is pivotal and the consequential probability that the referendum is binding are both positive, then the expected utility of voting yes is greater than the expected utility of voting no if and only if his/her valuation for the project is greater than the cost he/she pays, regardless of the votes of others. This implies that the PR is incentive compatible (IC) in the sense that the individual's optimal voting decision is to truthfully reveal their preferences. We have two probabilities in equation (5): (1) a subjective probability of being pivotal and (2) exogenous probability (in our model) that the referendum is binding. Note that we assume that these two probabilities are independent.

Equation (5) provides guidance regarding how the three factors of interest, consequential probability, group size, and value-cost spread, affect the size (but not the sign) of the expected utility difference. The bottom line is that the probabilistic referendum (PR) is theoretically incentive compatible (IC) as long as a positive consequential probability, a finite group size (which guarantees a positive pivotal probability), and non-zero[4] net gain. We note that equation (4) shows that group size affects the subjective probability of being pivotal while consequentiality and net gain affect subject's own utility difference, implying potentially different behavioral effects.

Equation (5) shows that the lower consequential probability decreases the expected utility difference between voting yes and no when subject's valuation is greater than the cost he/she pays, and the difference goes to zero if the consequential probability is zero. Thus, the consequential probability does not change the sign as long as positive but affects the size. A tiny consequential probability, in other words translates into a very remote possibility of the referendum being binding, making the size of the expected utility difference of voting yes and no marginal. Once we consider unobservable subject's costs caused by making a voting decision, we might expect that the smaller

[4] Of course, the PR is still IC with zero net gain, in which his/her preference is indifference between the project and status quo.

consequential probability results in an increases in the frequency of violation of the IC condition.

Group size decreases the probability that a subject's vote is pivotal. That is, the outcome is either a tie or one vote away from a tie. When group size is one, the subject becomes a dictator and the probability that the subject is pivotal is one. As the group size gets increasingly larger, the pivotal probability goes to zero. Thus, equation (5) shows that group size has a negative effect on the expected utility difference through the pivotal probability, and the difference goes to zero if the group size is infinite. Levine and Palfrey (2007) use an induced-value experiment of a voting participation game to show that group size decreases turnout. We note that the pivotal probability is subjective, which is not necessary to be decreasing in group size if subjects are not rational. We elicit a subject's subjective probability that they are pivotal given each group size using a quadratic scoring rule. In short, equation (5) leads us to expect that the bigger group size, through the pivotal probability, increases the frequency of individual violations of the IC condition.

The value-cost difference obviously increases the expected utility difference as shown in equation (5). No net gain implies no expected utility difference given the referendum passes and thus subjects should be indifferent between the project with payment and the status quo. Equation (5) suggests that the net gain more directly and clearly affects the subject's calculation of their expect utility, especially from a subject's perspective, than consequential probability, and much more than group size. Again, given unobservable subject costs caused by making a voting decision, we can expect that the smaller value-cost difference increases the violation frequency of the IC condition.

3. Experimental Design

We conducted a within-subject induced-value laboratory experiment at Kyoto University in February 2011. Forty-five undergraduate students were recruited from the general population at the university. Subjects were assigned to an individual seat, and communication was not allowed between subjects. The experimenter provided oral instructions with a front screen and answered any questions. The instructions contained information about a referendum proposal of a discrete public project (which includes induced-value and cost), group size, and consequential probability. After one practice decision with an explanation of a decision sheet, the subjects participated in fifteen voting decisions. The three parameters of interest, consequential probability, group size, and value-cost difference, were varied in each round using randomized ordering to avoid potential order effects. Also, to avoid potential learning effects, votes in each decision round were made without any feedback. Subjects were told that only one of the fifteen decision rounds would be randomly chosen for the payment at the end of the experiment. These aspects of the design were common knowledge. After all decisions were made, there was an incentivized guessing experiment where subjects were asked their subjective probabilities that they were pivotal at each group size. The experiment concluded with a questionnaire that collected basic demographics including gender, age, and academic major. Subjects were paid anonymously in cash at the end of the experiment.

Subjects were initially endowed with 1000JPY (10USD at the exchange rate of 100JPY = 1.00USD). At each voting round, a voting decision sheet[5] contained the following information: (1) Group, including group size and group name; (2) a referendum proposal, including cost, value, and the number of subjects needed to be passed; (3) a binding probability. Then, subjects were asked, "What is your vote on the proposal? Please circle ONE response from YES or NO." The instruction and procedure of the probabilistic natures in the referenda followed the two-step referendum rules of Carson et al. (2004) and Cummings and Taylor (1998).

We used three different levels for the consequential probabilities (0.01, 0.1, and 0.25) and five levels for the group size (1, 3, 5, 15, 45). We employed a 3x5 full factorial design, which results in 15 treatments. Our consequential probability design spans across low

[5] A sample of the decision sheet is in the appendix. Group size, group name, cost, and binding probability were common knowledge while induced-value was private information.

probabilities relative to previous studies.[6] In particular we consider the extremely small probability 0.01. We chose five group sizes, which are odd and can divide the total subjects 45 by integers. Thus, 45 groups are formed at the group size of 1, 15 groups at the size of 3, 9 groups at the size of 5, 3 groups at the size of 15, and 1 group at the size of 45. These group sizes are similar to ones employed by Levine and Palfrey (2007).[7]

The decision sheets provide subjects their induced-value in JPY, which indicates each subject's value for the project if provided. Heterogeneous induced-values of 500JPY (5USD), 700JPY (7USD), or 900JPY (9USD) were randomly assigned to each subject, i.e. 15 subjects were assigned to each value level. Each subject had the same induced-value for each of the 15 voting decisions. Consistent with field applications, subjects were told that values varied across subjects but were not told the range or frequency of values. That is, subjects knew only their own values and that other subjects could have different values.

We used five levels of cost for the referendum: 200JPY (2USD), 400JPY (4USD), 600JPY (6USD), 800JPY (8USD), and 1000JPY (10USD). All subjects received each cost level three times. Combining with three value types, we had three different sets of the value-cost spread. For high induced-value (i.e. 500) subjects, the possible net gains were -500, -300, -100, 100, and 300. For medium value (i.e. 700) subjects, the possible net gains were -300, -100, 100, 300, and 500. For high values (i.e. 900) subjects, the possible net gains were -100, 100, 300, 500, and 700. The value-cost spread had both within-subject (from five cost levels) and between-subject (from three value levels) variation. In order to prevent correlation between net gains and the other two treatments, the frequency of the net gains was designed to be equal across the three consequential probabilities and also five group size levels. The complete information of our design (i.e. 45 x 15 = 675 combinations) is available from the authors upon request.

[6] The smallest probability is usually 0.2 (Carson et al., 2004) or 0.25 (Cummings and Taylor, 1998).

[7] They varied the group sizes from 3 to 51.

The referendum experiment was followed by a follow-up incentivized guessing experiment for which a separate instruction was provided. We employed a quadratic scoring rule to elicit subjective probabilities that they were pivotal at each group size (Nyarko and Shotter, 2002). Subjects can earn the maximum payoff when their guess is correct. The amount of earning diminishes quadratically as the guess deviates from the actual outcome, down to zero. Theoretically, the rule induces a risk-neutral subject to report his/her true, subjective belief with regard to the binary event (Camerer, 1995). We used the following payoff function: $\pi = 500\{ 1 - (G_p - I_{pivot})^2\}$, where G_p is their guess of the probability of being pivotal and I_{pivot} is an ex-post indicator that the subject was actually pivotal (i.e. $I_{pivot} = 1$ if he/she was pivotal). Thus, subjects had a chance to earn extra 500JPY (5USD) at maximum from this guessing experiment. To avoid a potential income effect, all the results (i.e. from the referendum and guessing experiments) were announced at the end of the session.

4. Results

We observed a total of 675 voting decisions from 45 subjects participating in 15 rounds. We defined errors (*Violate* = 1) in incentive compatibility as instances when a subject votes yes/no when her value is less/greater than the cost. In other words, a subject is said to make an error (*Violate*) when his/her vote deviates from the theoretically optimal vote. This is the same definition as "*Deviation1*" in Vossler and McKee (2006). We observed only 27 violations in total, which were 4% of the total votes. This is a fairly low frequency of violation, even compared to the real (i.e. binding) referendum.[8] At an individual subject level, 8 subjects (17.8%) violated at least one of the 15 votes.

To detect a systematic difference in the violation depending on our experimental variables, we first report four tables, which show the violation frequency at each level of three treatments, then show the regression results. Table 1 shows the violation frequency

[8] 6.9% of the total votes, and 2.1% of the votes whose value-cost differences are larger than 1USD, violated the IC condition in the real referendum in Vossler and McKee (2006). 16.1% of the total subjects, and 5.3% of the subjects whose value-cost difference are larger than 1USD, miss-voted in the real referendum in Taylor et al. (2001).

at each level of the consequential probability. Table 2 shows the violation frequency at each group size. Table 3 shows the violation frequency at each net gain level.

Table 1: Consequential Probability and Violation

Probability	Freq.	Total	Percent
0.01	16	225	7.1%
0.1	4	225	1.8%
0.25	7	225	3.1%
Total	27	675	4.0%

Table 2: Group Size and Violation

Group Size	Freq.	Total	Percentage
1	6	135	4.4%
3	4	135	3.0%
5	7	135	5.2%
15	5	135	3.7%
45	5	135	3.7%
Total	27	675	4.0%

Table 3: Net Gain and Violation

Net Gain	Freq.	Total	Percentage
-500	1	45	2.2%
-300	6	90	6.7%
-100	3	135	2.2%
100	11	135	8.1%
300	4	135	3.0%
500	2	90	2.2%
700	0	45	0.0%
Total	27	675	4.0%

Table 4 shows the mean values of *Violate*, i.e. the percentage of the violation at each cell, given consequential probabilities in columns and net gains in rows. Table 4 indicates higher violations at the small consequential probability of 0.01, regardless of how big the net gains are (except for the 700JPY difference), also higher violations at the small positive value-cost difference of 100JPY (1USD), regardless of how big the consequential probabilities are. This suggests that our observation may not support the interaction effect of consequential probability and net gain (i.e. size of differences in expected utility) but may be more likely to be consistent with the existence of attention or cognitive threshold.

Table 4: Violation Percentage given Consequential Probability and Net Gain

	Cons Prob			
Net Gain	**0.01**	**0.1**	**0.25**	Total
-500	6.7%	0%	0%	2.2%
-300	13.3%	3.3%	3.3%	6.7%
-100	2.2%	0%	4.4%	2.2%
100	8.9%	6.7%	8.9%	8.1%
300	8.9%	0%	0%	3.0%
500	6.7%	0%	0%	2.2%
700	0%	0%	0%	0%
Total	7.1%	1.8%	3.1%	4.0%

Table 5: Individual-based Fixed-effect Logit

	Model 1			**Model 2**		
	Coef.	Std. Err.		Coef.	Std. Err.	
ConsProb	-5.180	2.517	**			
GroupSize	-0.010	0.015				
NetGain	-0.342	0.156	**			
Positive	0.431	0.485				
ConsProb=0.01				1.388	0.596	**
ConsProb=0.1				-0.757	0.728	
GroupSize=3				-0.368	0.870	
GroupSize=5				0.408	0.890	
GroupSize=15				-0.234	0.864	
GroupSize=45				-0.552	0.846	
NetGain=300				0.863	0.923	
NetGain=100				2.539	0.873	***
NetGain=-100				0.610	0.988	
NetGain=-300				2.081	1.010	**
LL	-44.1			-35.9		
McFadden's R^2	0.10			0.27		
AIC	10.7			10.2		
BIC	77.3			74.0		

*** $p < 0.01$, ** $p < 0.05$.

We account for unobserved individual specific characteristics, running an individual-based fixed-effect logit where the dependent variable is violating the incentive compatibility (*Violate*). Table 5 presents the estimation results. In Model 1, the explanatory variables include: 1) the consequential probability (*ConsProb*); 2) the group size (*GroupSize*); 3) the net gain (*NetGain*), which is the absolute value of the difference between value and cost; 4) the dummy variable (*Positive*) which is equal to 1 if the value is greater than the cost. Model 2 employs dummy variables for the three treatment variables. A model with order-specific dummy variables finds no evidence indicating order effects.

The estimation result of Model 1 shows that the probability of binding (*ConsProb*) and the absolute value of value-cost difference (*NetGain*) are both negative and statistically significant at the 5% level while the group size (*GroupSize*) is not a significant predictor of the violation. The result indicates that the smaller consequential probability induces a higher frequency of violating the IC condition, and the smaller net gain also increases the frequency of the violation. The result of Model 2 where dummy variables are used confirms the finding that the small consequential probability and small net gain can be a trigger that induces miss-votes. The coefficient of the 1% consequential probability is positive and statistically significant at the 5% level, indicating that the 1% chance of binding significantly increases the violation of the IC condition, when compared with the 25% chance of binding. In contrast, there is no statistical difference in the error rate between the 10% and 25% chances, implying that the effect of the consequential probability is non-linear. The coefficient of the positive 100JPY (1USD) net gain is positive and statistically significant at the 1% level, indicating that the smallest positive net gain (of 100JPY) significantly increases the violation, when compared with the bigger value-cost differences (than 300JPY). We find more violations for net gainers than net losers at the smallest value-cost spread of 100JPY (1USD). This implies that subjects tend to vote no when their value is slightly greater than the cost (maybe they are satisfied with receiving the status quo endowment), but they correctly vote no when their value is slightly less than the cost. This finding is consistent with the result from Taylor et al.

(2001), in which more miss-votes are found for winners (i.e. positive net gain) than losers.[9]

Again, the result of Model 2 confirms that the bigger group size does not influence the frequency of the violation, even when compared with the dictator situation (i.e. group size is one). This stands in contrast to our conjecture that the size of the difference between the expected utilities matters, i.e. the group size presumably reduces the probability of being pivotal, which reduces the size of the difference. To test the relationship between the group size and subject's subjective probability of being pivotal, we conducted an incentivized guessing experiment utilizing a quadratic scoring rule. The result shows that the average subjective probabilities that subjects are pivotal are 100% (S.D. is 0.0) at the group size of 1, 57.1% (24.1) at the group size of 3, 37.2% (23.2) at the group size of 5, 16.9% (22.8) at the group size of 15, and 12.1% (22.6) at the group size of 45. This implies that the pivotal probability is negatively correlated (-0.70) with the group size at least at the aggregate level, while the subjective probability is bigger than the actual probability especially at the biggest group size. Thus, one might conclude that the pivotal probability does not affect a subject's truth revealing behavior in the referendum context although the biggest group size in our design is 45, which could be too small to observe the effect.

5. Concluding Remarks

This paper provides robustness tests of the incentive compatibility of binary CV referenda by varying the probabilities of binding down to 0.01, the number of subjects in a group, and a value-cost spread, in an induced-value experiment. Overall, we find strong support for the robustness of incentive compatibility of consequential CV referenda, in the sense that a small percentage (4%) of the total votes violated the condition, which results in that the mean willingness to pay (WTP) estimated from the

[9] Although, our result of Model 2 indicates that the negative 300JPY (3USD) net gain also significantly increases the violation, comparing to the larger differences than 300JPY (3USD).

votes is 692JPY (6.92USD) whose counterpart is 700JPY (7USD).[10] However, our results suggest that systematic errors can occur more often with very small consequential probability and small net gain. The estimated marginal effects indicate that the 1% binding possibility (i.e. the smallest probability of binding) will increase the probability of violating by 3%, and the positive 100JPY (1USD) value-cost difference (i.e. the smallest, positive difference of value and cost) will also increase the probability of violating by 4%. Given the cost of voting decision is almost zero in an induced-value experiment, higher systematic violations will be expected associate with the low consequential probability and small value-cost incentives in the field where voting decision is much more costly. This aspect will be investigated in the future research.

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[10] Logit model, where the dependent variable equals to 1 when voting yes and the explanatory variables are the cost and constant, is estimated to calculate the average WTP.

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Appendix: An example of Decision Sheet (ballot paper).

Referendum 1

ID: 5
TREATMENT: 1
GROUP SIZE: 45

REFERENDUM

ID

Group Information

Group Size： 45 subjects
Your Group Name： A
* You belong to Group A with 45 subjects. In this laboratory, there is 1 group with 45 subjects each.

Referendum Proposal

Your Cost： 400JPY (4USD)
Your Value： 700JPY (7USD)
* You have 1000JPY. If this proposal is passed by majority vote in your group and the policy is implemented, then you receive the value of 700JPY and pay the cost of 400JPY.

Consequential Probability

Consequential Probability： 25%
* Given the proposal passes with majority vote, the probability that the policy is implemented is 25%.

Decision Sheet *BALLOT PAPER*

What is your vote on the proposal?

[[Your Vote]]

☐ YES ☐ NO

GROUP	ORDER
A	7