

ONLINE APPENDIX TO “DEMAND FOR GIVING TO MULTIPLE CHARITIES: AN EXPERIMENTAL STUDY”

Emel Filiz-Ozbay
University of Maryland

Neslihan Uler
University of Maryland

E-mail: filizozbay@econ.umd.edu (Filiz-Ozbay); neslihan@umd.edu (Uler)

Appendix A

Table A.1. Summary Statistics for Experiment Subs

Animal Rebate Rate	Donations to Animal	Donations to Homeless	Total Giving
0.1	6.17 (1.38)	27.74 (3.85)	33.90 (4.51)
0.3	8.76 (1.58)	25.67 (3.69)	34.43 (4.57)
0.5	17.05 (2.46)	21.67 (3.03)	38.71 (5.08)
0.7	27.86 (3.74)	16.24 (2.85)	44.10 (4.95)
0.9	46.71 (5.46)	13.76 (2.56)	60.48 (5.50)

Total observations per cell are 42. Standard errors are in parentheses.

Table A.2 Summary Statistics for Experiment Comp

Toothpaste Rebate Rate	Donations to Toothpaste	Donations to Toothbrush	Total Giving
0.1	16.56 (2.58)	19.48 (3.24)	36.04 (5.26)
0.3	17.29 (2.57)	21.35 (3.18)	38.65 (5.26)
0.5	20.73 (2.64)	20.31 (2.61)	41.04 (5.23)
0.7	24.38 (3.17)	20.52 (2.62)	44.90 (5.37)
0.9	26.67 (3.22)	22.19 (2.63)	48.85 (5.38)

Total observations per cell are 48. Standard errors are in parentheses.

Table A.3. Summary Statistics for Experiment Comp-W

Toothpaste Rebate Rate	Donations to Toothpaste	Donations to Toothbrush	Total Giving
0.1	13.85 (1.91)	25.00 (2.83)	38.85 (4.20)
0.3	15.83 (1.98)	24.06 (2.66)	39.90 (4.17)
0.5	24.17 (2.25)	22.60 (2.32)	46.77 (4.47)
0.7	31.98 (3.16)	20.63 (2.25)	52.60 (4.51)
0.9	38.85 (3.91)	19.90 (2.39)	58.75 (4.96)

Total observations per cell are 48. Standard errors are in parentheses.

Table A.4. Summary Statistics for Experiment Subs-M

Animal Rebate Rate	Donations to Animal	Donations to Homeless	Total Giving
0.1	7.03 (1.31)	35.08 (5.02)	42.10 (5.15)
0.3	9.03 (1.42)	31.15 (4.75)	40.18 (4.84)
0.5	18.08 (2.09)	24.25 (3.82)	42.33 (4.76)
0.7	31.28 (3.88)	16.80 (3.16)	48.08 (4.71)
0.9	48.25 (5.38)	14.63 (3.03)	62.88 (5.21)

Total observations per cell are 40. Standard errors are in parentheses.

Table A.5. OLS Regression Analysis for Experiment Subs

Dep. Var.	Animal (Treated)		Homeless (Untreated)		Total	
<i>rebate</i>	50.10*** (7.23)	-12.49 (14.89)	-18.69*** (5.11)	-14.69* (7.40)	31.40*** (5.60)	-27.18* (13.92)
<i>rebate</i> ²		62.59*** (18.01)		-4 (8.34)		58.59*** (17.48)
<i>age</i>	-2.68*** (0.95)	-2.68*** (0.95)	-1.6 (1.10)	-1.6 (1.10)	-4.28** (1.73)	-4.28** (1.73)
<i>female</i>	-0.3 (5.83)	-0.3 (5.85)	-1.51 (7.14)	-1.51 (7.16)	-1.81 (11.76)	-1.81 (11.79)
<i>econ</i>	8.39 (11.31)	8.39 (11.34)	27.56*** (7.65)	27.56*** (7.67)	35.96** (14.85)	35.96** (14.89)
<i>income2</i>	-10.11 (6.01)	-10.11 (6.03)	-10.26 (6.44)	-10.26 (6.45)	-20.37* (11.23)	-20.37* (11.26)
<i>income3</i>	-0.29 (9.23)	-0.29 (9.26)	3.82 (9.10)	3.82 (9.12)	3.53 (16.37)	3.53 (16.41)
<i>income4</i>	-7.22 (8.79)	-7.22 (8.81)	1.37 (10.19)	1.37 (10.22)	-5.85 (17.90)	-5.85 (17.94)
<i>income5</i>	-16.11* (8.07)	-16.11* (8.09)	-4.22 (7.78)	-4.22 (7.80)	-20.33 (13.96)	-20.33 (13.99)
<i>income6</i>	-7.75 (7.65)	-7.75 (7.67)	18.54** (8.99)	18.54** (9.01)	10.79 (12.22)	10.79 (12.26)
<i>liberal</i>	-3.3 (4.37)	-3.3 (4.38)	5.61 (5.13)	5.61 (5.14)	2.31 (8.76)	2.31 (8.78)
<i>conser.</i>	0.67 (9.46)	0.67 (9.49)	-7.24 (8.08)	-7.24 (8.11)	-6.57 (15.59)	-6.57 (15.63)
<i>religion2</i>	-4.01 (5.48)	-4.01 (5.49)	-5.37 (6.87)	-5.37 (6.88)	-9.38 (11.32)	-9.38 (11.35)
<i>religion3</i>	-20.10** (8.85)	-20.10** (8.87)	-35.33*** (6.84)	-35.33*** (6.86)	-55.43*** (13.45)	-55.43*** (13.49)
<i>religion4</i>	-2.66 (9.59)	-2.66 (9.62)	4.03 (8.27)	4.03 (8.29)	1.37 (16.61)	1.37 (16.65)
<i>donated2</i>	6.16 (6.99)	6.16 (7.01)	5.14 (7.23)	5.14 (7.25)	11.29 (12.00)	11.29 (12.03)
<i>donated3</i>	-0.87 (8.29)	-0.87 (8.31)	-5.58 (9.08)	-5.58 (9.10)	-6.45 (15.78)	-6.45 (15.82)
<i>donated4</i>	13.38** (6.35)	13.38** (6.37)	3.6 (6.51)	3.6 (6.53)	16.97 (11.41)	16.97 (11.44)

<i>know_a</i>	3.02 (2.44)	3.02 (2.45)	0.46 (2.70)	0.46 (2.70)	3.48 (4.81)	3.48 (4.82)
<i>know_h</i>	-1.3 (1.19)	-1.3 (1.19)	0.62 (1.36)	0.62 (1.36)	-0.68 (2.25)	-0.68 (2.25)
<i>constant</i>	58.78** (22.43)	69.42*** (22.25)	63.77** (30.25)	63.09** (29.64)	122.54** (46.12)	132.50*** (45.80)
Obs.	210	210	210	210	210	210

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

The variable *age* is the age of the subject in years. The variable *female* takes a value of 1 if the subject is female and 0 otherwise. The variable *econ* takes a value of 1 if the subject is an economics major and 0 otherwise. *income1* is a dummy variable that takes a value of 1 if a subject's family income is less than \$50,000. Similarly, *income2*, *income3*, *income4*, *income5* and *income6* are dummy variables corresponding to income brackets, (\$50,000, \$75,000), (\$75,000, \$100,000), (\$100,000, \$150,000), (\$150,000, \$200,000) and more than \$200,000, respectively. *conservative* and *liberal* are two dummies to account for the subject's political stance (compared to being moderate). *religion1-religion4* are dummy variables to control for how religious a subject is. *religion1* takes value 1 if a subject reports religion being "not important", whereas *religion4* takes value 1 if a subject reports religion to be "very important". The variable *donated1-donated4* is a series of dummy variables that capture donations in the past 12 months, where *donated1* takes value 1 for donations "less than \$5" and *donated4* takes value 1 for donations "more than \$20." The variables *know_a* and *know_h* are measures for how familiar the subject is with the animal rescue organizations and homeless shelters, respectively. They both take values from 0 to 10, where 0 indicates no prior information and 10 indicates a perfect knowledge about these organizations. Finally, *prob_p* and *prob_b* corresponds to subjects' guesses regarding the likelihood of a homeless person to own a toothpaste and toothbrush, respectively.

Table A.6. OLS Regression Analysis for Experiment Comp

Dep. Var.	Toothpaste (Treated)	Toothbrush (Untreated)	Total
<i>rebate</i>	13.65*** (3.65)	2.29 (4.02)	15.94*** (3.36)
<i>age</i>	-1.37 (1.67)	-1.59 (1.65)	-2.96 (3.32)
<i>female</i>	-3.88 (5.56)	-2.5 (5.35)	-6.38 (10.84)
<i>econ</i>	-15.84** (7.47)	-13.21* (7.70)	-29.05* (15.10)
<i>income2</i>	37.26*** (9.99)	35.33*** (10.19)	72.59*** (20.11)
<i>income3</i>	16.93** (8.41)	16.60* (8.52)	33.53* (16.90)
<i>income4</i>	20.13*** (6.30)	18.44*** (6.38)	38.57*** (12.56)
<i>income5</i>	14.67* (8.56)	14.49 (8.66)	29.17* (17.18)
<i>income6</i>	43.90*** (7.88)	43.43*** (7.62)	87.33*** (15.38)
<i>liberal</i>	-3.94 (5.70)	-1.21 (5.66)	-5.15 (11.33)
<i>conser.</i>	-12.16 (8.73)	-9.68 (8.88)	-21.84 (17.57)
<i>religion2</i>	-6.63 (5.75)	-4.49 (5.58)	-11.12 (11.17)
<i>religion3</i>	-4.91 (7.48)	-3.48 (7.46)	-8.39 (14.89)
<i>religion4</i>	0.67 (8.11)	3.34 (8.38)	4.01 (16.46)
<i>donated2</i>	1.13 (7.45)	2.52 (7.71)	3.65 (15.14)
<i>donated3</i>	-2.24 (8.73)	-5.56 (7.97)	-7.81 (16.53)
<i>donated4</i>	4.36 (5.64)	2.97 (5.50)	7.32 (11.11)
<i>know_h</i>	-1.25 (1.30)	-0.66 (1.29)	-1.91 (2.58)
<i>prob_p</i>	-1.02 (2.77)	-1.08 (2.77)	-2.1 (5.52)

<i>prob_b</i>	-0.26 (2.50)	-0.46 (2.49)	-0.72 (4.98)
<i>constant</i>	35.15 (35.98)	42.43 (35.50)	77.58 (71.23)
Obs.	240	240	240

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%.
Robust standard errors are in parentheses

Table A.7. OLS Regression Analysis for Experiment Comp-W

Dep. Var.	Toothpaste (Treated)	Toothbrush (Untreated)	Total
<i>rebate</i>	33.07*** (5.47)	-6.82* (3.90)	26.25*** (4.78)
<i>age</i>	1.15 (1.66)	0.3 (1.88)	1.45 (3.39)
<i>female</i>	16.38*** (4.77)	12.59** (5.36)	28.97*** (9.25)
<i>econ</i>	-1.05 (5.82)	-0.89 (6.89)	-1.94 (12.04)
<i>income2</i>	16.19** (7.68)	6.98 (10.97)	23.17 (17.59)
<i>income3</i>	24.47*** (7.03)	12.52 (8.25)	37.00** (14.48)
<i>income4</i>	18.48*** (6.18)	12.26 (7.71)	30.74** (13.52)
<i>income5</i>	-1.07 (9.59)	0.51 (11.07)	-0.57 (20.39)
<i>income6</i>	11.67* (6.78)	2.68 (8.18)	14.35 (14.45)
<i>liberal</i>	5.61 (4.59)	5.22 (4.56)	10.84 (8.89)
<i>conser.</i>	12.31 (7.35)	9.8 (7.10)	22.11 (13.96)
<i>religion2</i>	-10.75** (5.05)	-2.65 (5.85)	-13.4 (10.40)
<i>religion3</i>	-7.21 (6.99)	1.16 (7.50)	-6.05 (13.98)
<i>religion4</i>	0.47 (6.86)	3.68 (7.70)	4.15 (13.97)
<i>donated2</i>	-5.07 (7.07)	1.12 (9.23)	-3.95 (15.48)
<i>donated3</i>	4.32 (8.52)	0.06 (8.65)	4.38 (16.80)
<i>donated4</i>	-0.37 (5.89)	5 (6.53)	4.63 (12.03)
<i>know_h</i>	1.80* (1.02)	1.58 (1.13)	3.37 (2.07)
<i>prob_p</i>	-2.43 (1.82)	-1.73 (2.02)	-4.16 (3.70)

<i>prob_b</i>	1.36 (1.67)	-0.45 (2.09)	0.91 (3.47)
<i>constant</i>	-33.79 (35.41)	5.43 (41.08)	-28.35 (73.51)
Obs.	240	240	240

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%.
Robust standard errors are in parentheses.

Table A.8. OLS Regression Analysis for Experiment Subs-M

Dep. Var.	Animal (Treated)		Homeless (Untreated)		Total	
<i>rebate</i>	52.35*** (7.62)	-8.54 (12.77)	-27.63*** (7.12)	-32.89*** (12.13)	24.73*** (5.16)	-41.44** (16.63)
<i>rebate</i> ²		60.89*** (16.07)		5.27 (10.71)		66.16*** (18.84)
<i>age</i>	0.15 (0.32)	0.15 (0.32)	-0.75 (0.46)	-0.75 (0.47)	-0.6 (0.70)	-0.6 (0.70)
<i>female</i>	-3.57 (4.03)	-3.57 (4.04)	-15.46*** (5.18)	-15.46*** (5.19)	-19.03** (7.55)	-19.03** (7.57)
<i>econ</i>	8.11* (4.52)	8.11* (4.53)	1.06 (5.83)	1.06 (5.85)	9.17 (6.82)	9.17 (6.84)
<i>income2</i>	0.13 (6.35)	0.13 (6.36)	-6.08 (9.11)	-6.08 (9.13)	-5.94 (14.03)	-5.94 (14.07)
<i>income3</i>	0.36 (6.16)	0.36 (6.18)	-0.15 (7.11)	-0.15 (7.13)	0.22 (9.61)	0.22 (9.64)
<i>income4</i>	1.57 (4.02)	1.57 (4.03)	1.54 (6.44)	1.54 (6.46)	3.11 (8.11)	3.11 (8.13)
<i>income5</i>	9.64 (8.67)	9.64 (8.69)	4.03 (13.37)	4.03 (13.40)	13.67 (20.62)	13.67 (20.68)
<i>income6</i>	11.17* (5.78)	11.17* (5.79)	25.49*** (9.14)	25.49*** (9.17)	36.66*** (10.25)	36.66*** (10.27)
<i>liberal</i>	11.36** (4.40)	11.36** (4.41)	18.03*** (5.97)	18.03*** (5.99)	29.39*** (8.46)	29.39*** (8.49)
<i>conser.</i>	15.15** (7.07)	15.15** (7.09)	14.84 (9.04)	14.84 (9.07)	29.99** (12.07)	29.99** (12.11)
<i>religion2</i>	1.83 (4.05)	1.83 (4.06)	10.24 (6.58)	10.24 (6.59)	12.08 (8.87)	12.08 (8.90)
<i>religion3</i>	3.26 (5.09)	3.26 (5.10)	37.12*** (12.18)	37.12*** (12.22)	40.38*** (11.36)	40.38*** (11.39)
<i>religion4</i>	15.45*** (5.25)	15.45*** (5.27)	33.16*** (7.48)	33.16*** (7.50)	48.62*** (10.73)	48.62*** (10.76)
<i>donated2</i>	-2.86 (5.34)	-2.86 (5.35)	-15.23 (9.16)	-15.23 (9.18)	-18.09* (10.39)	-18.09* (10.42)
<i>donated3</i>	-0.99 (5.38)	-0.99 (5.39)	-8.32 (8.51)	-8.32 (8.54)	-9.31 (10.62)	-9.31 (10.65)
<i>donated4</i>	-6.1 (5.03)	-6.1 (5.04)	-26.33*** (9.33)	-26.33*** (9.35)	-32.43*** (10.88)	-32.43*** (10.91)
<i>know_a</i>	1.55 (2.18)	1.55 (2.18)	2.22 (1.85)	2.22 (1.86)	3.77 (3.65)	3.77 (3.66)

<i>know_h</i>	-2.50*	-2.50*	-1.43	-1.43	-3.92*	-3.92*
	(1.25)	(1.26)	(1.50)	(1.51)	(2.16)	(2.17)
<i>constant</i>	-9.08	1.27	53.70***	54.60***	44.62**	55.87***
	52.35***	-8.54	(13.22)	(12.81)	(18.37)	(18.54)
Obs.	200	200	200	200	200	200

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%.
Robust standard errors are in parentheses.

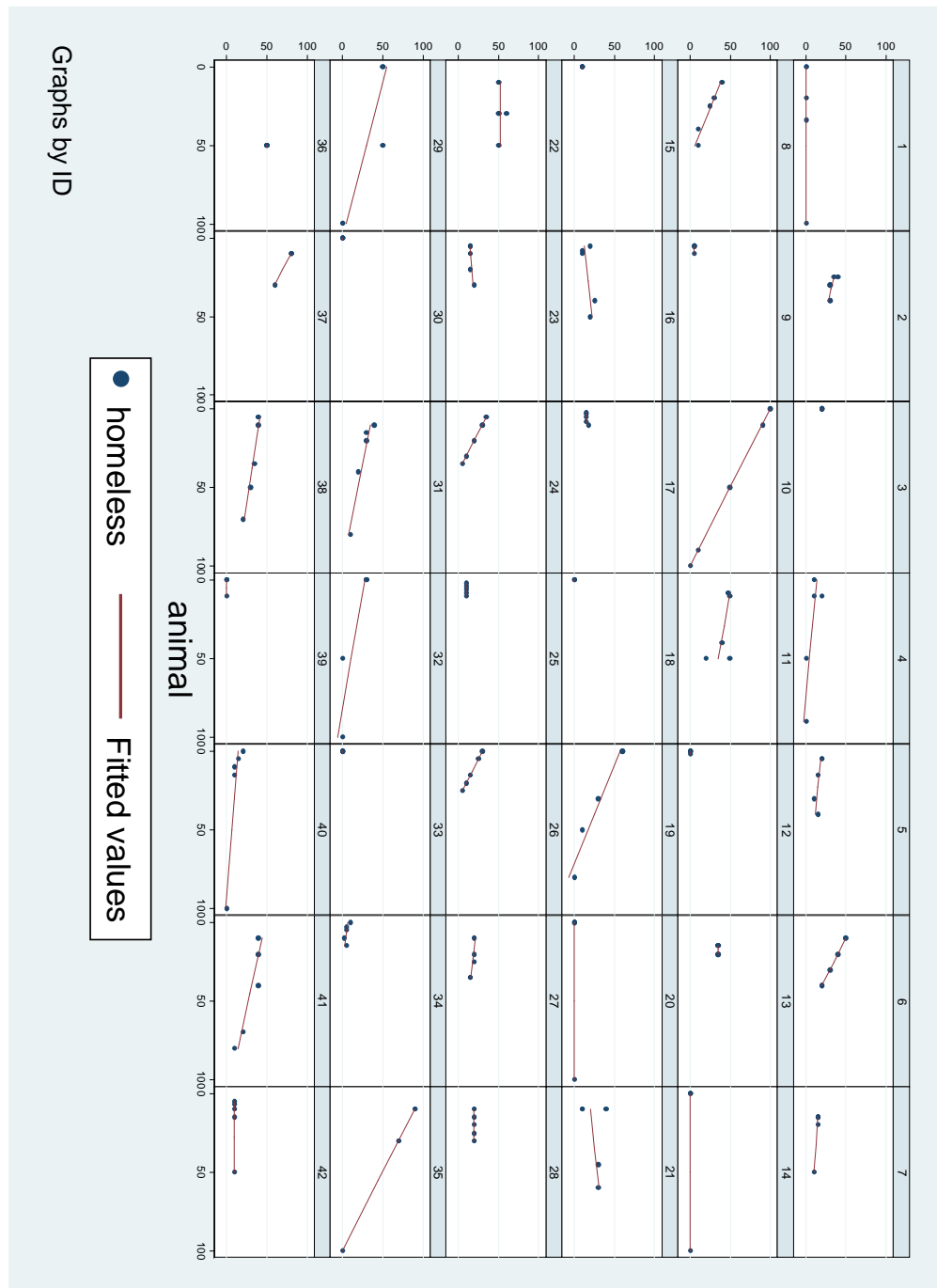
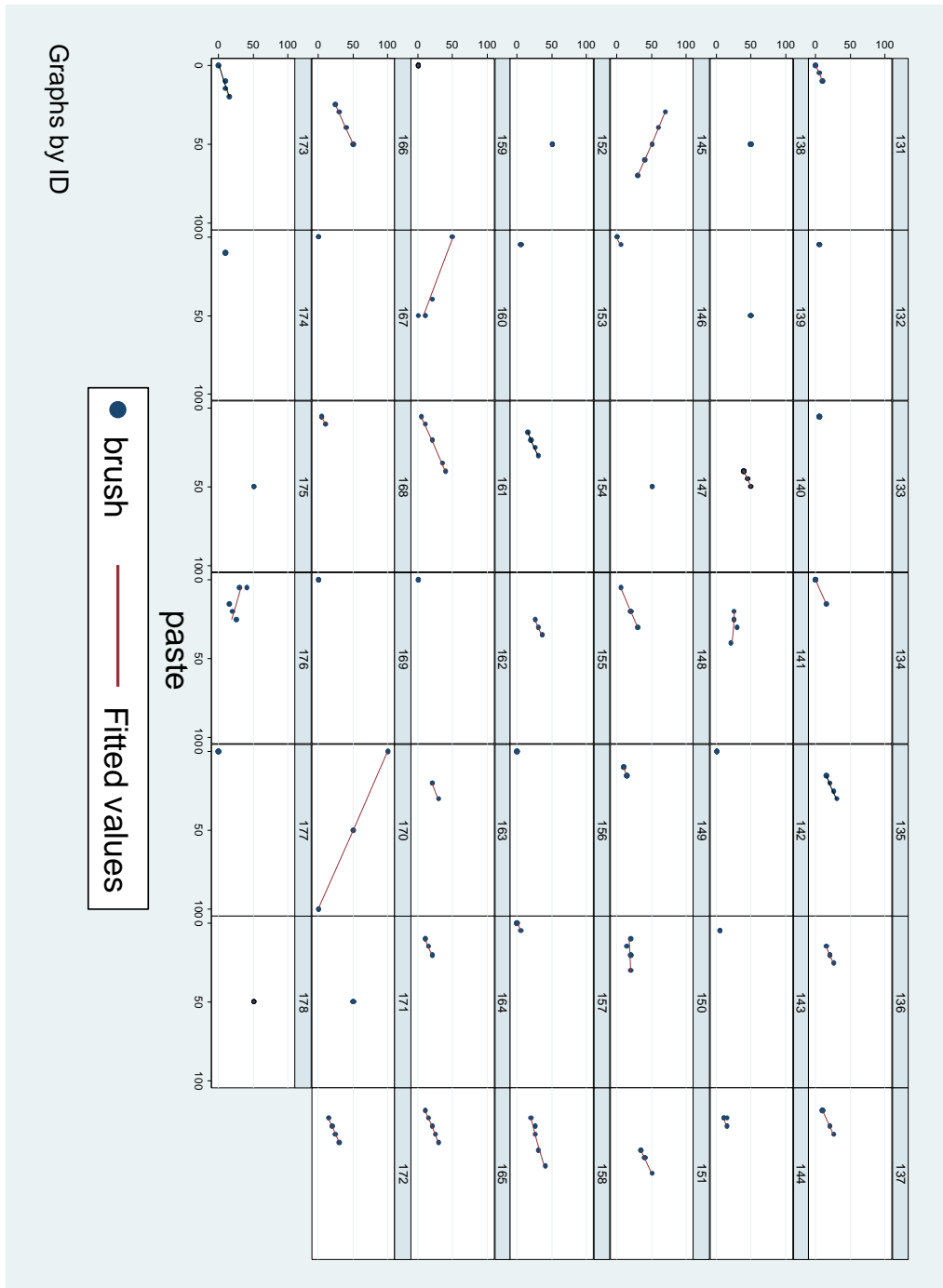


Figure A.1. Individual donations from Experiment Subs

The rebate rate increases from 0.1 to 0.9 from left to right in each graph. Vertical axis presents the donations to the homeless. Horizontal axis presents the donations to the animal.

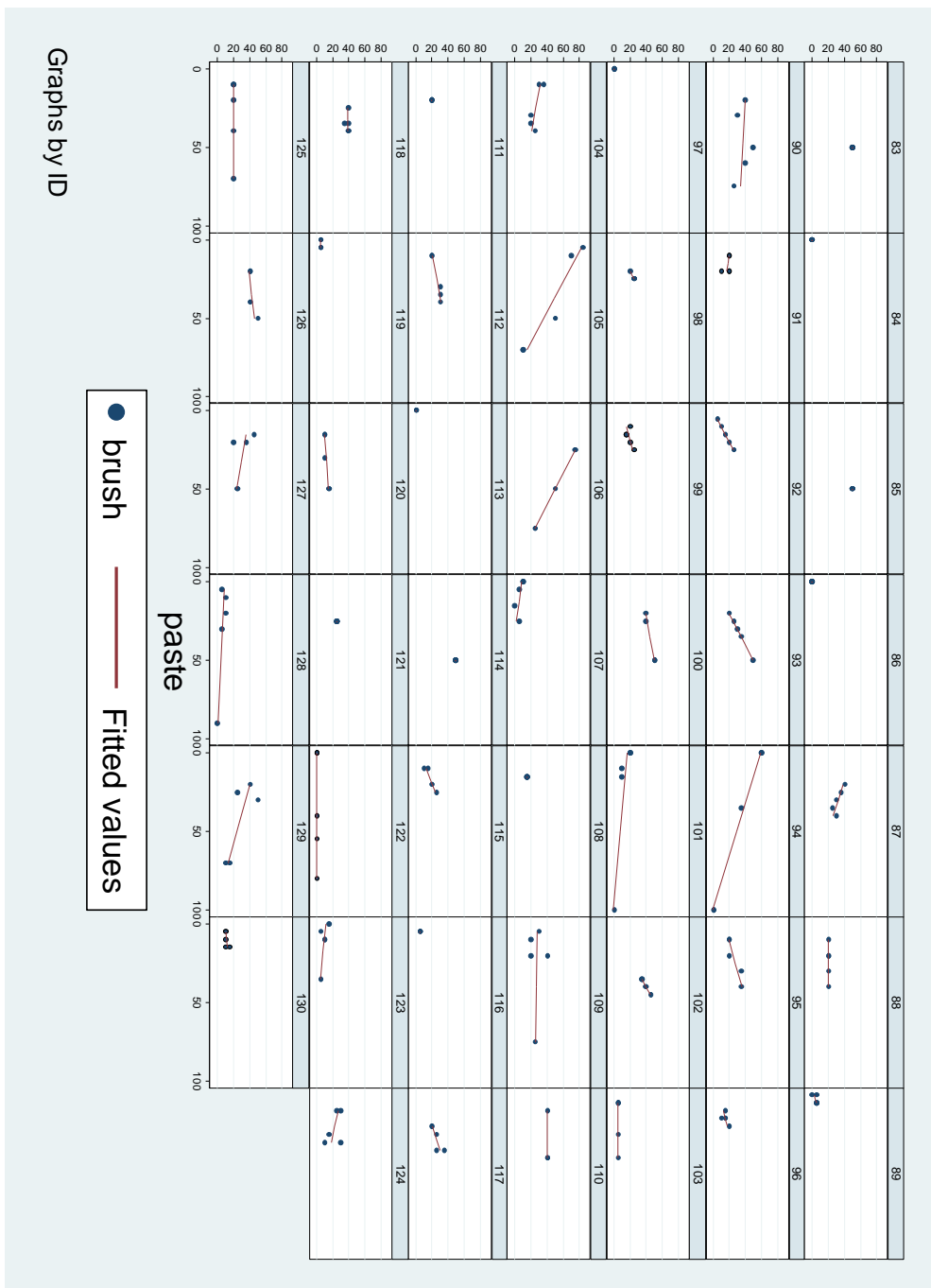


Graphs by ID

● brush
— Fitted values

Figure A.2. Individual donations from Experiment Comp

The rebate rate increases from 0.1 to 0.9 from left to right in each graph. Vertical axis presents the donations to the homeless. Horizontal axis presents the donations to the animal.



Graphs by ID

● brush
— Fitted values

Figure A.3. Individual donations from Experiment Comp-W

The rebate rate increases from 0.1 to 0.9 from left to right in each graph. Vertical axis presents the donations to the homeless. Horizontal axis presents the donations to the animal.

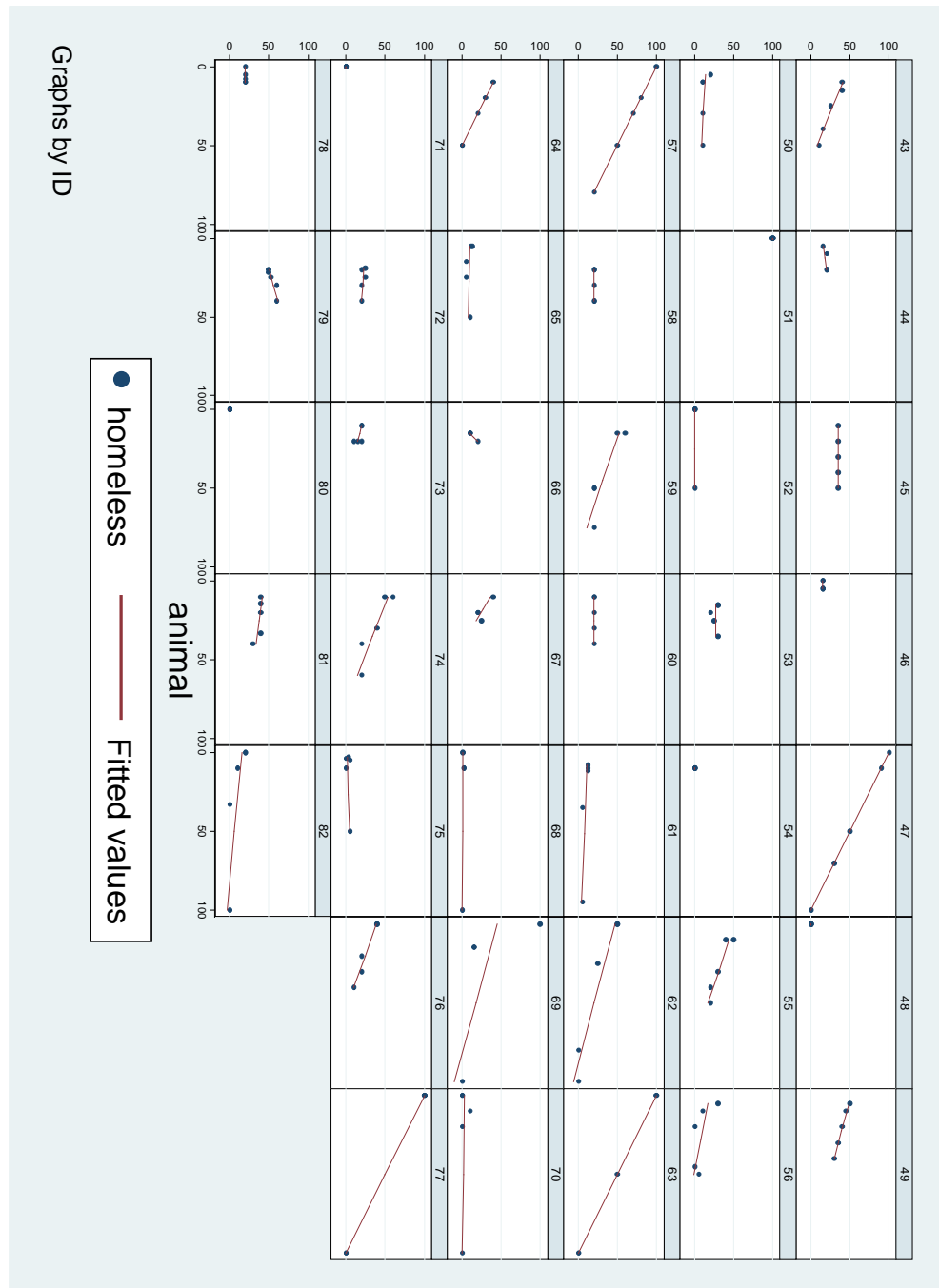


Figure A.4. Individual donations from Experiment Subs-M

The rebate rate increases from 0.1 to 0.9 from left to right in each graph. Vertical axis presents the donations to the homeless. Horizontal axis presents the donations to the animal.

Appendix B

Instructions for Experiments

This experiment deals with the economics of decision making. Your participation in this experiment is voluntary. You will be compensated for your participation.

The experimental instructions are presented below. After you complete the experiment, you will be asked to fill out a questionnaire on demographics while you wait to be paid.

During the experiment, your earnings will be calculated in Tokens. At the end of the experiment the total amount of Tokens you have earned will be converted to US Dollars at the following rate:

$$10 \text{ Tokens} = 1.00 \text{ US Dollar}$$

In addition, upon completion of the experiment, you will receive a show-up reward of \$5 [\$7 in experiments Comp and Comp-W]. This is yours to keep regardless of the decisions you make in the experiment.

Your computer has been assigned an ID number that you will be informed of. Your decisions and payoffs from the experiment will be recorded with that ID number. At no time your name will be linked to that ID number. At the end of the experiment, you will be paid in private. Your decisions and payoff will not be revealed to anyone during or after the experiment.

Please do not communicate with the other participants during the experiments. Should you have any questions, please raise your hand.

Donations to Charities: [for experiment Subs]

In this experiment, you will be given 5 different situations in which you will make decisions regarding donations to two charitable organizations. At the end, one of the situations will be chosen at random. This chosen situation will determine your payoff. Each situation has an equal chance of being chosen; hence, you should make your decision in each situation as if it will be the chosen one. You will be notified of your earnings at the end of the experiment.

In every situation, each of you will be asked to decide how much to donate to two non-profit organizations in the Ann Arbor region. One is an Animal Rescue Organization and the other one is a Homeless Shelter in Ann Arbor. Each of you is randomly assigned to one rescued animal in an Animal Rescue Organization and one homeless person who is a resident of a Homeless Shelter in Ann Arbor. **No two subjects are giving to the same animal or the same homeless person. Thus, your donation will be the only donation that your animal and homeless person will receive as a result of this experiment.** Your donated amounts will be delivered to your assigned homeless person and/or animal in the form of equal-value food or other supplies (such as hygiene products, clothing, etc.).

In each of the 5 situations, you will start with an endowment of 100 tokens and you will decide how many tokens to donate to your assigned animal in the Animal Rescue Organization, how many tokens to donate to your assigned homeless person at the Shelter, and how many tokens to keep for yourself. In addition to the tokens you keep for yourself, you will receive rebates from the experimenters for donations that you make. The rebate levels will change for each situation and will be explained in detail in the next section.

As mentioned above, at the end of the experiment, one of the 5 situations will be picked at random and the decisions from that situation will be implemented. The donations that you make in that situation will be sent out to your assigned animal and homeless person within 6-8 weeks to ensure that the whole research study is completed. The amount that you keep for yourself (converted into dollars) will be paid out to you in addition to the rebates that you receive from your donations (as well as the show-up reward of \$5).

Rebates:

The rebate rate is the percentage of your donation that will be refunded to you. For example, if you give X tokens to your assigned homeless person in the shelter and the rebate rate is 50%, the experimenters will pay you a rebate of $0.50 \cdot X$ tokens at the end of the experiment, and a donation with a value of X tokens will be sent to the shelter to be spent specifically for the homeless person. In this experiment, the rebate rate for the Homeless Shelter is always the same at 50%.

The rebate rate for the Animal Rescue Organization varies from 0% to 90%. The following example shows how your earnings and donations are calculated. At the end of the experiment, one situation out of the 5 will be randomly picked for each subject. Suppose in that situation, the rebate rate for the Animal Rescue Organization is 30%, and the rebate rate for the Homeless Shelter is 50%. If you gave X tokens for your assigned animal and Y tokens for your assigned homeless person, then:

Your assigned animal at the Animal Rescue Organization receives: X

Your assigned homeless person at the Homeless Shelter receives: Y

You receive: $(100 - X - Y) + (0.30 * X) + (0.50 * Y)$

To facilitate your decisions, we will provide a "calculator" (see table below) when the experiment starts. You may use the calculator to see your and charities' payoffs for any potential donation plans you have in mind before actually making the donation decision. To use the calculator, first enter the rebate rate for donations to the animal for the specific situation where you are currently making decision, and then enter the possible donation amounts for your assigned animal and your assigned homeless person. The calculator will then provide you with a table that gives information on the number of tokens you decided to keep for yourself (100 - donations to the animal - donations to the homeless person), tokens you will receive from rebates from your donations, and the total tokens after rebates. You can use the calculator as many times as you like.

Calculator

Rebate rate for donations to the animal (%)	30
Rebate rate for donations to the homeless person (%)	50
Donation to the animal (tokens)	15
Donation to the homeless person (tokens)	30
Tokens kept for yourself	55
Rebate received from donations to the animal	4.5
Rebate received from donations to the homeless person	15
Total Tokens you have after Rebates	74.5

Decision Screen:

Your decision screen consists of two parts: the left part will have the “calculator” and the right part will have 5 different situations from which you need to make donation decisions. You may use the calculator as explained above before making your final decision in each situation.

To summarize, you will make decisions for 5 situations. In each situation, the two organizations that you can donate are kept fixed but the rebate rates change from one situation to another. For each situation, you need to decide how much to donate to your assigned animal at the Animal Rescue Organization and to your assigned homeless person at the Homeless Shelter. At the end of the experiment, one of the situations will be selected at random where each situation has an equal chance of being selected. The tokens donated to the animal and to the homeless person will be donated to these charities by the experimenters. The amount that you do not donate will be paid out to you, as well as the rebates that you receive from the experimenters for your donations.

Note that the experimenter - not the charitable organization - pays the rebates.

After you enter your donation amounts at the decision screen, please press the “confirm” button to confirm your decisions. Once you confirm all your five decisions, changes cannot be made.

Exercise: Let's check our understanding!

Suppose the rebate rate for the Animal Rescue Organization is 10%, and the rebate rate for the Homeless Shelter is 50%. Let's consider a situation where the subject's donation to her assigned animal is 20 tokens and her donation to her assigned homeless person is 40 tokens. Please fill the table below for this specific situation:

How much does her assigned animal receive (tokens)?	
How much does her assigned homeless person receive (tokens)?	
Tokens kept for herself	
Rebate received from donations to the animal	
Rebate received from donations to the homeless person	
Total Tokens she has after Rebates	

Suppose the rebate rate for the Animal Rescue Organization is 10%, and the rebate rate for the Homeless Shelter is 50%. Let's consider a situation where the subject's donation to her assigned animal is 40 tokens and her donation to her assigned homeless person is 20 tokens. Please fill the table below for this specific situation:

How much does her assigned animal receive (tokens)?	
How much does her assigned homeless person receive (tokens)?	
Tokens kept for herself	
Rebate received from donations to the animal	
Rebate received from donations to the homeless person	
Total Tokens she has after Rebates	

Donations to Charities: [for experiment Subs-M]

In this experiment, you will be given 5 different situations in which you will make decisions regarding donations to two charitable organizations. At the end, one of the situations will be chosen at random. This chosen situation will determine your payoff. Each situation has an equal chance of being chosen; hence, you should make your decision in each situation as if it will be the chosen one. You will be notified of your earnings at the end of the experiment.

At the beginning of the experiment you will be randomly and anonymously paired with another participant from this room to form a group. In every situation, you and your paired participant will be asked to decide how much to donate to two non-profit organizations in the Ann Arbor region. One is an Animal Rescue Organization and the other one is a Homeless Shelter in Ann Arbor. Each group is randomly assigned to one rescued animal in an Animal Rescue Organization and one homeless person who is a resident of a Homeless Shelter in Ann Arbor. **No two groups are giving to the same animal or the same homeless person. Thus, your group's donation will be the only donation that your group's assigned animal and homeless person will receive as a result of this experiment.** Your group's donated amounts will be delivered to your group's assigned homeless person and/or animal in the form of equal-value food or other supplies (such as hygiene products, clothing, etc.).

In each of the 5 situations, you will start with an endowment of 100 tokens and you will decide how many tokens to donate to your group's assigned animal in the Animal Rescue Organization, how many tokens to donate to your group's assigned homeless person at the Shelter, and how many tokens to keep for yourself. Similarly, for each situation, your paired participant also starts with an endowment of 100 tokens and decides how many tokens to donate to your group's assigned animal and homeless person, and how many tokens to keep for himself/herself. **You and your paired participant will make donations simultaneously and will not know each other's donations until the end of the experiment.** In addition to the tokens you keep for yourself, you will receive rebates from the experimenters for donations that you make. The rebate levels will change for each situation and will be explained in detail in the next section.

As mentioned above, at the end of the experiment, one of the 5 situations will be picked at random for your group and the decisions from that situation will be implemented. The donations that your group makes in that situation will be sent out to your group's assigned animal and homeless person within 6-8 weeks to ensure that the whole research study is completed. The amount that you keep for yourself (converted into dollars) will be paid out to you in addition to the rebates that you receive from your donations (as well as the show-up reward of \$5).

Rebates:

The rebate rate is the percentage of your donation that will be refunded to you. For example, if you give X tokens to your assigned homeless person in the shelter and the rebate rate is 50%, the experimenters will pay you a rebate of $0.50 * X$ tokens at the end of the experiment, and a donation with a value of X tokens together with the donation of your paired participant will be sent to the shelter to be spent specifically for the homeless person. In this experiment, the rebate rate for the Homeless Shelter is always the same at 50%.

The rebate rate for the Animal Rescue Organization varies from 0% to 90%. The following example shows how your earnings and donations are calculated. At the end of the experiment, one situation out of the 5 will be randomly picked for each subject. Suppose in that situation, the rebate rate for the Animal Rescue Organization is 30%, and the rebate rate for the Homeless Shelter is 50%. Suppose you gave X_1 tokens for your group's assigned animal and Y_1 tokens for your group's assigned homeless person, and your paired participant gave X_2 tokens and Y_2 tokens, respectively.

Then:

Your group's assigned animal at the Animal Rescue Organization receives: $X_1 + X_2$

Your group's assigned homeless person at the Homeless Shelter receives: $Y_1 + Y_2$

You receive: $(100 - X_1 - Y_1) + (0.30 * X_1) + (0.50 * Y_1)$

Note that the donations of your paired participant do not affect your payoff from this experiment, only your decisions do. However, your paired participant's donations affect how much your group's assigned animal and homeless person receives.

To facilitate your decisions, we will provide a "calculator" (see table below) when the experiment starts. You may use the calculator to see your payoff for any potential donation plans you have in mind before actually making the donation decision. To use the calculator, first enter the rebate rate for donations to the animal for the specific situation where you are currently making decision, and then enter the possible donation amounts for your group's assigned animal and your group's assigned homeless person. The calculator will then provide you with a table that gives information on the number of tokens you decided to keep for yourself (100 - donations to the animal - donations to the homeless person), tokens you will receive from rebates from your donations, and the total tokens after rebates. You can use the calculator as many times as you like.

Calculator

Rebate rate for donations to the animal (%)	30
Rebate rate for donations to the homeless person (%)	50
Your donation to the animal (tokens)	15
Your donation to the homeless person (tokens)	30
Tokens kept for yourself	55
Rebate you received from your donation to the animal	4.5
Rebate you received from your donation to the homeless person	15
Total Tokens you have after Rebates	74.5

Decision Screen:

Your decision screen consists of two parts: the left part will have the “calculator” and the right part will have 5 different situations from which you need to make donation decisions. You may use the calculator as explained above before making your final decision in each situation.

To summarize, you and your paired participant will make decisions for 5 situations, simultaneously. In each situation, the two organizations that you can donate are kept fixed but the rebate rates change from one situation to another. For each situation, you need to decide how much to donate to your group’s assigned animal at the Animal Rescue Organization and to your group’s assigned homeless person at the Homeless Shelter. At the end of the experiment, one of the situations will be selected at random where each situation has an equal chance of being selected. The tokens donated to the animal and to the homeless person by your group will be donated to these charities by the experimenters. The amount that you do not donate will be paid out to you, as well as the rebates that you receive from the experimenters for your donations.

Note that the experimenter - not the charitable organization - pays the rebates.

After you enter your donation amounts at the decision screen, please press the “confirm” button to confirm your decisions. Once you confirm all your five decisions, changes cannot be made.

Exercise: Let's check our understanding!

Suppose the rebate rate for the Animal Rescue Organization is 10%, and the rebate rate for the Homeless Shelter is 50%. Let's consider a situation where the subject's donation to her group's assigned animal is 20 tokens and her donation to her group's assigned homeless person is 40 tokens. Suppose her paired participant donates 15 tokens to the group's assigned animal and 15 tokens to the group's assigned homeless person. Please fill the table below for this specific situation:

How much does her group's assigned animal receive (tokens)?	
How much does her group's assigned homeless person receive (tokens)?	
Tokens kept for herself	
Rebate she received from her donation to the animal	
Rebate she received from her donation to the homeless person	
Total Tokens she has after Rebates	

Suppose the rebate rate for the Animal Rescue Organization is 10%, and the rebate rate for the Homeless Shelter is 50%. Let's consider a situation where the subject's donation to her group's assigned animal is 40 tokens and her donation to her group's assigned homeless person is 20 tokens. Suppose her paired participant donates 15 tokens to the group's assigned animal and 15 tokens to the group's assigned homeless person. Please fill the table below for this specific situation:

How much does her group's assigned animal receive (tokens)?	
How much does her group's assigned homeless person receive (tokens)?	
Tokens kept for herself	
Rebate she received from her donation to the animal	
Rebate she received from her donation to the homeless person	
Total Tokens she has after Rebates	

Donations to Charities: [for experiment Comp]

In this experiment, you will be presented with 5 different situations in which you will make donation decisions. At the conclusion of the experiment, one of the situations will be chosen at random. This chosen situation will determine your earnings. Each situation has an equal chance of being chosen; hence, you should make your decision in each situation as if it will be the chosen one. You will be notified of your earnings at the end of the experiment.

Each of you will be donating to different homeless people who are residents of a Homeless Shelter in Maryland. In each situation, you will be asked to decide how many toothbrushes and how many tubes of toothpaste to donate to homeless people at the Homeless Shelter. Figure 1 shows these items. **No two subjects are giving to the same homeless person. Thus, your donation will be the only donation that your assigned homeless persons will receive as a result of this experiment.**

	
Colgate Fluoride Toothpaste, 0.85 oz personal size	Colgate Toothbrush, individually wrapped

Figure 1.

In each of the 5 situations, you will start with an endowment of 100 Tokens and you will decide (1) how many Tokens to donate towards toothpaste, (2) how many Tokens to donate towards toothbrushes, and (3) how many Tokens to keep for yourself. In addition to the Tokens you keep for yourself, you will receive rebates from the experimenters for donations that you make. The rebate levels will change for each situation and will be explained in detail in the next section.

Each individual toothbrush and each individual tube of toothpaste “costs” 5 Tokens. As such, you will be asked to make donations in increments of 5 Tokens. Every 5 Tokens you donate towards toothpaste will generate one tube of toothpaste. Similarly, every 5 Tokens you donate towards toothbrushes will generate one toothbrush. Toothbrushes and tubes of toothpaste will only be distributed to your assigned homeless persons in toothbrush-toothpaste pairs. That is, your

donations will be distributed in the following way: The first toothpaste-toothbrush pair will be donated to a homeless person. The second toothpaste-toothbrush pair will be donated to another homeless person. This process will continue until there are no toothbrush-toothpaste pairs remaining. If there are only tubes of toothpaste leftover, they will NOT be donated and will be kept by the experimenter. If there are only toothbrushes remaining, they will NOT be donated and will be kept by the experimenter. Unpaired items will not be donated and their value in Tokens will not be returned to you.

As an example, if in a given situation you have donated 30 Tokens towards toothpaste and 35 Tokens towards toothbrushes, this means that you have donated 6 tubes of toothpaste and 7 toothbrushes. This will yield 6 toothpaste-toothbrush pairs and one unpaired toothbrush. In such a case, 6 homeless people will receive a toothbrush-toothpaste pair and 1 toothbrush will be kept by the experimenter.

As detailed above, at the end of the experiment, one of the 5 situations will be picked at random and the decisions from that situation will be implemented. The donations that you made in that situation will be converted into toothpaste-toothbrush pairs and sent out to your assigned homeless persons within 6-8 weeks to ensure that the research study is completed. Your earnings from the experiment—that is, the number of Tokens that you retain in your possession after your donations, plus the number of Tokens that you receive via rebates (converted into U.S. dollars at the rate detailed above), plus the unconditional show-up reward of \$7—will be paid out to you before you leave.

Rebates:

The rebate rate in each situation is the percentage of your donations that will be refunded to you. For example, if you donate X Tokens towards toothbrushes and the rebate rate for toothbrushes is 50%, the experimenters will pay you a rebate of $0.50 \cdot X$ Tokens at the end of the experiment. In this experiment, the rebate rate for toothbrush donations will remain fixed at 50% in each of the 5 situations.

Unlike the rebate rate for toothbrushes (which will remain fixed at 50% in each situation), the rebate rate for toothpaste donations will vary from 0% to 90% depending upon the given situation.

The following example shows how your earnings and donations for a given situation are calculated. At the end of the experiment, one situation out of the 5 will be randomly picked, and you will be paid (and actual donations will be distributed to your assigned homeless persons) based upon your decisions in that situation. Suppose that in the chosen situation, the rebate rate

for toothpaste donations was 30%, and the rebate rate for toothbrush donations was 50%. If you gave X Tokens towards toothpaste donations and Y Tokens towards toothbrush donations, then:

You generated: X/5 tubes of toothpaste

You generated: Y/5 toothbrushes

You receive (in Tokens): $(100 - X - Y) + (0.30 * X) + (0.50 * Y)$

Recall that we will make as many toothpaste-toothbrush pairs as possible and donate those pairs to your assigned homeless people (one pair per person). Remaining unpaired items that you generated will NOT be donated and their value (in Tokens) will NOT be returned to you.

To facilitate your decisions, we will provide a “calculator” (see table below) when the experiment starts. You may use the calculator to see your potential payoff and your potential donations before making your actual donation decisions. To use the calculator, first enter the rebate rate for donations towards toothpaste that applies to the current situation (recall that the rebate rate for toothbrush donations is fixed at 50%), and then enter possible donation amounts for toothbrushes and tubes of toothpaste. The calculator will then provide you with a table that gives information on the number of Tokens you decided to keep for yourself (100 - donations towards toothbrushes - donations towards tubes of toothpaste), Tokens you will receive from rebates from your donations, and the total Tokens you will possess after rebates. You can use the calculator as many times as you like.

Calculator

Rebate rate for donations towards toothpaste (%)	30
Rebate rate for donations towards toothbrushes (%)	50
Donations towards toothpaste (Tokens)	15
Donations towards toothbrushes (Tokens)	30
Pairs of toothpaste/toothbrushes donated	3
Number of unpaired toothpastes (the experimenter will keep them)	0
Number of unpaired toothbrushes (the experimenter will keep them)	3
Tokens kept for yourself	55
Rebate received from donations towards toothpaste	4.5
Rebate received from donations towards toothbrushes	15
Total Tokens you have after Rebates	74.5

Decision Screen:

Your decision screen consists of two parts: the left part will have the “calculator” and the right part will have the 5 different situations in which you need to make donation decisions. You may use the calculator as explained above before making your final decision in each situation.

To summarize, you will make decisions in 5 different situations. The rebate rate for toothbrush donations will always be 50%, but the rebate rate for toothpaste donations will change from one situation to another. For each situation, you need to decide (1) how many Tokens to donate towards tubes of toothpaste, (2) how many Tokens to donate towards toothbrushes, and (3) how many Tokens to keep for yourself. At the end of the experiment, one of the situations will be selected at random (where each situation has an equal chance of being selected). Toothpaste-toothbrush pairs will be donated to the charities by the experimenters. Unpaired tubes of toothpaste and unpaired toothbrushes will be kept by the experimenter and will not be donated to the homeless persons. Your final payment will be based on the amount of Tokens that you do not donate, as well as the rebates that you receive from the experimenters for your donations, in addition to the show-up payment of \$7. **Note that the experimenter—not the charitable organization—pays the rebates.**

After you enter your donation amounts at the decision screen, please press the “confirm” button to finalize your decisions. Once you confirm all five of your decisions, changes cannot be made.

Exercise: Let's check our understanding!

Suppose the rebate rate for toothpaste donations is 10%, and the rebate rate for toothbrush donations is 50%. Let's consider a situation in which a subject's donation toward toothpaste is 20 Tokens and her donation towards toothbrushes is 40 Tokens. Please fill out the table below for this specific situation:

How many homeless people will receive a toothbrush-toothpaste PAIR from this subject?	
How many unpaired tubes of toothpaste will be kept by the experimenter?	
How many unpaired toothbrushes will be kept by the experimenter?	
Tokens kept for herself	
Rebate received from donations towards toothpaste	
Rebate received from donations towards toothbrushes	
Total Tokens she has after rebates	

Suppose the rebate rate for toothpaste donations is 10%, and the rebate rate for toothbrush donations is 50%. Let's consider a situation in which a subject's donation toward toothpaste is 40 Tokens and her donation towards toothbrushes is 20 Tokens. Please fill out the table below for this specific situation:

How many homeless people will receive a toothbrush-toothpaste PAIR from this subject?	
How many unpaired tubes of toothpaste will be kept by the experimenter?	
How many unpaired toothbrushes will be kept by the experimenter?	
Tokens kept for herself	
Rebate received from donations towards toothpaste	
Rebate received from donations towards toothbrushes	
Total Tokens she has after rebates	

Donations to Charities: [for experiment Comp-W]

In this experiment, you will be presented with 5 different situations in which you will make donation decisions. At the conclusion of the experiment, one of the situations will be chosen at random. This chosen situation will determine your earnings. Each situation has an equal chance of being chosen; hence, you should make your decision in each situation as if it will be the chosen one. You will be notified of your earnings at the end of the experiment.

Each of you will be donating to different homeless people who are residents of a Homeless Shelter in Maryland. In each situation, you will be asked to decide how many toothbrushes and how many tubes of toothpaste to donate to homeless people at the Homeless Shelter. Figure 1 shows these items. **No two subjects are giving to the same homeless person. Thus, your donation will be the only donation that your assigned homeless persons will receive as a result of this experiment.**



Figure 1.

In each of the 5 situations, you will start with an endowment of 100 Tokens and you will decide (1) how many Tokens to donate towards toothpaste, (2) how many Tokens to donate towards toothbrushes, and (3) how many Tokens to keep for yourself. In addition to the Tokens you keep for yourself, you will receive rebates from the experimenters for donations that you make. The rebate levels will change for each situation and will be explained in detail in the next section.

Each individual toothbrush and each individual tube of toothpaste costs 5 Tokens. As such, you will be asked to make donations in the increments of 5 Tokens. Every 5 Tokens you donate towards toothpaste will generate one additional tube of toothpaste. Similarly, every 5 Tokens you donate towards toothbrushes will generate one additional toothbrush. Your donations will be

distributed to different homeless persons in the following way: The first toothpaste-toothbrush pair will be donated to a homeless person. The second toothpaste-toothbrush pair will be donated to another homeless person. This process will continue until there are no toothbrush-toothpaste pairs remaining. If there are only tubes of toothpastes leftover, each tube of toothpaste will be distributed to a different homeless person. If there are only toothbrushes remaining, each toothbrush will be distributed to a different homeless person. In other words, whenever possible, your donations will be distributed as a toothbrush-toothpaste pair, and then the unpaired donations will be distributed. Recall that the particular homeless people assigned to you do not receive gifts from other subjects in the experiment.

As an example, if in a given situation you have donated 30 Tokens towards toothpaste and 35 Tokens towards toothbrushes, this means that you have donated 6 tubes of toothpaste and 7 toothbrushes. This will yield 6 toothpaste-toothbrush pairs and one unpaired toothbrush. In such a case 6 homeless people will receive a toothbrush and a tube of toothpaste and 1 homeless person will receive only a toothbrush.

As detailed above, at the end of the experiment, one of the 5 situations will be picked at random and the decisions from that situation will be implemented. The donations that you made in that situation will be converted into toothbrushes and tubes of toothpaste and sent out to your assigned homeless persons within 6-8 weeks to ensure that the whole research study is completed. Your earnings from the experiment—that is, the number of Tokens that you retain in your possession after your donations, plus the number of Tokens that you receive via rebates (converted into U.S. dollars at the rate detailed above), plus the unconditional show-up reward of \$7—will be paid out to you before you leave.

Rebates:

The rebate rate in each situation is the percentage of your donations that will be refunded to you. For example, if you donate X Tokens towards toothbrushes and the rebate rate for toothbrushes is 50%, the experimenters will pay you a rebate of $0.50 \cdot X$ Tokens at the end of the experiment, and a toothbrush donation with a value of X Tokens ($X/5$ toothbrushes) will be sent to the shelter to be spent specifically for your assigned homeless persons. In this experiment, the rebate rate for toothbrush donations will remain fixed at 50% in each of the 5 situations.

Unlike the rebate rate for toothbrushes (which will remain fixed at 50% in each situation), the rebate rate for toothpaste donations will vary from 0% to 90% depending upon the given situation.

The following example shows how your earnings and donations for a given situation are calculated. At the end of the experiment, one situation out of the 5 will be randomly picked, and

you will be paid (and actual donations will be distributed to your assigned homeless persons) based upon your decisions in that situation. Suppose that in the chosen situation, the rebate rate for toothpaste donations was 30%, and the rebate rate for toothbrush donations was 50%. If you gave X Tokens towards toothpaste donations and Y Tokens towards toothbrush donations, then:

You donated: X/5 tubes of toothpaste

You donated: Y/5 toothbrushes

You receive (in Tokens): $(100 - X - Y) + (0.30 * X) + (0.50 * Y)$

Recall that we will first make as many toothpaste-toothbrush pairs as possible and donate those pairs to your assigned homeless people (one pair per person). Remaining unpaired items will be donated to other homeless people separately.

To facilitate your decisions, we will provide a “calculator” (see table below) when the experiment starts. You may use the calculator to see your potential payoff and your potential donations before making your actual donation decisions. To use the calculator, first enter the rebate rate for donations towards toothpaste that applies to the current situation (recall that the rebate rate for toothbrush donations is fixed at 50%), and then enter possible donation amounts for toothbrushes and tubes of toothpaste. The calculator will then provide you with a table that gives information on the number of Tokens you decided to keep for yourself (100 - donations towards toothbrushes - donations towards tubes of toothpaste), Tokens you will receive from rebates from your donations, and the total Tokens you will possess after rebates. You can use the calculator as many times as you like.

Calculator

Rebate rate for donations towards toothpaste (%)	30
Rebate rate for donations towards toothbrushes (%)	50
Donations towards toothpaste (Tokens)	15
Donations towards toothbrushes (Tokens)	30
Pairs of toothpaste/toothbrushes donated	3
Number of unpaired toothpastes donated	0
Number of unpaired toothbrushes donated	3
Tokens kept for yourself	55
Rebate received from donations towards toothpaste	4.5
Rebate received from donations towards toothbrushes	15
Total Tokens you have after Rebates	74.5

Decision Screen:

Your decision screen consists of two parts: the left part will have the “calculator” and the right part will have the 5 different situations in which you need to make donation decisions. You may use the calculator as explained above before making your final decision in each situation.

To summarize, you will make decisions in 5 different situations. The rebate rate for toothbrush donations will always be 50%, but the rebate rate for toothpaste donations will change from one situation to another. For each situation, you need to decide (1) how many Tokens to donate towards tubes of toothpaste, (2) how many Tokens to donate towards toothbrushes, and (3) how many Tokens to keep for yourself. At the end of the experiment, one of the situations will be selected at random (where each situation has an equal chance of being selected). The Tokens donated towards toothpaste and toothbrushes will be donated to the charities by the experimenters. The amount that you do not donate will be paid out to you, as well as the rebates that you receive from the experimenters for your donations (in addition to the show-up payment of \$7). **Note that the experimenter—not the charitable organization—pays the rebates.**

After you enter your donation amounts at the decision screen, please press the “confirm” button to finalize your decisions. Once you confirm all five of your decisions, changes cannot be made.

Exercise: Let's check our understanding!

Suppose the rebate rate for toothpaste donations is 10%, and the rebate rate for toothbrush donations is 50%. Let's consider a situation where the subject's donation toward toothpaste is 20 Tokens and her donation towards toothbrushes is 40 Tokens. Please fill out the table below for this specific situation:

How many homeless people will receive a toothbrush-toothpaste PAIR from this subject?	
How many homeless people will receive only a tube of toothpaste from this subject?	
How many homeless people will receive only a toothbrush from this subject?	
Tokens kept for herself	
Rebate received from donations towards toothpaste	
Rebate received from donations towards toothbrushes	
Total Tokens she has after rebates	

Suppose the rebate rate for toothpaste donations is 10%, and the rebate rate for toothbrush donations is 50%. Let's consider a situation where the subject's donation toward toothpaste is 40 Tokens and her donation towards toothbrushes is 20 Tokens. Please fill out the table below for this specific situation:

How many homeless people will receive a toothbrush-toothpaste PAIR from this subject?	
How many homeless people will receive only a tube of toothpaste from this subject?	
How many homeless people will receive only a toothbrush from this subject?	
Tokens kept for herself	
Rebate received from donations towards toothpaste	
Rebate received from donations towards toothbrushes	
Total Tokens she has after rebates	

Questionnaire [common to all experiments with the exceptions noted below]

1. Age:
2. Gender:
3. Major:
4. Family income:
 - a) less than 50,000
 - b) between 50,000 and 75,000
 - c) between 75,000 and 100,000
 - d) between 100,000 and 150,000
 - e) between 150,000 and 200,000
 - f) more than 200,000
5. What is your political view:
 - a) conservative
 - b) moderate
 - c) liberal
6. How important is religion in your life:
 - a) very important
 - b) important
 - c) somewhat important
 - d) not important
7. During the past 12 months how much money have you donated for charitable causes:
 - a) Less than \$5
 - b) Between \$5-\$10
 - c) Between \$10-\$20
 - d) More than \$20
8. [only in experiments Subs and Subs-M] How well do you know the **Animal Rescue Organizations in Ann Arbor**, please rate it on a 0 to 10 scale where 0 indicates no prior information at all and 10 indicates a perfect knowledge about these organizations:
9. [only in experiments Subs and Subs-M] How well do you know the **Homeless Shelters in Ann Arbor**, please rate it on a 0 to 10 scale where 0 indicates no prior information at all and 10 indicates a perfect knowledge about these organizations:
10. [only in experiments Comp and Comp-W] What do you think the likelihood of a homeless person to own a toothbrush? Please rate it on a 0 to 10 scale where 0 indicates not likely and 10 indicates extremely likely:
11. [only in experiments Comp and Comp-W] What do you think the likelihood of a homeless person to own a toothpaste? Please rate it on a 0 to 10 scale where 0 indicates not likely and 10 indicates extremely likely: