# Supporting File for *Pledging one's trustworthiness through gifts: an experiment*

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#### 1. Further analyses of the data

#### 1.1 The six main studies

# 1.1.1 Non-parametric testing

The panel structure of our two datasets (the trustor dataset and the trustee dataset) does not easily lend itself to non-parametric testing. We performed a time-average for each participant in the trustor panel and the trustee panel to ease this problem. This implies that each participant appears once in each dataset instead of ten times. We then conducted one Kruskal-Wallis test on the amounts sent by trustors across the six studies of the trustor dataset and one Kruskal-Wallis test on the amounts returned by trustees across the six studies of the trustee dataset. There is, therefore, *no* repeated testing on the same dataset. The Kruskal-Wallis test "tests the hypothesis that *k* independent groups or samples are the same against the alternative hypothesis that one or more of the groups differ from the others" (Siegel and Castellan, 1988, p. 216). As reported in the paper, we find significant differences, both in the amounts sent and the amounts returned across the six studies (p<0.001).

#### 1.1.2 Table 5 (trustor behavior) robustness checks

The dependent variable suffers from truncation at o and 10. Estimating the coefficients through panel Tobit (with bootstrapped standard errors, 500 replications) leads to equivalent signs and p-values, save for the gender dummy, whose coefficient  $\tilde{\beta}_9$  is positive (as in Table 5) but insignificant. Fixed effects (FE) estimation, with bootstrapped standard errors (500 replications), allows only the estimation of *token* (significant,  $\tilde{\beta}_1$ = 1.308,  $SE_{\tilde{\beta}_1}$ = 0.214), some of the cross terms (all insignificant) and the time trend (significant,  $\tilde{\beta}_8$ = -0.045,  $SE_{\tilde{\beta}_8}$ = 0.019). The Hausman test compares regression coefficients that can be estimated through both FE and RE, i.e.,  $\tilde{\beta}_1$ ,  $\tilde{\beta}_3$ ,  $\tilde{\beta}_5$ ,  $\tilde{\beta}_7$  and  $\tilde{\beta}_8$  using default (i.e., uncorrected) standard errors. The test finds significant differences between the two sets of coefficient estimates (p=0.004). The key regressor, *token*, can be estimated through both FE and RE, and it is significant and virtually identical in magnitude in the two regressions. There is, hence, no evidence of bias in the RE estimate of the coefficient of interest  $\tilde{\beta}_1$  (cf. Dieleman & Templin, 2014).

# 1.1.3 Table 9 (trustee behavior) robustness checks

The dependent variable suffers from truncation at o and 30. Estimating the coefficients through panel Tobit, the effects of the amount received  $\tilde{\theta}_1$  and being in a fixed pair  $\tilde{\theta}_4$  are still positive and significant. Tobit also finds a significant and negative effect of the time trend. All other regressors are insignificant. FE with bootstrapped standard errors (500 replications) allows estimation of  $\tilde{\theta}_1$ =0.447 ( $SE_{\tilde{\theta}_1}$ = 0.087), significant and similar in magnitude to the effect shown in Table 9. All other coefficients are insignificant. The Hausman test finds significant differences between the two sets of coefficient estimates (p<0.001). The key regressor, trust, can be estimated through both methods, and it is significant in both.

Regressor	Coef.	Observed	Bootstrap
		Coef.	Std. Err.
trust	${\widetilde v}_1$	0.417***	0.124
trusteeSentToken	${\widetilde v}_2$	0.077	0.154
voting	${ ilde v}_3$	-0.101	0.253
voting & trusteeSentToken	$\widetilde{v}_4$	0.230	0.182
timeTrend	${\widetilde v}_5$	-0.028**	0.012
male	${\widetilde v}_6$	0.202	0.309
age	${\widetilde v}_7$	-0.009	0.114
constant	${\widetilde v}_0$	0.541	2.489

We show in Tables 1s and 2S the regression output for random and fixed couples.

\*\*\*p<0.01, \*\*p<0.05. Overall R-squared = 0.5. Only participants from the treatment studies with random pairs included (40 participants).

Table 1S: the dependent variable is the amount sent back by the trustee, random pairs only

Regressor	Coef.	Observed	Bootstrap
		Coef.	Std. Err.
trust	$ ilde{ heta}_1$	0.917***	0.151
trusteeSentToken	$ ilde{ heta}_2$	-0.609	0.623
voting	$ ilde{ heta}_3$	-0.104	1.065
voting & trusteeSentToken	$ ilde{ heta}_4$	-0.367	0.856
timeTrend	$ ilde{ heta}_5$	-0.032	0.030
male	$ ilde{ heta}_6$	1.735	1.042
age	$ ilde{ heta}_7$	0.052	0.285
constant	${ ilde  heta}_0$	0.859	6.323

\*\*\*p<0.01. Overall R-squared = 0.7. Only participants from the treatment studies with fixed pairs included (40 participants).

Table 2S: the dependent variable is the amount sent back by the trustee, fixed pairs only

To gain insights into the representativeness of our sample of participants, we can compare the payback in Cochard et al. (2004) and in our *Control Fixed* study. A difference in design limits the comparison: Cochard et al. (2004) use a multiplier of three, while we use a multiplier of two. Also, Cochard et al. (2004) only report statistics for positive sendings by the trustors. Table 2 reports the *absolute* difference between the amount returned and the amount sent, rather than the ratio of the two, because the ratio is undefined whenever trustors send no points, leading to a waste of observations. In those instances in which trustors sent a positive amount, Cochard et al. (2004, p. 34) find a ratio of points returned to three times the points sent in fixed pairs of 56.14%. For positive sendings, our ratio of points returned to (twice) the points sent in *Control Fixed* is 57.5%--very close to Cochard et al. (2004).

# 1.2 The robustness study

# 1.2.1 Further analyses of the robustness study

For comparison with the robustness study, the closest study is *Tokens-Random-Voting*. In *Tokens-Random-Voting* and *Tokens-Random-BDM*, we introduced a manipulation to create a basis for common knowledge that one of the tokens is "special." The trustors' giving behavior in the two studies appears indistinguishable (according to the Kruskal–Wallis equality-of-populations rank

test; cf. also Figure 1S, which replicates Figure 1 in the text, updated with the average number of points sent in the new treatment).



# Figure 1S: amounts given in the seven studies

Non-parametric tests fail to find differences in the trustees' decision regarding how many points to send back in the two comparable studies, *Tokens-Random-Voting* and *Tokens-Random-BDM*. Some differences are apparent in the use of the tokens. Table 3S compares 4 variables related to the tokens in the *Tokens-Random-Voting* and *Tokens-Random-BDM*, with confidence intervals.

	Observed	Bootstrapped	Normal-based [95%] Conf. Interval	
	Mean	Std. Err.		
monopoly				
Tokens-Random-Voting	0.113	0.023	0.068	0.159
Tokens-Random-BDM	0.222	0.032	0.159	0.284
token				
Tokens-Random-Voting	0.716	0.031	0.655	0.778
Tokens-Random-BDM	0.830	0.027	0.777	0.882
noObjectEndofRound				
Tokens-Random-Voting	0.045	0.016	0.015	0.075
Tokens-Random-BDM	0.329	0.031	0.269	0.390
noMonopolyEndofRound				
Tokens-Random-Voting	0.315	0.033	0.250	0.380
Tokens-Random-BDM	0.592	0.032	0.529	0.654

Table 3S: comparison of the trustees' behavior in Tokens-Random-Voting and Tokens-

# **Random-BDM** studies

More Monopoly bills, and more tokens in general, appear to have been sent in the *Tokens-Random-BDM* study whenever a Monopoly bill or token was available (observations are set to missing whenever no Monopoly or no token was available). Because of the "profligacy" in the *Tokens-Random-BDM* study, in *Tokens-Random-BDM* participants were left with no tokens at all in about one-third of the rounds, a substantial increase compared to *Tokens-Random-Voting*. Also, Monopoly bills were less available for use in the BDM study. However, there is no evidence that these differences in token behavior translated into differences in the amounts sent or returned.

We can use the new data collected for *Tokens-Random-BDM* to re-estimate the regression models presented in Table 5 (trustor behavior) and Table 9 (trustee behavior). The only modification we introduce is that we now use a *saliency* variable instead of the variable *voting*, equal to 1 in the two studies with voting and the new study with the BDM. The re-estimation leads to equivalent inferences to those presented in the paper.

Using data from the four earlier treatment studies with tokens plus the new treatment, we can further investigate whether the trustees used the token as bait. The regression output shown in Table 9 did not lend evidence to this scenario. We created a time-varying dummy variable that takes the value of 1 when the trustee sent a token in a particular round but then returned to the trustor strictly *fewer* points than he/she received (before the multiplication took place). This is the "bait" scenario. The variable is set equal to zero in all other cases: this includes cases in which the tokens were later accompanied by a payback greater than or equal to what the trustor sent (before the multiplication), as well as cases in which a token was not sent, and hence in which there was no attempt to use a bait. The variable is missing when no token was available for the trustee to send (because he/she had run out). Figure 2S shows that the proportion of baits is always less than 40%, with seemingly lower proportions in the treatments with fixed pairs.



Figure 2S: the proportion of trustees' "baits"

We use the data collected for our robustness study and the data collected in the previous six studies to perform power simulations using the new STATA<sup>®</sup> command *pc\_simulate* (Burlig *et al.*, 2020). This command is specifically suited to power calculations in panels. We perform two simulations, one for the trustor's decision regarding how many points to send; and one for the trustee's decision regarding how many points to send; and one for the trustee's decision regarding how many points to send back. The parameters for both simulations are the same:  $\alpha$ =0.05, the actual number of observations in our sample (144 total participants), half of the subjects assigned to treatment, a minimum detectable effect of 3 points (sent for the trustor, sent back for the trustee), ten rounds in which the cross-sectional units expected to play as trustors or trustees, and controlling for age and gender. The two simulations yield both  $\beta$ >0.8, the conventional threshold. Lowering the minimum detectable effect to 2 points, we are still above the conventional threshold for the trustor analysis and slightly below the threshold for the trustee.

### References

Burlig, F., Preonas, L., & Woerman, M. (2020). Panel data and experimental design. *Journal of Development Economics*, 102458.

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Siegel, S. Castellan, N.J. (1988). Non-parametric statistics for the behavioral sciences. McGraw Hill.

## 2. Instructions

# 2.1 Instructions of the study Control-Fixed

You will receive  $\epsilon_2$  for your participation and you will be able to earn an additional sum of money, and some objects, through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

### ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

#### **EXPERIMENT**

The experiment is divided into two phases. In the first phase, you will take part in a game. In the second phase, you will be asked to answer a questionnaire.

### FIRST PHASE

Through a random draw at the beginning of the game, pairs of players are formed. The pairs are fixed for the entire duration of the experiment (20 rounds of the same game).

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental points. Each experimental point corresponds to 1 euro.

Player A decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So, B will receive twice the number of points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players have an initial amount of 10 points.

All choices (how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of zero points passed.

# SECOND PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will randomly choose one round among the twenty of the second phase, and we will pay the earnings of the players in that round, plus the two euros for participation,

If you have any questions, please raise your hand and one of us will answer confidentially.

# 2.2 Instructions of the study Control-Random

You will receive  $\epsilon_2$  for your participation and you will be able to earn an additional sum of money, and some objects, through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

# ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

#### **EXPERIMENT**

The experiment is divided into two phases. In the first phase, you will take part in a game. In the second phase, you will be asked to answer a questionnaire.

#### FIRST PHASE

Through a random draw at the beginning of each round, pairs of players are formed. The draw includes players you have already played with. It is, therefore, possible to play more than once with the same player in this phase. However, the minimum interval between the two matches will be

ten rounds. In this phase, there are a total of 20 draws made before each of the 20 repetitions of the same game.

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental pointsEach experimental point corresponds to 1 euro.

Player A decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So, B will receive twice the number of points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

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Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players have an initial amount of 10 points.

All choices (how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of zero points passed.

# SECOND PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will randomly choose one round among the twenty of the second phase, and we will pay the earnings of the players in that round, plus the two euros for participation,

If you have any questions, please raise your hand and one of us will answer confidentially.

# 2.3 Instructions of the study Tokens-Random-Voting

You will receive  $\epsilon_2$  for your participation and you will be able to earn an additional sum of money, and some objects, through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

### ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

### **EXPERIMENT**

The experiment is divided into three phases. In the first phase, you will take part in a game. In the second phase, you will take part in another game. In the third phase, you will be asked to answer a questionnaire.

### FIRST PHASE

You will see images of 5 objects on the screen. All the participants present in the room at this time will see the same images on their screen. Everyone chooses one object from the screen. The

participant who chooses the object most chosen by all those who are in the room at this time, in the shortest possible time, wins 3 euros. We will then show you the votes received by each object. The winning participant learns that he/she/she won at the end of the experiment.

### SECOND PHASE

Through a random draw at the beginning of each round, pairs of players are formed. The draw includes players you have already played with. It is, therefore, possible to play more than once with the same player in this phase. However, the minimum interval between the two matches will be ten rounds. In this phase, there are a total of 20 draws made before each of the 20 repetitions of the same game.

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental points; and 5 objects shown in photos (the same ones you saw in phase 1). Each experimental point corresponds to 1 euro.

Player B moves first and decides whether to send an object to player A and, if so, which object from those available. Player A observes the choice of B and decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So, B will receive twice the number of points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A. You will also be shown the objects available to you at the end of each round.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players have an initial amount of 10 points. The objects available to each player at the end of the previous round are transferred to the next round.

All choices (which object B sends to A, how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of no object sent, and zero points passed.

THIRD PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will randomly choose one round among the twenty of the second phase, and we will pay the earnings of the players in that round, plus the two euros for participation, the possible earnings from phase 1, and the objects that the players had at the end of the twentieth round. The objects will be physically delivered (not photos of the objects).

If you have any questions, please raise your hand and one of us will answer confidentially.

# 2.4 Instructions of the study Tokens-Fixed-Voting

You will receive  $\epsilon_2$  for your participation and you will be able to earn an additional sum of money, and some objects, through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

# ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

#### **EXPERIMENT**

The experiment is divided into three phases. In the first phase, you will take part in a game. In the second phase, you will take part in another game. In the third phase, you will be asked to answer a questionnaire.

#### FIRST PHASE

You will see images of 5 objects on the screen. All the participants present in the room at this time will see the same images on their screen. Everyone chooses one object from the screen. The participant who chooses the object most chosen by all those who are in the room at this time, in

the shortest possible time, wins 3 euros. We will then show you the votes received by each object. The winning participant learns that he/she won at the end of the experiment.

### SECOND PHASE

Through a random draw at the beginning of the game, pairs of players are formed. The pairs are fixed for the entire duration of the experiment (20 rounds of the same game).

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental points; and 5 objects shown in photos (the same ones you saw in phase 1). Each experimental point corresponds to 1 euro.

Player B moves first and decides whether to send an object to player A and, if so, which object from those available. Player A observes the choice of B and decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So, B will receive twice the number of points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A.

You will also be shown the objects available to you at the end of each round.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players have an initial amount of 10 points. The objects available to each player at the end of the previous round are transferred to the next round.

All choices (which object B sends to A, how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of no object sent, and zero points passed.

## THIRD PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will randomly choose one round among the twenty of the second phase, and we will pay the earnings of the players in that round, plus the two euros for participation, the possible earnings from phase 1, and the objects that the players had at the end of the twentieth round. The objects will be physically delivered (not photos of the objects).

If you have any questions, please raise your hand and one of us will answer confidentially.

# 2.5 Instructions of the study Tokens-Random

You will receive  $\epsilon_2$  for your participation and you will be able to earn an additional sum of money, and some objects, through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

### ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

### **EXPERIMENT**

The experiment is divided into two phases. In the first phase, you will take part in a game. In the second phase, you will be asked to answer a questionnaire.

### FIRST PHASE

Through a random draw at the beginning of each round, pairs of players are formed. The draw includes players you have already played with. It is, therefore, possible to play more than once with the same player in this phase. However, the minimum interval between the two matches will be ten rounds. In this phase, there are a total of 20 draws made before each of the 20 repetitions of the same game.

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental points; and 5 objects shown in photos. Each experimental point corresponds to 1 euro.

Player B moves first and decides whether to send an object to player A and, if so, which object from those available. Player A observes the choice of B and decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So, B will receive twice the number of points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A.

You will also be shown the objects available to you at the end of each round.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players have an initial amount of 10 points. The objects available to each player at the end of the previous round are transferred to the next round.

All choices (which object B sends to A, how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of no object sent, and zero points passed.

## SECOND PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will randomly choose one round among the twenty of the second phase, and we will pay the earnings of the players in that round, plus the two euros for participation, and the objects that the players had at the end of the twentieth round. The objects will be physically delivered (not photos of the objects).

If you have any questions, please raise your hand and one of us will answer confidentially.

# 2.6 Instructions of the study Tokens-Fixed

You will receive  $\epsilon_2$  for your participation and you will be able to earn an additional sum of money, and some objects, through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

# ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

### EXPERIMENT

The experiment is divided into two phases. In the first phase, you will take part in a game. In the second phase, you will be asked to answer a questionnaire.

### FIRST PHASE

Through a random draw at the beginning of the game, pairs of players are formed. The pairs are fixed for the entire duration of the experiment (20 rounds of the same game).

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that

you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental points; and 5 objects shown in photos. Each experimental point corresponds to 1 euro.

Player B moves first and decides whether to send an object to player A and, if so, which object from those available. Player A observes the choice of B and decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So, B will receive twice the number of points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A.

You will also be shown the objects available to you at the end of each round.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players have an initial amount of 10 points. The objects available to each player at the end of the previous round are transferred to the next round.

All choices (which object B sends to A, how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of no object sent, and zero points passed.

### SECOND PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will randomly choose one round among the twenty of the second phase, and we will pay the earnings of the players in that round, plus the two euros for participation, and the objects that the players had at the end of the twentieth round. The objects will be physically delivered (not photos of the objects).

If you have any questions, please raise your hand and one of us will answer confidentially.

# 2.7 Instructions of the study Tokens-Random-BDM

You will receive €10 for your participation and you will be able to earn an additional sum of money through the games that will be presented to you. All earnings are paid at the end of the experiment. During the experiment, you are not allowed to talk to other participants and the use of mobile phones.

# ANONYMITY:

The experiment will take place in conditions of anonymity and using a computer. You will only be identified during the experiment by the code you picked upon entering the room, and that we ask you to keep for the duration of the experiment. The researchers will not be able to associate your real name with the choices you make during the experiment.

## EXPERIMENT

The experiment is divided into three phases. In phase 1, you will have the opportunity to purchase some objects, if you wish to do so. In the second phase, you will take part in a game where you can use the objects purchased in the first phase. In the third phase, you will be asked to answer a questionnaire.

We will explain the rules of the game first (phase 2), so that it is clear to you what is the function of the objects you can buy in phase 1.

## THE GAME (PHASE 2)

Through a random draw at the beginning of each round, pairs of players are formed. The draw includes players you have already played with. It is, therefore, possible to play more than once with the same player in this phase. However, the minimum interval between the two matches will be ten rounds. In this phase, there are a total of 20 draws made before each of the 20 repetitions of the same game.

Within each pair, in each round, there will be a player A and a player B. The probability of being player A and B is the same, and the draw takes place in each round. It is, therefore, possible that you have the same role for several successive rounds. On average, you will play 10 rounds as player A and 10 as player B.

Both player A and player B begin this phase with 10 experimental points (1 experimental point = 1 euro) and the objects purchased in the first phase.

Player B moves first and decides whether to send an object to player A and, if so, which object from those available. Player A observes the choice of B, and decides how many points to pass to player B, by entering a number from o to 10 in the appropriate box.

The number of points passed from A to B will be multiplied by 2. So B will receive double the points passed by A. If we indicate with x the number of points passed by A, 2 \* x points are delivered to player B.

Player B will wait for the choice of A. Once A has made his/her choice, a message will appear on the monitor of player B with the information on the number of points passed by A and on the number of points that he/she actually received (2 times the number of points passed by A).

Then player B will decide how many points to pass to A. B can send any number of points between zero and all the points available, 10 points plus 2 \* x.

The round earnings of each player will then be shown on the monitor.

The monetary earnings of the players in each round will be the following:

Player A:

Earnings of A = 10 points - points passed to B + points passed by B.

Player B:

Earnings of B = 10 points + points passed by A and multiplied by 2 - points passed to A.

You will also be shown the objects available to you at the end of each round.

This phase is repeated 20 times. The experimental points accumulated in the previous rounds do not accumulate. In each round, all players always have an initial amount of 10 points.

The objects available to each player at the end of the previous round are instead transferred to the next round.

All choices (which object B sends to A, how many points A passes to B, and how many points B passes to A) must be completed in a maximum of 40 seconds. If no choice is made, the system automatically selects the options of no object sent / zero points passed.

#### THE OBJECTS (FIRST STAGE)

In phase 1, which precedes the game described above, you can purchase some objects. Objects can be purchased using your participation amount. The objects will be shown to you in photos and are everyday objects. All participants present in the room at this time will have the opportunity to purchase the same objects. You should know that if you buy any of the objects, it will be exclusively to use them in the game described above. Any object you might still have in your endowment at the end of the experiment will not have any value.

You are asked to indicate the maximum price at which you are willing to purchase each object. The price must be between 0 and 2 experimental points, in increments of ten cents of experimental point.

For each object, a random number between o and 2 experimental points will be generated in a public extraction, in increments of ten cents. The random number is the selling price of each object. If the selling price is less than or equal to the purchase price you indicated for that object, you will purchase the object at the randomly extracted selling price. However, if the selling price is higher than the maximum purchase price you indicated for that object, you will not buy the object.

Keep in mind that it is not in your interest to underestimate the object because this reduces the chances of you being able to buy it, but at the same time, it does not influence in any way the determination of the sale price. Likewise, it is not in your best interest to overestimate the object because it could force you to buy it at a price that is higher than the valuation you give to the object itself. We remind you that your price evaluations must be made keeping in mind that the object are used only in the game described above, and will not be physically given to you.

An example shows you why the rules should convince you to express a purchase price exactly equal to your valuation of each object. Imagine that the first object you can buy is an apple. Now imagine that you have attributed to the apple a value in the game described above equal to 1 experimental point (= 1 euro). This means that you would not be willing to buy the apple for 1 euro and 10 cents

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but you would be happy to buy it for 1 euro or, of course, at prices below 1 euro. You may be tempted to offer to buy the apple for less than 1 euro, for example 50 cents. However, if you did so, you would not be able to buy the apple at prices between 50 cents and 1 euro, prices which are less than or equal to your valuation (1 euro). It follows that the only way that you can avoid wasting this opportunity to buy the apple is to choose a purchase price exactly equal to your valuation of the object (1 euro in this purely illustrative example). It should be clear to you that it is not in your interest to express a purchase price higher than one euro. Your purchase price must reflect the value of each object in the phase 2 game: the more useful it is for you to have the object in the phase 2-game, the higher the purchase price you should write.

The unspent money in the purchase of the objects remains in your initial amount, paid at the end of the experiment. If you wish to keep your initial amount intact, you can indicate as the purchase price "o" (zero) for all objects. In this way you are sure that you will never spend any of your participation amount. If you want to purchase all objects, you can do so by indicating the maximum purchase price of 2 euros for each object. There are enough objects to ensure that all participants can buy them.

At the end of this phase, we will show each participant the objects he/she has purchased. We will also show everyone the average purchase prices for each object indicated by the participants in the experiment in this room.

### THIRD PHASE

You will complete a questionnaire.

# END OF EXPERIMENT

We will choose a random round among the twenty of phase 2, and we will pay the players' winnings in that round, plus the initial amount (minus what you spent in phase 1). There is no physical payment of the objects. If you have questions, raise your hand and one of us will answer confidentially.