

WORKING PAPERS IN ECONOMICS

No. 03/20

INGRID OVIDIA TELLE AND SIGVE
TJØTTA

INTERPRETING REDISTRIBUTION IN
THE SPECTATOR GAME



Department of Economics
UNIVERSITY OF BERGEN

Interpreting Redistribution in the Spectator Game

Ingrid Ovidia Telle and Sigve Tjøtta
Department of Economics
University of Bergen, Norway
April 16, 2020

Abstract

Spectators act as a third party, and their decisions affect the payoff for other subjects but not for themselves; there is no trade-off between “one’s own” and “others” payoff. This feature has caused spectator design to emerge as tool to measure spectators’ inequality preferences as redistribution among “others.” Here, we conducted a spectator experiment in which we fixed the redistribution choice set and varied the salience of the “no distribution” choice. We found a strong effect from this; in the more salience treatment, the inequality that the spectators implemented increased from medium, at 0.34, to very high, at 0.62. After the spectators made their redistribution choice, we asked them what motivated their choice. Analyzing the answers gave support that non-distributive norms matters in the spectator situations.

JEL classifications D63; D90

Keywords Spectator game; measurement of inequality; salience; exit option

1. Introduction

Spectator games have emerged as a tool in the field of behavioral economics to measure inequality preferences (Cappelen et al. 2013, Konow 2000, Charness and Rabin 2002, Engelmann and Strobel 2004, Saijo and Akai 2009, Fischbacher et al. 2009, Coffman 2011, Almås et al. 2020). Here, the spectator acts as a third party, making decisions that affect the payoff to other subjects but not to him or herself. The attractiveness of this design lies in the fact that the spectator has no personal material interest in the decision—there is no trade-off between the self and others.

To measure inequality preference, spectators are matched with a pair of stakeholders. The spectators decide how much to redistribute from one stakeholder's endowment to the other stakeholder's endowment. Choosing equal distribution in the stakeholders' endowments is interpreted as a preference for equality. Choosing unequal distributions is interpreted as having preferences for inequality.

This prompts the question of how robust this measurement of inequality preferences is. To address this, we vary the salience of the choice of not redistributing keeping the spectator's choice set of redistribution the same across treatments. If the spectator's decision to redistribute is only driven by a preference for inequality, the effect of a more salient "no redistribution" option should not affect the spectator's decision.

We found a strong effect of making "no redistribution" more salient. The implemented inequality, measured using the Gini coefficient, increased from 0.34 in the base treatment to 0.62 in the more salient treatment. This increase from a medium level of inequality to a very

high level of inequality is significant, statistically and in magnitude. This result questions the external validity of using spectator game to measure preferences for inequality.

2. Experimental Design

To avoid deceiving the spectators, we also ran a stakeholder treatment. Upon finishing a real-effort task for 10 minutes, we gave the stakeholders a lottery ticket with equal probabilities of winning the whole prize, winning 400 bonus points, or winning nothing at all.¹ We also gave them the opportunity to exchange the ticket for a guaranteed payment of 140 bonus points, a considerably lower value than the expected reward from the lottery. We informed the subjects that each bonus point they earned had a conversion rate to 1 United States (US) cent, and that their final earnings would be paid to them upon finishing the experiment.

Upon finalizing the same real-effort task as the stakeholders, we randomly assigned the spectators in our two treatments to a pair of stakeholders that had both chosen to keep the lottery ticket. We gave them a description of the choice between lottery and a guaranteed payment the stakeholders faced.

In the basic treatment (B-treatment), we asked the spectators to type a number from 0–400 that they wanted to transfer from the winner to the loser of the lottery. The decision to transfer includes the option to redistribute no money (i.e., zero). In the more salient treatment (S-treatment), the spectators are first faced with the decision to exit or to continue to a distribution stage. If they decide to exit, the winner of the lottery keeps his or her money, and the factual redistribution is zero. If a spectator decides to enter the distribution stage, the spectator faces

¹The stakeholders received a set of five words, for example, the words “THE, EXCITING, GAME, NO, WAS.” We asked them to form a sentence or expression using four of these words. Each person had 20 seconds before the answer was automatically submitted and a new set of words was given.

the same decision as in in the B-treatment, including redistributing zero money. Screen shots from the instructions are attached in the appendix.

Data was collected online using the Qualtrics Research Suite.² We recruited a total of 268 US based participants on the online workplace Amazon Mechanical Turk in February 2015: 122 spectators in the B-treatment, 118 spectators in the S-treatment, and 28 stakeholders.

3. Results

The distribution of transfer from the winner to the loser of the lottery is presented in Figure 1. The two panels in Figure 1 show a striking difference in the spectators' redistribution across the two treatments. In the treatment where "no redistribution" was made more salient (S-treatment), 55.1% of the spectators did not redistribute, whereas only 20.5% of the spectators in the B-treatment chose "no redistribution." The number of spectators choosing an equal distribution dropped from 59.0 % in the B-treatment to 33.0 % in the S-treatment.

Table 1 reports the main aggregate statistics. The mean redistribution dropped from 157.0 experimental units in the B-treatment to 84.3 units in the S-treatment. The implemented inequality by the spectators, measured by the Gini coefficient in the corresponding two-persons stakeholder situation, increased considerable.

² Qualtrics, Provo, UT, USA (<http://www.qualtrics.com>).

Figure 1. Redistribution of bonus point, left panel B-treatment (N=122) and right panel S-treatment (N=118).

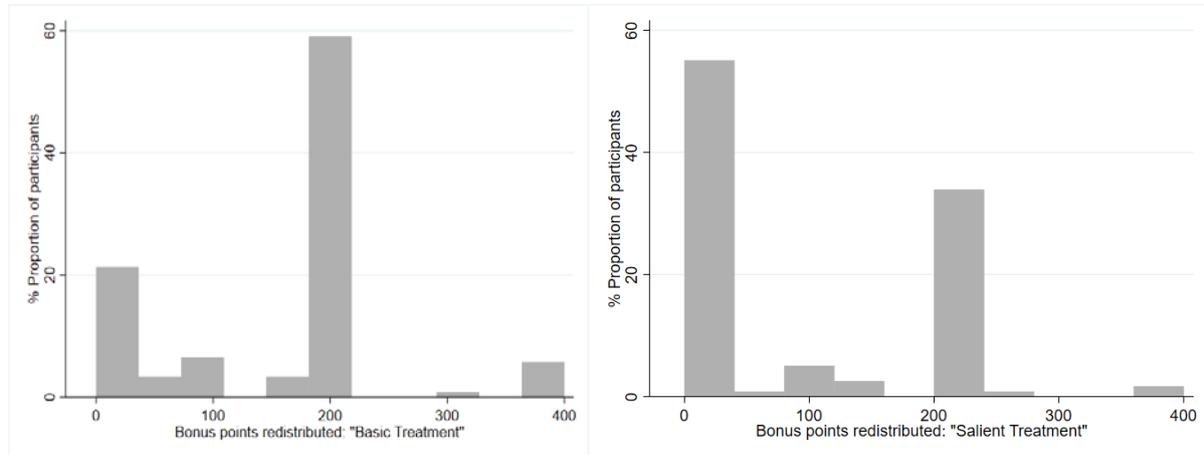


Table 1. Summary statistics for treatments

	Basic	Salient
Mean redistribution	157.0	88.9
Number choosing no-distribution (share)	25 (0.20)	65 (0.55)
Number choosing equalizing output (share)	72 (0.59)	40 (0.33)
Implemented inequality	0.34	0.62
Observations	122	118

Note: The mean redistribution is measured in experimental unit points ranging from 0–400. For the S-treatment, the redistribution of the spectators who chose to exit is set to 0. “Implemented inequality” is the mean Gini coefficient.

The OLS estimated effect of the S-treatment showed a reduced redistribution by 72.6 experimental points ($p < 0.01$) and an increased implemented inequality by 0.278 ($p < 0.01$).

The treatment effects were robust to the inclusion of the background variables of gender, age, education, and political orientation as controls.

4. Discussion

An attractive feature of the spectator design is that the spectators' decisions affect others' payoff, not their own. In our design, we kept the others' payoff constant and varied the level of salience of not redistributing. Making the "no redistribution" option more salient substantially altered preferences for inequality. Hence, our result demonstrates that spectators' redistribution behavior cannot be driven by preferences for inequality only.

As there are no payoff consequences for spectators, social norms may explain spectators' behavior. Spectators care about how they perceive themselves. How do we judge ourselves? In his 1759 *The Theory of Moral Sentiments*, Adam Smith writes, we "endeavor to examine our own conduct as we imagine any other fair and impartial spectator would examine it" (III.1.2, p. 110). Smith tells us that in the process of judging ourselves, we place ourselves outside of ourselves and judge our conduct in the same way as a fair and impartial spectator would.

In this process of judging ourselves, we consider whether the decision is in line with social norms in this situation (Smith, 1759, VII.iii.3.15, p. 326). The spectator's situation is a complex one with a multitude of corresponding and conflicting social norms. It involves taking money from one stranger and giving it to another stranger. Taking is injustice—it harms others. Giving is beneficence, as it is doing good toward others. Both stakeholders have chosen to participate in the lottery with a winner and a loser. Intervening and redistributing outcomes of someone's voluntary choices may be considered a norm violation, according to some spectators. Other spectator follows norms of equalizing outcomes between the stakeholders.

Moreover, in deciding the proper action to take in a situation, we also consider the intentions among the involved agents including the experimenter (Smith 1759, VII.iii.3.15, p. 326).

Keeping the spectator's redistribution choice set constant but varying the salience of the "no redistribution" choice may make the experimenter's intention clearer—it may be more proper to follow non-distributive norms in this situation, causing spectators to choose not to redistribute.

To explore our claims that non-distributive norms matter, we asked the spectators after they made their redistribution choice the following open-ended question: "What motivated your redistributive decision?". We classified the answers into four categories: distributive motivations like "I just want to be fair and gave each person 200 points" (subject B 99); non-distributive answers like "I just don't think it is my right to interfere" (B10); both distributive and non-distributive explanations; and ambiguity.

Making the "no-distribution" more salient increased the number of non-distributive motivations, from 16.4 percent in the B-treatment to 44.1 percent in the S-treatment. The distributive motivation decreased, from 46.6 percent in the B-treatment to 28.0 percent in S-treatment. Conditional on choosing "no distribution", the most common motivation was non-distributive norms in both treatments. In the B-treatment, 25 out of 122 chose "no redistribution". Nineteen of these 25 (76.0%) were motivated by non-distributive norms. In the S-treatment, 65 out of 118 chose not to redistribute. Among these 65 spectators, 52 (80.0%) were motivated by non-distributive norms. Conditional on choosing equal distribution, the most common motivation was equality in outcomes. In the B-treatment, 72 out of 122 spectators chose equal distribution. Among those 72 spectators, 54 (75.0 %) were motivated by fairness in terms of equalizing outcomes. In the S-treatment, 40 out of 118 spectators chose to equalize between the two stakeholders. Among those 40 spectators, 30 (75 %) were motivated by fairness of equal outcomes.

We conclude that the inequality implemented by the spectators cannot measure preferences for equality of outcome only. Our text analyse is explorative. With this caveat, we infer that non-distributive norms matter for spectators. Moreover, in line with Adam Smith's moral theory, making the "no redistribution" option more salient, it may be more proper to follow non-distributive norms in this situation.

Acknowledgements

We thank Thomas de Haan, Mathias Ekström, Nina Serdarevic, and Eirik A. Strømmland for discussion and comments. A special thanks to Sebastian Fest for helping us to run our experiment. We thank Småforsk at the University of Bergen for financial support.

References

- Almås, I., Cappelen, A. W., & Tungodden, B. (2020). Cutthroat Capitalism Versus Cuddly Socialism: Are Americans More Meritocratic and Efficiency-Seeking Than Scandinavians? *Journal of Political Economy* (forthcoming).
- Cappelen, A. W., Konow, J., Sørensen, E. Ø., & Tungodden, B. (2013). Just Luck: An Experimental Study of Risk-Taking and Fairness. *American Economic Review*, 103(4): 1398–1413.
- Charness, G., & Rabin, M. (2002). Understanding Social Preferences with Simple Tests. *The Quarterly Journal of Economics*, 117(3): 817–869.
- Coffman, L. C. (2011). Intermediation Reduces Punishment (and Reward). *American Economic Journal: Microeconomics*, 3(4): 77–106.
- Engelmann, D., & Strobel, M. (2004). Inequality Aversion, Efficiency, and Maximin Preferences in Simple Distribution Experiments. *American Economic Review*, 94(4): 857–869.
- Fischbacher, U., Kairies, N., & Stefani, U. (2009). Performance, Productivity and Fairness: An Experiment and the Distribution of Joint Production. *Discussion Paper Series in Economics and Management*: 9–12.
- Konow, J. (2000). Fair Shares: Accountability and Cognitive Dissonance in Allocation Decisions. *The American Economic Review*, 90(4): 1072–1091.
- Smith, A. (1759). *The Theory of Moral Sentiments*. Indianapolis: Liberty Fund (Glasgow ed. 1976).

APPENDIX

Interpreting Redistribution in the Spectator Game

April 16, 2020

Appendix A Recruitment and text boxes

We conducted the experiment at the online workplace Amazon Mechanical Turk (MTurk) in February 2015. Only subjects with a location in the United States were eligible for participation. Participants needed to have a total of 1,000 previously approved MTurk tasks and an approval rate of 95% to be included in the sample. We recruited a total of 268 participants: 28 stakeholders, 122 spectators in the B-treatment, and 118 spectators in the S-treatment. Text boxes show the screens for the two treatments.

Text box A.1 Screen for the B-treatment

You will determine the distribution of bonus points of two other participants that we are going to refer to as person X and person Y. Both persons have worked on the same task for 10 minutes and their payment was determined in the same way.

Person X as well as person Y initially received a lottery ticket. Person X and Person Y then chose to keep the lottery ticket. The result was that person X earned 400 bonus points from working while person Y earned 0 bonus points from working.

In the field below you can write down how many of the bonus points earned by the two participants, 400, you want to give to person Y. Person X will receive the points you do not give to person Y. Remember that your choice can decide how much each of the two other participants will be paid for the work task.

Spectators that were randomized into the Salient treatments group were given the instructions in Textbox A-2 . Only participants that chose to redistribute were shown the page containing the distribution field shown in Textbox A. 3.

Text box A.2 Screen for the S-treatment

You may determine the distribution of bonus points of two other participants that we are going to refer to as person X and person Y. Both persons have worked on the same task for 10 minutes and their payment was determined in the same way.

Person X as well as person Y initially received a lottery ticket. Person X and Person Y then chose to keep the lottery ticket. The result was that person X earned 400 bonus points from working while person Y earned 0 bonus points from working.

- I want to redistribute
- I do not want to redistribute

Text box A.3 Screen for subjects in the S-treatment conditional on choosing “I want to redistribute” in the previous screen (Table A.2)

In the field below you can write down how many of the bonus points earned by the two participants, 400, you want to give to person Y. Person X will receive the points you do not give to person Y. Remember that your choice can decide how much each of the two other participants will be paid for the work task.

APPENDIX B Summary Statistics and Regressions

Table B1 Summary statistics for treatments

	Basic	Salient
Mean redistribution	157.0	88.9
Number choosing no-distribution (share)	25 (0.20)	65 (0.55)
Number choosing equalizing output (share)	72 (0.59)	40 (0.33)
Implemented inequality	0.34	0.62
Age (years)	37.4	36.7
Education	4.3	4.4
Political orientation	2.6	2.6
Female	0.48	0.42
Observations	122	118

Note: The mean redistribution is measured in experimental unit points ranging from 0–400. For the S-treatment, the redistribution of the spectators who chose to exit is set to 0. “Implemented inequality” is the mean Gini coefficient. “Education” is a scale variable from 1–8, where 1 = less than high school, 2 = high school/GED, 3 = some higher education, 4 = two-year college degree, 5 = four-year college degree, 6 = master’s degree, 7 = doctoral degree., and 8 = professional degree (JD, MD). “Political orientation” is a scale variable from 1–5, where 1 = very liberal and 5 = very conservative. “Female” is a dummy variable set at 1 if the spectator is a female.

Table B.2 OLS regressions: Spectators’ redistribution

	1	2
More salient	-72.65***	-69.90***
	(13.24)	(13.14)
Female		21.17
		(13.20)
Age		0.65
		(0.60)
Education		-8.68*
		(4.71)
Political orientation		-8.83
		(6.16)
Constant	157.0***	182.6***
	(9.28)	(35.12)
N	240	240
R2	0.112	0.146

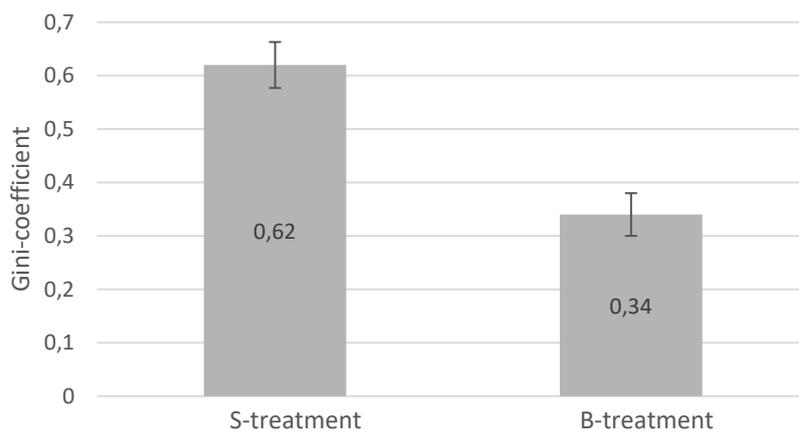
Notes: Standard errors in parentheses (* p<0.10, **p<0.05, *** p<0.01). The mean transfer is measured in experimental unit points ranging from 0–400. For the S-treatment, the transfer of the spectators who chose to exit is set to 0. “Implemented inequality” is the mean Gini coefficient. “Education” is a scale variable from 1–8, where 1 = less than high school, 2 = high school/GED, 3 = some higher education, 4 = two-year college degree, 5 = four-year college degree, 6 = master’s degree, 7 = doctoral degree., and 8 = professional degree (JD, MD). “Political orientation” is a scale variable from 1–5, where 1 = very liberal and 5 = very conservative. “Female” is a dummy variable set at 1 if the spectator is a female.

Table B.3 OLS regressions on spectators' implemented inequality

	(1)	(2)
More Salient	0.278***	0.264***
	(0.058)	(0.058)
Female		-0.118**
		(0.058)
Age		-0.004
		(0.003)
Education		0.037*
		(0.027)
Political orientation		0.020
		(0.027)
Constant	0.338***	0.324**
	(0.041)	(0.155)
N	240	240
R2	0.087	0.126

Notes: Standard errors in parentheses (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). The mean transfer is measured in experimental unit points ranging from 0–400. For the S-treatment, the transfer of the spectators who chose to exit is set to 0. “Implemented inequality” is the mean Gini coefficient. “Education” is a scale variable from 1–8, where 1 = less than high school, 2 = high school/GED, 3 = some higher education, 4 = two-year college degree, 5 = four-year college degree, 6 = master’s degree, 7 = doctoral degree., and 8 = professional degree (JD, MD). “Political orientation” is a scale variable from 1–5, where 1 = very liberal and 5 = very conservative. “Female” is a dummy variable set at 1 if the spectator is a female.

Figure B.1 Implemented Gini-coefficient in Baseline treatment (B) and the more salient treatment (S).



Appendix C Respondents' motivation

After the spectators made their distribution choice, we asked them the following open-ended question: "What motivated your redistributive decision?" We classified the answers into four categories:

P : Non-Distributive (procedure) motivations "I just want to be fair and gave each person 200 points" (subject B 99);

O: Non-distributive (outcome) motivations like "I just don't think it is my right to interfere" (B10);

B: Both distributive and non-distributive explanations;

A: Ambiguity, misunderstanding such as "Person X was more deserving because of his hard work" (B5).

Table C.1 Summary Statistics classifications of motivations

	X = Points redistributed					Share
	X=0	0 < X < 200	X=200	200 < X <= 200	Total	
B-treatment:						
Non-distributive (P)	19	1	0	0	20	0,16
Distributive (O)	0	3	54	0	57	0,47
Both (B)	0	3	1	0	4	0,03
Ambiguity (A)	6	10	17	8	41	0,34
	25	17	72	8	122	
S-treatment:						
Norms (P)	52	0	0	0	52	0,44
Distributive (O)	0	3	30	0	33	0,28
Both (B)	0	4	0	0	4	0,03
Ambiguous (A)	13	3	10	3	29	0,25
	65	10	40	3	118	

In the table C.2 below, we have included the following information:

The first column (Resp.) lists all respondents within int Basic treatment (B) and the Salient (S) treatment.

The second column (Cat.) contains qualitatively assessed categories indicating respondents' motivation.

The third column (Redist.) contains the amount transferred to the loser of the lottery (0-400). We assigned the value zero to respondents that chose not to redistribute in the S-treatment.

The fourth column gives respondents' complete answers.

Table C.2 Subjects motivations

Resp.	Cat.	IO	Redist.	Motivation
Basic Treatment (B)				
B1	P		0	Both participants willingly accepted the lottery tickets knowing the risks. As stated, the result was that X got 400 points while Y got 0 points. This is the result of chance and how lottery tickets play out. The participants were not told that a third party would be deciding who gets what. It would be unfair for me to alter what chance had afforded either participants because neither of them agreed to that arrangement.
B2	P		0	It was only fair. If X won the lottery they should received the promised points.
B3	P		0	They both made the same gamble, X won and Y did not. Y had an option to trade for safe points, but chose to gamble the points. As a result, I think that they need to have the outcome of the choices that they made. Y risked points and lost, simple as that. If Y chose not to use the safety net, I am not going to provide one for them.
B4	P		0	I gave them what they earned. The one that earned nothing got nothing.
B5	A		0	Person X was more deserving because of his hard work.
B6	P		0	I just don't think it is my right to interfere
B7	P		0	They both knew the risks as well as the reward. It is only fair.
B8	A		0	I wanted X to receive the most possible points.
B9	P		0	Both person X and Y had the choice of keeping the lottery ticket with a chance to win either 400 point or 0 points. They also had the option of trading in their lottery ticket for a guaranteed 140 points. They both had the same choices to make, and both chose to keep the lottery ticket. X won and Y didn't, that was the risk they both took.
B10	A		0	Person X did the most work so I thought they deserved the most bonus points.
B11	P		0	Both persons took a risk that they knew with cashing in their lottery ticket (instead of choosing 140 sure points). Therefore, they should each get the corresponding consequences of their risk. While it would be nice for the loser to get some points, it's not fair to take from the winner, since they both knew the risk and took it.
B12	P		0	Person x won the lottery and should receive the full 400 points as promised. While both of them getting some sort of bonus would be a nice gesture I don't feel its fair to short the amount promised to the person who actually won.
B13	P		0	It's the luck if the draw. X got a winning ticket and Y didn't. X benefits from his good fortune, Y suffers from his bad. Cruel world but those were the rules going in and Y knew it.
B14	P		0	The point distribution was decided by lottery; X and Y agreed to that before doing the task. X got 400 and y got 0. despite that fact that you gave me the ability to change that, I am not. That is the nature of making choices; If one makes a bad one, on has to live with the consequences or fix it one's self. It's not my or anyone else's place to change that.
B15	P		0	Being fair. They both took a gamble. One of them won and the other lost. I could not take away any part of the winnings belonging to the one who gambled and won and give it to the one who gambled and lost without being unfair to the one who won. They both knew the risks and took a chance. They have to live with the decisions they made. It is not right for me to change the rules after the fact.
B16	P		0	I simply gave them what was owed to them. When you enter the lottery there is a good chance you will not win anything.
B17	P		0	I feel that both of them risked the lottery instead of the safe choice, so both of them should get what the results of the lottery were. I do not think it is my place to redistribute the winnings.
B18	P		0	They made the decision to select the lottery option. They knew the risks involved. I chose to give Y zero points because that was the outcome of the lottery.
B19	P		0	They both took a 50% gamble. One won and one lost. That's fair.
B20	P		0	Both participants had the same right to either choose a lottery ticket, or choose the guaranteed bonus of 140 points. I do not think it would be fair to take away from X to reward Y for Y make a decision that earned 0. Y chose their own fate.
B21	P		0	Person Y made a conscious decision to opt for the lottery. I shouldn't change the outcome.
B22	P		0	I think they should have won what they orriganally started with, and I did not want to take from one, just to give toi the other
B23	A		0	Because its a risky outcome

B24	A	0	They took a chance and gambled. Sometimes when you gamble, you lose. Them's the breaks.
B25	A	0	Person "Y" must either not have been completing the task, or incorrectly completing it. They did not earn any bonus points on their own, and I believe Person "X" deserves to keep all that they did earn.
B26	O	20	Person X had worked to earn 400 bonus points while person Y earned 0. I only gave person Y points out of sympathy.
B27	B	50	Even though Person Y willingly chose to keep their lottery ticket, and earning 0 points was a risk, I still wanted to give them a token amount because of the work they did without taking too much from Person X who legitimately won the lottery portion.
B28	P	50	Person Y made their choice and it wasn't fair to take much, but at the same time they did work
B29	O	50	I wanted them to have some bonus
B30	B	50	they both took a chance, and person x was lucky enough to win the 400 points, where as person y lost all of his points. I was being nice by giving him 50 of the bonus points. It was a gamble.
B31	B	100	They both worked on the task, so I figured since X got the 400 and Y got nothing, I would throw some over to Y. I only gave Y 1/4 and made sure that X was still rewarded by having a lot more points.
B32	B	100	Person x officially won the lottery so should get more. But Y could get something.
B33	B	100	It felt like a good way to at least provide some reward to person Y, who may have done similar work but wouldn't get a bonus here. Person X still gets 300 points, but person Y comes away with a little bit of money as well...though less than if they'd have cashed out.
B34	A	100	TO BE SOMEWHAT FAIR WITHOUT CHEATING PERSON X OUT OF THEIR GOOD FORTUNE
B35	B	100	I wanted to reward the non winning participant with some points so that they earned some points for working on the task.
B36	A	100	quite motivated. I think it's fair.
B37	O	100	I wanted to share a portion of the points to the other person. Or I feel that 100 points is a fair value to give the other person
B38	A	100	because I think I was one of those who didn't earn any points on another HIT posted earlier today, and I want that bonus. But I didn't earn it. And I'm not even sure if these two HITs are related but I suspect they are. If they are, I may stand to make more money from this. If they aren't, I don't really lose anything. I must admit it feels a bit wrong to take from Player X's pool to give to Player Y if Player Y didn't earn the points theirselves.
B39	B	150	I wanted to balance out a little of what was earned so that they both would receive bonuses, but the luckier person still got more bonus points.
B40	B	150	The desire to make the situation more fair since both parties had put in the same amount of work but one was getting 400 to the other's 0. I considered splitting the payment 200-200, however this only felt appropriate if they had an agreement at the outset. By selecting 250-150, the winner still gets substantially more than the other player but the other player is compensated for his efforts too. / / Note that it was not disclosed whether the other players were aware of the lottery results prior to my redistribution decision and this could influence the redistribution. While the payment is not fair, it's also not fair to split a lottery ticket after it has won since it means that not everyone has weathered the risk equally.
B41	B	150	They both did a task for 10 minutes and should be rewarded. The lottery was random so one got lucky and another didn't.
B42	A	180	tried to keep it fair
B43	O	200	I wanted them to both have the same amount
B44	A	200	I just wanted to be fair.
B45	O	200	I WANTED TO BE FAIR AND GIVE THE BOTH A BONUS
B46	O	200	Split it evenly and fairly because they both did the same amount of work.
B47	O	200	I feel each member x and y should equally be rewarded for their work.
B48	O	200	Both did the same amount of work.
B49	O	200	The decision each individual (Person X and Person Y) was given was ambiguous. I wondered: "Did they know a third person (me) would be deciding their fate?" As such, though Person Y chose a ticket that did not reward a bonus, I did not feel it was right to deny Person Y given the possible ambiguity of the situation. As for Person X, again, all they did was make a random decision without all the facts as well. In the end, I felt equality was better than favoring one individual over the other, and felt this was only right given the circumstances surrounding the decision-making process.
B50	O	200	I wanted to be fair and even, since they both worked on it.
B51	O	200	Since they completed the same task, I would choose to give them the same bonus.
B52	O	200	FAIRNESS , AN EQUAL DISTRIBUTION OF THE PAY
B53	O	200	What motivated my decision is that I like to play fair. SO I split the points between x and y.
B54	O	200	I think its fair they share its what I would do so based the decision on my own behavior in the situation
B55	O	200	split the amount in half between the two
B56	O	200	Equality
B57	O	200	I like to be fair. I understand person X was losing 200 points by my decision, but I'd rather they both get something, rather than nothing.
B58	A	200	I wanted to make it fair since they both worked on the task
B59	A	200	MAKE IT FAIR
B60	O	200	i didn't get to see their answers so i decided to be fair and split in half, because i know i worked hard and this was a hard task. I believe we all put in great effort and work hard on all surveys so it just makes sense to split it in half.
B61	O	200	I wanted to split things evenly.
B62	O	200	I WAS TRYING TO BE FAIR IN DISTRIBUTING THE POINTS BETWEEN BOTH PARTICIPANTS.
B63	O	200	I feel that each person should get an equal share
B64	A	200	To be fair

B65	A	200	I wanted to be as fair as possible.
B66	A	200	They were doing the same task so I wanted to make it fair for both of them.
B67	O	200	I wanted them both to receive the same amount. It is only fair for me to divide the points evenly given that I am responsible for whether Person Y has a second chance at a bonus.
B68	O	200	I wanted an equitable distribution among turkers.
B69	O	200	Both people completed the task, bot opted to go for the risky possible 400 points instead of the safe 140. That meant that I had no reason to favor or disfavor either X or Y. Since one had a winning ticket and there was a total of 400 points to distribute I distributed 200 points to each. Both then came out ahead of the sure thing 140 and both had made some profit by their deciding to take a chance. Since X hadn't earned the 400 by harder work or anything other than blind luck I didn't feel that his sacrifice, unwilling though it may have been, was morally or ethically wrong for me to make.
B70	O	200	Man, everybody doing surveys on mturk is working extra hard and it would be nice if something was thrown everybody's way. I guess that makes me a socialist. So be it.
B71	O	200	I wanted to even out the bonus for both, since they did the same task.
B72	A	200	Fairness
B73	O	200	WANTED EVERYONE TO HAVE A FAIR OUTCOME
B74	O	200	It seemed fair to divide the points by half since they both made the same decision.
B75	O	200	With limited information, other than what was given, I opted for equal dististribution of bonus points. However, if X was already given the 400 points, then I wouldn't take them away and redistribute half of them to Y.
B76	A	200	Morals are my guide.
B77	A	200	Fairness
B78	O	200	i felt it was fair to separate the points equally
B79	O	200	I think it was to share equally. If I understand, this way the points will be shared equally.
B80	O	200	I thought that they should both get the same amount since they done the same amount of work.
B81	O	200	I wanted both people to get an equal bonus.
B82	O	200	If they both did the work and chose to keep the lottery ticket it only seemed fair to split the points evenly.
B83	A	200	I was trying to be fair.
B84	O	200	Both chose the lottery ticket, so I thought they deserved equal compensation.
B85	O	200	If they both worked for the same length, the should get the same payout
B86	O	200	They both did the same task so they should get the same bonus
B87	O	200	Since they both went for the lottery, I thought it would be nice if they both got 200 points instead of all 400 going to just one person.
B88	O	200	I like things to be even.
B89	O	200	fairness...I guess. I really thought of leaving the points alone...because they each knew the risk beforehand, but impulsively I chose to split the points
B90	O	200	I feel that it's only fair that two participants who did the same work should get the same reward, so I split the 400 points evenly between them. I regret that X "lost" something as a consequence, but they only received it due to luck in the first place so it was not really uniquely deserved by them anyway.
B91	O	200	I tried to be fair and even.
B92	A	200	person Y did the same task and got nothing
B93	A	200	wanted to be fair
B94	O	200	I wanted the other participant to receive a good amount of points.
B95	O	200	Splitting the 400 points in half and each getting a half or 200 points is the fair thing to do.
B96	O	200	I believe in fairness over luck. Life may not operate that way, but if both persons completed the study then each deserves the same amount of bonus points.
B97	A	200	i wanted to be fair since they both worked on the same type of task for the same amount of task
B98	A	200	I JUST WANTED TO BE FAIR.
B99	A	200	I thought it was the most fair, since X did nothing special do deserve the points.
B100	O	200	I just wanted it to be fair and gave each person 200 points.
B101	O	200	I want everyone to get the same share
B102	A	200	Fairness
B103	B	200	I just divided the 400 points in half. I thought about giving the whole 400 to the person who didn't receive it from the lottery, but thought that might be unfair. Tough decision.
B104	O	200	I just think both people deserved to have a share of the money.If they both worked to the best of their ability they should be equal in the extra pay.
B105	O	200	I wanted to split it in half.
B106	A	200	I was trying to be fair
B107	O	200	They both did the same task and they both made the same decision about keeping a lottery ticket (not taking the safe payment). I just decided to split it down the middle, even though I understand that both of them chose to accept some risk in their choice that they would get nothing paid out from the lottery.
B108	A	200	Fairness
B109	O	200	I divided the tickets equally
B110	O	200	to be fair and reward each equally since they both did the same task
B111	O	200	I wanted to be fair, so I divided the points evenly. I didn't think it was fair one person got 0 points.
B112	O	200	I hate when my pay is determined by random chance I have no control over. I think giving each the same bonus is a much more fair solution than one being lucky and the other being unlucky.
B113	O	200	Split it down the middle
B114	O	200	I wanted both participants to get some of the bonus so I split the 400 in half.
B115	O	300	Lotteries are poor investments, but I wanted a more fair outcome
B116	A	400	They both chose the lottery. Any other outcome would be unexpected.
B117	A	400	They willingly participated in the lottery so they expect to win the 400 ir noting. It only seems fair to not change anything about the results.

B118	A		400	so they would get equal points since they did equal work and both made the same decisions. Seems the fairest.
B119	A		400	The person worked, therefore they deserve it. You take your chances on a lottery ticket.
B120	A		400	Since Player Y received no bonus from the lottery, and X did, I decided to give Y those full points.
B121	A		400	I don't think it was fair that Y didn't get any point so I took all the points gave it to Y.
B122	A		400	since participant x already won/recvied 400 points already, i felt it was fair for the other participant received the same amount as well
Salient Treatment				
S1	P		0	I don't know person x or person y so I prefer to move things along as is.
S2	P		0	They made their choice to gamble, and the gamble resulted in a natural outcome. I see no reason to meddle.
S3	P		0	They both decided on the lottery ticket and knew the risk of getting nothing. As much as I would like to more evenly distribute it so the one person did not end up with no bonus, it would be unfair to the winner to take the money they won fair and square.
S4	P		0	It was person X's luck that he won the lottery. It will be unfair to redistribute it.
S5	P		0	They were each aware of the risks they were taking on by selecting the chance option. One was lucky and one was unlucky - I dont think it would be fair to redistribute based on their choices.
S6	P		0	I figured that I would not interfere
S7	A		0	Because person Y has no points
S8	P		0	it's a lottery and it should remain as such
S9	P		0	It was a fair choice. Each person began with the same chance and they made the decision knowing the possible outcomes. I don't think I should take from one to give to another solely to make sure everyone gets something.
S10	P		0	They both chose the lottery option, knowing there's a chance to lose their bonus. X just happened to get lucky, and Y was unlucky. And both did the work, so neither deserved to win more than the other.
S11	A		0	I would rather not redistribute
S12	P		0	I feel that it would be wrong to take away the winnings of one contestant to give to another.
S13	P		0	They both made their choices
S14	P		0	they chose the lottery. if they win or lose thats a chance they took.
S15	P		0	Because this is lottery and it depends on luck 100%, so when something depends on luck, I depend on my gut feeling not my mind
S16	A		0	The fact that sometimes life isn't fair, I guess.
S17	P		0	I wanted to respect the choices made by these participants.
S18	P		0	Initially I wanted to redistribute to make sure everyone walked away with an equal amount of points, but then I remembered that both people had the same opportunity for a safer payout but chose instead to chance getting either 0 points or 400. Because of this I thought it would be very unfair to take away from the person who won 400 points.
S19	P		0	I think it is fair that both players decided to choose the lottery ticket knowing the odds of wining 400 bonus points or playing it safe for 140 points. So since only one has won the bonus prize then I think it should stay that way.
S20	P		0	Each person made decision that she/he wanted. They were freely to make this decision. So, each got what deserve.
S21	A		0	hatred of socialism
S22	A		0	I rather have guaranteed money.
S23	P		0	They should accept the results from the choices they made.
S24	P		0	Both x and y took a gamble. They knew they had a chance of getting 0 but went for the prize and stuck with their guns. They could have played it safe and taken the 140. But they didn't and chose the gamble. Just because the gamble didn't work out for one of them, I'm not re-distributing. They took a calculated risk and failed for one of them.
S25	P		0	They took their chances. They knew the odds so they need to honor the outcome.
S26	P		0	NOTHING HAD GONE WRONG, SO WHY SHOULD I MEDDLE WITH THE DECISIONS THEY EACH MADE FOR THEMSELVES? THEY'RE ADULTS. NEITHER GOT AN UNFAIR OUTCOME - THEIR CHANCES OF WINNING 400 POINTS WAS INDEED 50:50.
S27	P		0	They made their choice to keep the lottery ticket and they should live with the results. It is not my place to take points from the person who won and give them to the person who lost.
S28	A		0	Inertia
S29	A		0	I worked hard and i dont want to distribute what i have earned
S30	P		0	They both chose to gamble the money, so if one won and one didn't, it seems fair enough to me.
S31	P		0	THEY MADE THEIR CHOICES KNOWING THE OUTCOME WAS A RISK I HONORED THEIR CHOICES
S32	P		0	They each made a choice so I see no need to redistribute
S33	P		0	The bonus was a chance situation. A redistribution would be a fairness situation.
S34	P		0	I made my decision because because each player made their own decision and knew the consequences of their actions.
S35	A		0	I was looking at the concept that one wins and the other doesn't.
S36	P		0	They made the choice to enter the lottery. They had the option to take the fixed lower payment instead of enter the lottery. The assumed the risk of possible getting nothing.
S37	P		0	THEY both gambled on a chance at 400 points. Person X was luckier and I feel they should keep their winnings.
S38	P		0	I went with what I thought to be fair. When you play the lottery, you play to win or lose. One of the participants lost, and the other won. That's as fair as the lottery can be. I don't see it fit for me to mess with that.

S39	P	0	Well, each person made a decision. They both had the opportunity to play it safe but they gave that up to take a chance. When you do that then you have to take the consequences of the chance.
S40	P	0	Fair is fair. I don't believe in tampering with the results simply because they were lopsided.
S41	P	0	They both gambled, and one lost. I don't want to alter their choice. They made their choice and can live with it.
S42	P	0	Each person made their choice. The outcome should not be changed.
S43	P	0	It was said in the instructions that the person had a chance to win 400 or win nothing. Sometimes you win and sometimes you lose, those were the rules so i dont see any need in changing the outcome from what was originally stated.
S44	A	0	fairness
S45	P	0	I decided to let the original rules stand rather than intervene and alter the results.
S46	A	0	I prefer a sure thing
S47	P	0	I let the chips fall as they may. No reason for me to change what luck already decided.
S48	P	0	Both people chose the lottery ticket knowing they had an even chance at getting 400 or getting 0. One person won and one lost, so I don't see any reason to intervene.
S49	P	0	I do not know the people personally, so I do not want to change the distribution because I have no idea if either of them deserve it or not. Since both people knew they were entering a lottery, they can not really be disappointed with the outcome because they knew the possible outcomes and were explained the odds ahead of time.
S50	P	0	I figured they both had a chance at winning evenly so I thought that what you picked is what you get
S51	P	0	The rules of the task was a lottery, it doesn't matter that they both put in the same amount of time.
S52	P	0	I decided that both knew it was a lottery and knew the risks so why change the outcome
S53	P	0	The individuals made their decisions independently knowing that they might have a positive or adverse outcome. X had a positive outcome and Y had an adverse outcome. I feel that the results were fair and there should be no redistribution.
S54	P	0	They had the option of taking a safe payment or risking it. I felt that redistribution would go against what they agreed to.
S55	P	0	Both made the decision knowing what the chances were of keeping the lottery ticket. That was their choice--one was lucky and the other wasn't.
S56	A	0	Unsure! Though I felt it was unfair to take away from Person X something that they may have earned from working hard, and possibly giving it to Person Y for maybe doing nothing at all.
S57	A	0	They keep way they earned, there's no salaries in here. /
S58	P	0	It is based on luck, and it would be unfair
S59	P	0	They made the decision to take a chance knowing the potential payout
S60	A	0	i thought it was a good choice
S61	P	0	THE both knew the risk involved when they decided to take the lottery instead of the fixed payment. And it wouldn't be fair to redistribute the points and take some away from person X
S62	P	0	It should not be split unless they were working as a team .
S63	A	0	personal preference
S64	P	0	Since it was a lottery they knew the risks, therefore it would be unfair to redistribute.
S65	P	0	They know what they were getting into when they took chances.
S66	O	50	Just because Y had no points
S67	B	100	People take risks all the time. I have taken risks in the past and sometimes it didn't work out at all. So, if I have the opportunity to help out a fellow risk taker I will. I realize that the other person could be a little miffed about the redistribution, but it is not a large amount and hopefully they will chalk it up to one more unforeseen risk.
S68	B	100	The person deserves some points for part of effort he put through.
S69	B	100	I felt that person X should get more since they had actually won, but wanted to give person y at least some bonus.
S70	B	100	i thought it would still be fair to person x if they got 300 pounds, but it would be nice for person y, who wasn't going to get any points, to get 100 points instead of nothing.
S71	A	100	I WANTED TO MAXIMIZE MY POTENTIAL OUTCOME
S72	A	100	I thought it would lead me to have a bigger outcome if I redistributed the points and I also wanted to be generous
S73	A	140	it seem fair
S74	O	140	Even though he gambled it away I'd rather they were treated a little more fairly for doing the same work
S75	O	150	person y should get something for his efforts.i think 150 for him is fair
S76	O	200	I decided to split it up evenly that way everyone would get something for their hard work. That seems fair to me.
S77	O	200	They put in the same amount of work, and both deserve to be rewarded. It seemed a little unfair leaving it all up to luck.
S78	A	200	I wanted to be fair
S79	O	200	I felt that, since the two participants worked on the task for the same amount of time (put in equal work), they should be paid equally as well. 200 points a piece seemed like a fair decision for the redistribution.
S80	A	200	FAIRNESS
S81	A	200	It appeared to be a fair outcome. Both individuals worked on the task for the same amount of time.
S82	O	200	everyone worked and the task and deserves to get some of the bonus
S83	O	200	I made the decision to give each participant 50% of the total points. Each participant had an equal amount of time invested in the task. I believe that they each deserve to be rewarded accordingly. In addition, they each took the same chance at the lottery points.
S84	O	200	Equality for the same outcomes.
S85	O	200	Since they both did the same amount of work, they should share the bonus.
S86	A	200	seemed fair

S87	O	200	They both win this way for equal effort.
S88	A	200	It seemed fair
S89	A	200	to be fair
S90	O	200	I wanted to be fair. Both participants put in the work and so both deserve a share of the bonus.
S91	O	200	To be fair and equal.
S92	O	200	To be fair to both people
S93	O	200	I want them to both have the same amount of money.
S94	O	200	I wanted to be fair and make sure all participants received points.
S95	O	200	Simply to make things fair for equal work.
S96	O	200	I always try to split things 50/50 no matter what
S97	O	200	I was motivated to make the payment fair to both participants.
S98	O	200	I thought it was fair to redistribute the points given that both took a risk.
S99	O	200	EQUALITY
S100	O	200	split it so they could share make it equal
S101	O	200	I felt they both deserved the same amount of bonus points because they did the same amount of work.
S102	O	200	I think redistributing an equal amount between participants X and Y is fair. They both worked on the same task for 10 minutes, and hence, it shouldn't be left up to chance that they get rewarded different amounts.
S103	A	200	Being fair
S104	O	200	They followed the same plan. It's only right that they get the same result.
S105	O	200	did it in the interest of fairness so nobody walked away with nothing for their effort
S106	O	200	Why not make everyone happy?
S107	A	200	I wanted to be fair to the two participants.
S108	A	200	was trying to be fair to both
S109	O	200	split the difference evenly for the same amount of work
S110	O	200	I am all about equality and think that person X and Y should have no upper hand over who gets what. I think that both of the participants should have their fair share (plus this makes fair).
S111	O	200	I wanted it to be even and fair
S112	O	200	If they each performed the same task, they should get equal pay for it.
S113	O	200	The task was the same so the bonus should be the same.
S114	O	200	It was only fair to equally divide the points not knowing or having more information to determine who performed better on the test.
S115	A	200	it should be more fair
S116	A	250	I wanted both to receive points, but Y deserved a reward for earning the lottery points
S117	A	400	It's a gamble, and you have to bet to win.
S118	A	400	I just wanted to be controlling

Department of Economics
University of Bergen
PO BOX 7802
5020 Bergen
Visitor address: Fosswinckels gate 14
Phone: +47 5558 9200
www.uib.no/econ/