Self-serving dictators[*]

Geir B. Asheim[†]

Department of Economics, University of Oslo,

P.O. Box 1095 Blindern, NO-0317 Oslo, Norway

e-mail: `g.b.asheim@econ.uio.no`

Leif Helland

BI Norwegian School of Management,

Nydalsveien 39, NO-0447 Oslo, Norway

e-mail: `leif.helland@bi.no`

Jon Hovi

Department of Political Science, University of Oslo,

P.O. Box 1097 Blindern, NO-0317 Oslo, Norway

and

CICERO, P.O. Box 1129 Blindern, NO-0318 Oslo, Norway

e-mail: `jon.hovi@stv.uio.no`

Bjorn Hoyland

Department of Political Science, University of Oslo,

P.O. Box 1097 Blindern, NO-0317 Oslo, Norway

e-mail: `bjorn.hoyland@stv.uio.no`.

August 18, 2008

Abstract

This paper provides experimental evidence for self-serving choice of fairness ideals, in a dictator game design where funds can be transferred in two ways to the one player and in one way to the other. Two methods for transferring funds to the *recipient* produce the same results as the regular dictator game. However, two methods for transferring funds to the *allocator* reduce her generosity significantly. Hence, the allocator's fairness ideal is equal share per individual in the former case (as in the regular dictator game), while her ideal is equal share per transfer method in the latter case.

1   Introduction

Self-serving bias in fairness judgements occurs when, in the words of Babcock and Loewenstein (1997, p. 110), subjects "...conflate what is fair with what benefits oneself". Or as defined by Dahl and Ransom (1999, p. 703): "A self-serving bias occurs when individuals subconsciously alter their fundamental views about what is fair or right in a way that benefits their interest."[1]   Laboratory experiments (Messick and Sentis, 1979; Thompson and Loewenstein, 1992; Loewenstein et al., 1993; Camerer and Loewenstein, 1993; Babcock et al., 1995; Konow, 2000; Gächter and Riedl, 2005), video experiments (Hennig-Schmidt, 2002), field studies (Babcock et al., 1996), and survey studies (Dahl and Ransom, 1999; Lange et al., 2008) show how subjects may fall prey to a self-serving bias in their fairness perceptions.

Much of the literature has studied self-serving bias in negotiations; in this context Babcock and co-authors indicate how biased fairness judgements may impede settlements. Hence, subjects may understand that biasing their fairness ideals is costly in terms of foregone mutual gains. Using a dictator game design allows us to separate the self-serving choice of fairness ideals from the potential cost of disagreement that such a bias may lead to, since the recipient in a dictator game has no choice but to accept the division of the endowment that the allocator decides upon. The general point is that the allocator in a dictator game does not face strategic considerations, making this game particularly suitable for testing the impact of self-serving biases. In games with a richer strategic structure, testing for the presence of self-serving bias requires elaborate controls for beliefs (see Kaplan and Ruffle, 2002).

In the dictator game design we introduce, there are two methods for transferring funds from the administrator to a subject: (1) by transferring funds to the subject's

---

[1]In a comment to Babcock and Loewenstein (1997), Kaplan and Ruffle (1998) point out that the notion "self-serving bias" is used in a wider sense: "A self-serving bias exists where an individual's preferences affect his beliefs in an optimistic direction, one favoring his own payoff. Beliefs may be about one's own ability, the environment, another player's type, or about what is a fair outcome". This paper concerns only the latter type of self-serving bias, which relates to fairness judgements.

bank account, and (2) by giving the subject a voucher (valid in a local grocery store). One set of treatments (A treatments) provides two methods for transferring funds to the allocator and only one method for transferring funds to the recipient. In contrast, a second set of treatments (C treatments) provides only one method for the allocator and two methods for the recipient. The baseline (B) treatments replicates the regular dictator game, providing only one method for each player.

Results from dictator game experiments suggest that generosity depends heavily on the experimental design. Exchange language[2] and entitlements[3] cause generosity to decrease significantly (Forsythe et al., 1994; Hoffman et al., 1994, 1996). Also, administrator anonymity[4] may lead to decreased generosity (Hoffman et al., 1994, 1996; Bolton et al., 1998). In the present experimental design, the dictator game is played without exchange language, entitlements or administrator anonymity, i.e., in a version that promotes behavior in accordance with a fairness ideal of equal split.

Using the regular dictator game as control, results are not affected by having two methods for transferring funds to the recipient: allocators give the recipients on average 40.0% (with st.dev. .323) compared to 42.9% (.291) in the control. However, *having two methods for transferring funds to the allocator reduces her generosity substantively*; in this treatment, allocators give on average only 16.9% (.168). This suggests a self-serving bias in the choice of fairness ideals: In the regular dictator game and in the version with two ways to transfer funds to the recipient, the allocator's fairness ideal is *equal share per individual*, while in the version with two ways to transfer funds to the allocator, her ideal is *equal share per method*.

---

[2]Exchange language frames the experiment in terms of market exchange rather than in terms of dividing a fixed endowment. The motivation for introducing exchange language is that "typically experimenters want to infer some conclusion about markets when discussing their experimental results" (Forsythe et al., 1994, p. 351).

[3]With entitlements the experiment is designed such that allocators earn endowments through costly effort such as answering a quiz, rather than receive them as windfalls (Konow, 2000; Cherry et al., 2002; Cappelen et al., 2007).

[4]Guaranteeing subjects complete anonymity vis-a-vis the experiment administrator is achieved through a "double blind" procedure (as described by Hoffman et al., 1996, pp. 655–656).

To test whether the empirical distributions obtained in the three treatments support this suggestion, we model that self-interest enters into the allocator's decision-making process in two ways:

- Through trading off the fairness ideal with her material self-interest, for a given fairness ideal (as proposed by Bolton and Ockenfels, 2000, and others).

- Through the choice of fairness ideal, depending on the treatment.

By showing how the choice of fairness ideal depends on the treatment, our paper contributes to the literature on self-serving bias in fairness judgements. A striking feature of our experiment is the apparent lack of intuitive appeal of the alternative fairness ideal adopted by some allocators in the A treatments: why split equally among transfer methods when this leads to an unequal split among individuals?[5]

Section 2 describes relevant theory. Section 3 presents the experimental design. Section 4 contains the experimental results. Section 5 offers concluding remarks.

2 Theory

Following the ERC model of Bolton and Ockenfels (2000) as well as the analysis of dictator games in Cappelen et al. (2007), we assume that the individuals are motivated by a desire for both income and fairness. In particular, we specify that each allocator i has a motivation function which depends on the treatment T:

$$v_i(y_i, \sigma_i; \text{T}) = (\gamma_i/c)y_i - \tfrac{1}{2}\big(\sigma_i - \varphi_i(\text{T})\big)^2, \tag{1}$$

where c is the amount to be divided, y_i is the absolute amount that i keeps for herself, $\sigma_i := y_i/c$ is the *share* that i keeps for herself, γ_i/c is the weight assigned to income, and $\varphi_i(\text{T})$ is the fairness ideal that i adheres to in treatment T. This formulation is consistent with the assumptions of Bolton and Ockenfels's (2000) ERC model, if

---

[5]Hence, referring to this as a "social reference point", which is Bolton and Ockenfels's (2000) terminology, might be more appropriate than using the term "fairness ideal".

- $\gamma_i \geq 0$, so that non-negative weight is assigned to income, and

- $\varphi_i(\text{T}) = 1/2$ for T = A, B, C, so that the fairness ideal does not depend on treatment and is given by equal split.

An allocator i whose motivation is described by (1) chooses the following share for herself in treatment T:

$$r_i(\text{T}) = \arg\max_{\sigma_i} v_i(c\sigma_i, \sigma_i) = \varphi_i(\text{T}) + \gamma_i \, ,$$

with $cr_i(\text{T})$ being the corresponding absolute amount that i keeps for herself in treatment T. Hence, if we assume that allocators are $\varphi_i(\text{T})$ homogeneous within treatment T, all with fairness ideal equal to $\varphi(\text{T})$, then we will be able to observe the empirical γ_i distribution for the allocators in treatment T:

$$\gamma_i = y_i/c - \varphi(\text{T}) \, .$$

Since the ERC model allows allocators to be heterogeneous with respect to γ_i, but imposes homogeneity with respect to $\varphi_i(\text{T})$ by requiring all to adhere to equal split, this model yields the following prediction, provided that there are no systematic differences between the subject pools in the three treatments:

Hypothesis 1: The empirical distributions of $y_i/c - 1/2$ in treatments A, B and C are the same.

The existence of a self-serving bias leading to less generosity in treatment A — the treatment in which the allocator has two methods for transferring funds to herself — means that some allocators i adopt a fairness ideal that allows her to retain more than an equal share: $\varphi_i(\text{A}) > 1/2$. In particular, some allocators i may adhere to the ideal of equal share per transfer method, leading to $\varphi_i(\text{A}) = 2/3$. Now, there is little reason to believe that all allocators in treatment A are equally self-serving in their choice of fairness ideal. It is still of interest to test whether we can reject the hypothesis that allocators in treatment A are $\varphi_i(\text{A})$ homogeneous with $\varphi(\text{A}) = 2/3$, while – as before – allocators in treatments B and C are $\varphi_i(\text{T})$ homogeneous with $\varphi(\text{T}) = 1/2$ for T = B, C.

Hypothesis 2: The empirical distributions of $y_i/c - \varphi(\text{T})$ in treatments A, B and C are the same, with $\varphi(\text{A}) = 2/3$ and $\varphi(\text{B}) = \varphi(\text{C}) = 1/2$.

A third possibility is that allocators are influenced by the number of methods for transferring funds, but not in a self-serving manner. A rather extreme assumption is that allocators in treatment C are $\varphi_i(\text{C})$ homogeneous with $\varphi(\text{C}) = 1/3$, while – as for Hypothesis 2 – allocators in treatment A are $\varphi_i(\text{A})$ homogeneous with $\varphi(\text{A}) = 2/3$ and allocators in treatments B are $\varphi_i(\text{B})$ homogeneous with $\varphi(\text{B}) = 1/2$.

Hypothesis 3: The empirical distributions of $y_i/c - \varphi_i(\text{T})$ in treatments A, B and C are the same, with $\varphi(\text{A}) = 2/3$, $\varphi(\text{B}) = 1/2$ and $\varphi(\text{C}) = 1/3$.

Experimental results leading to the rejection of Hypotheses 1 and 3, but not of Hypothesis 2, will be interpreted as support for the existence of a self-serving bias in the choice of fairness ideals.

3   Design

The experiment we consider is a dictator game where c, the amount to be divided, equals 350 Money Units (MUs).[6]

We recruited 93 subjects by placing posters at the university campus and by e-mailing economics and political science students. 47 randomly chosen subjects were instructed to show up for the experiment. The others were assigned the role as recipient and told to wait for further information.[7]

Upon arrival, one of the 47 subjects seated in the experiment room was randomly assigned the role as supervisor. The supervisor administered the random matching of allocators with recipients,[8] and supervised the allocation of earnings

---

[6]One MU was worth approximately 1/7 of a US dollar.

[7]Each recipient was given a randomly chosen ID number between 47 and 92.

[8]Each allocator was given a randomly chosen id number between 1 and 46. The matching was conducted using an Excel sheet projected on a screen in the experiment room, so that the randomization was visible to all subjects present (i.e., the allocators).

after the experiment. The remaining 46 subjects in the room were assigned the role of allocator.[9]

Each allocator and each recipient collected a participation fee of 150 MUs in addition to the amount allocated to her or him in the experiment. The supervisor collected 350 MUs in addition to the participation fee of 150 MUs.

The instructions to the allocators (see Appendix A) replicated as closely as possible the wording in Forsythe et al. (1994). In particular, each allocator was told that she or he had been "provisionally allocated 350 MUs", and was asked to "divide" this endowment between an anonymous recipient and her- or himself.

After the random pairing of allocators with recipients, the 46 allocators were randomly (but evenly) distributed on six different treatments. General instructions (not depending on treatment) were read aloud to ensure that they were public knowledge (see appendix A). Each allocator also received a pen and a form with specific written instructions (depending on treatment, see appendix B). Allocators had 10 minutes to fill in the form, stating how they wanted to divide the endowment. The forms were then collected and the allocators left the room.

In the two baseline (B) treatments allocators had one method for transferring funds to each player (as in standard dictator games). In the B1 treatment allocators divided the endowment between (1) the allocator's bank account, and (2) the recipient's bank account. In the B2 treatment allocators divided the endowment between (1) a voucher to the recipient (valid in a local grocery store) and (2) a voucher to the allocator.

In the second pair of treatments (A), allocators had two methods for transferring funds to her- or himself and only one method for transferring funds to the recipient. In the A1 treatment allocators divided the endowment between (1) the allocator's bank account, (2) a voucher to the allocator, and (3) the recipient's bank account. In the A2 treatment allocators divided the endowment between (1) the allocator's

---

[9]An allocator's ID number was known only to that allocator, to the administrators, and to the supervisor. A recipient's ID number was known only to the administrators and to the supervisor.

bank account, (2) a voucher to the allocator, and (3) a voucher to the recipient.

In the third set of treatments (C), allocators had only one method for transferring funds to her- or himself and two methods for transferring funds to the recipient. In the C1 treatment allocators divided their endowment between (1) the allocator's bank account, (2) the recipient's bank account, and (3) a voucher to the recipient. In the C2 treatment allocators divided the endowment between (1) a voucher to the allocator, (2) the recipient's bank account, and (3) a voucher to the recipient.

4   Results

The results of the experiment are given in Table 1. They are summarized by Figure 1, which plots the empirical distribution of the self-interest parameter, γ, under the different treatments, A, B and C. We test whether the groups are drawn from the same distribution, adjusting for the fact that the maximum value of γ differs between the distributions under Hypotheses 2 and 3. The formal test-statistic, the two-sided Wilcoxon rank-sum, evaluates whether it is probable that two groups are drawn from the same distribution. We perform pairwise comparisons between all groups under the three different hypothetical sets of values for $\varphi(T)$, T = A, B, C.

	0	150	175	200	250	300	340	348	349	350
A	0	0	1	1	4	3	1	0	0	5
B	2	0	6	3	2	0	0	1	1	1
C	2	1	4	2	2	0	0	0	0	4

Table 1: Frequencies of the amount kept by the allocator

Under Hypothesis 1, tested to the left in Figure 1, we assume that the fairness ideal $\varphi(T) = 1/2$ for all three treatments. The results show that there is a large difference between treatment A and the other treatments. The test-statistic supports this, rejecting that A is drawn from the same distribution as B and C for $p \leq .05$.

For the pairwise comparison between treatments A and B, the two-sided Wilcoxon rank-sum statistic, W, is 192, $p \approx .00$. For the pairwise comparison of treatment A and C, $W = 162$, $p = .04$. For the pairwise comparison between treatment B and C, $W = 111$, $p = .73$. We must hence reject Hypothesis 1.
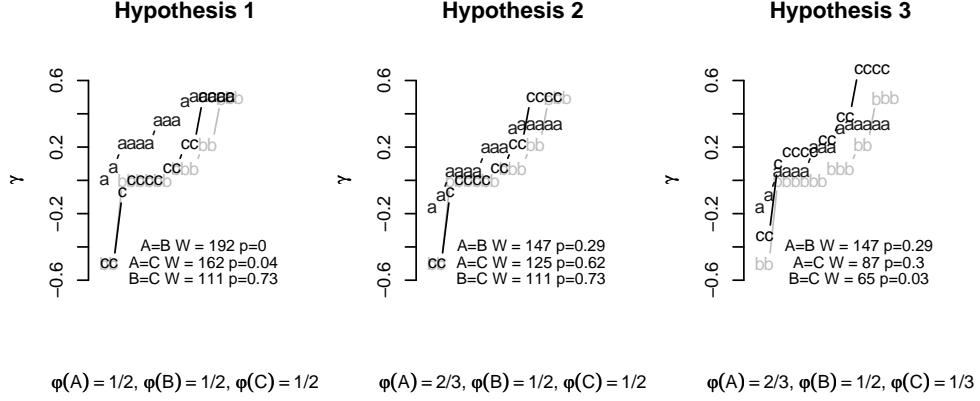

Figure 1: Illustrative test of the hypotheses.

The test-statistic reported is the two-sided Wilcoxon rank-sum statistic. A low p-value indicates that the groups are not drawn from the same distribution. The parameter γ (divided by $c = 350$) is the weight assigned to income, and $\varphi(\text{T})$ is the fairness ideal in treatment T.

The middle part of Figure 1 tests Hypothesis 2. Here we let the allocators entertain a self-serving bias, setting $\varphi(\text{A}) = 2/3$ and $\varphi(\text{B}) = \varphi(\text{C}) = 1/2$. There is little difference between the distributions in the three groups when adjusting for self-serving bias. For the pairwise comparison between treatments A and B, W is now only 147, $p = .29$. For the pairwise comparison of treatments A and C, $W = 125$, $p = .62$. For the pairwise comparison between treatments B and C, $W = 111$, $p = .73$, as before. This means that we can *not* reject Hypothesis 2.

Finally, the right hand side of Figure 1 tests Hypothesis 3. Under this hypothesis we assume that the allocators follow the fairness norm of splitting equally among methods, not entertaining a self-serving bias, so that $\varphi(\text{A}) = 2/3$, $\varphi(\text{B}) = 1/2$ and $\varphi(\text{C}) = 1/3$. Figure 1 shows that there is a large difference between treatments B and

C, as allocators in C have substantively higher γ than allocators in B for the whole distribution. This is confirmed in the test-statistic. For the pairwise comparison of treatments A and B, $W = 147$, $p = .29$. For the pairwise comparison of treatments A and C, $W = 87$ and $p = .30$. For the pairwise comparison of treatments B and C, $W = 65$, $p = .03$. We must hence reject Hypothesis 3.

In conclusion, the evidence enables us to reject Hypotheses 1 and 3, but does *not* allow us to reject Hypothesis 2.

5 Concluding remarks

Our paper contributes to the literature on self-serving bias in fairness judgements, by showing how the adopted fairness ideal depends on the treatment, in the parsimonious setting of a dictator game design with multiple methods for transferring funds to the players. We argue that the dictator game is particulary suitable for testing for the presence of self-serving bias since the allocators do not face strategic considerations. Our results suggest that allocators in dictator games entertain self-serving fairness ideals in the following manner: Allocators choose to spread the endowment evenly across transfer methods – rather than evenly across the two individuals – only when this causes a higher share of the endowment to be allocated to themselves, not when this would have left them with a lower share of the endowment.

References

Babcock, L. and G. Loewenstein (1997). Explaining Bargaining Impasse: The Role of Self-serving Bias. *Journal of Economic Perspective* **11**, 109–126.

Babcock, L., G. Loewenstein, S. Issacharoff and C. Camerer (1995). Biased Judgments of Fairness in Bargaining. *American Economic Review* **85**, 1337–1343.

Babcock, L., X. Wang and G. Loewenstein (1996). Choosing the Wrong Pond: Social Comparisons in Negotiations that Reflect a Self-serving Bias. *Quarterly Journal of Economics* **111**, 1–19.

Bolton, G.E., E. Katok and R. Zwick (1998). Dictator Game Giving: Rules of Fairness Versus Acts of Kindness. *International Journal of Game Theory* **27**, 269–299.

Bolton, G.E. and A. Ockenfels (2000). ERC: A Theory of Equity, Reciprocity, and Competition. *American Economic Review* **90**, 166–193.

Camerer, C. and G. Loewenstein (1993). Information, Fairness, and Efficiency in Bargaining. In B.A. Mellers and J. Baron, eds., *Psychological perspectives on justice. Theory and applications.* Cambridge: Cambridge University Press, pp. 155–179.

Cappelen, A., A.D. Hole, E.Ø. Sørensen and B. Tungodden (2007). The Pluralism of Fairness Ideals: An Experimental Approach. *American Economic Review* **97** 818–827.

Cherry, T.L., P. Frykblom and J.F. Shogren (2002). Hardnose the Dictator. *American Economic Review* **92** 1218–1221.

Dahl, G.B. and M.R. Ransom (1999). Does Where You Stand Depend on Where You Sit? Tithing Donations and Self-Serving Beliefs. *American Economic Review* **89**, 703–727.

Forsythe, R., J. Horowitz, N. Savin and M. Sefton (1994). Some Doubts about Measuring Self-interest Using Dictator Experiments: The Cost of Anonymity Fairness in Simple Bargaining Games. *Games and Economic Behavior* **1** 60–79.

Gächter, S. and A. Riedl (2005). Moral Property Rights in Bargaining with Infeasible Claims. *Management Science* **51**, 249–263.

Hennig-Schmidt, H. (2002). The Impact of Fairness on Decision Making – An Analysis of Different Video Experiments. In: F. Andersson and H. Holm, eds., *Experimental Economics: Financial Markets, Auctions, and Decision Making.* Boston, Dordrecht, London: Kluwer Academic Publishers, pp. 185–210.

Hoffman, E., K. McCabe, K. Schechat and V. Smith (1994). Preferences, Property Rights and Anonymity in Bargaining Games. *Games and Economic Behavior* **7** 346–80.

Hoffman, E., K. McCabe and V. Smith (1996). Social Distance and Other-regarding Behavior. *American Economic Review* **86** 653–60.

Kaplan, T.R. and B.J. Ruffle (1998). Self-serving Bias. *Journal of Economic Perspectives* **12**, 243–244.

Kaplan, T.R. and B.J. Ruffle (2002). The Self-Serving Bias and Beliefs about Rationality. Mimeo, Ben Gurion University.

Konow, J. (2000). Fair Shares: Accountability and Cognitive Dissonance in Allocation Decisions. *American Economic Review* **90** 1072–1091.

Lange, A. , A. Löschel, C. Vogt and A. Ziegler (2008). Self-serving Use of Equity in International Climate Negotiations. Mimeo, ZEW and Universities of Leipzig, Maryland and Zurich.

Levitt, S. and J. List (2006). What Do Laboratory Experiments Tell us About the Real World? University of Chicago and NBER, unpublished.

List, J. (2005). Dictator Game Giving is an Experimental Artifact. Mimeo, University of Chicago.

Loewenstein, G., S. Issacharoff, C. Camerer, B.Babcock, Linda (1993). Self-Serving Assessments of Fairness and Pretrial Bargaining. *Journal of Legal Studies* **22**, 135–159.

Messick, D.M. and K.P. Sentis (1979). Fairness and Preference. *Journal of Experimental Social Psychology* **15**, 418–434.

Thompson, L. and G. Loewenstein (1992). Egocentric Interpretations of Fairness and Interpersonal Conflict. *Organizational Behavior and Human Decision Processes* **51**, 176–197.

A Instructions

[**Allocators enter the lab, receive a lottery ticket from a book of tickets and choose a seat. Lists with ID numbers and names of the allocators are handed out. The administrator starts to read aloud the instructions**]

Welcome to this experiment in decision making. The experiment will take approximately 30 minutes. In front of you, you will find a pen, a blank piece of paper, the set of instructions that is now being read aloud, and a list of the participants present in the room. Your ID number is located to the left of your name on this list.

In this experiment each participant present in this room today will be randomly matched with another participant who was recruited to the experiment in the same way as you, but who is *not* present. None of you will be matched with the same participant. *We will not, at any time during or after the experiment, inform you about the identity of the participant you are matched with. Nor will we inform participants not present about who they were matched with in the experiment.*

The number of participants *not* present equals the number of participants present minus one. The reason for having an extra participant present will be explained shortly.

You will *not* be matched with any of the participants present. Decisions made by other participants present will not affect your gains, and decisions made by you will not affect the gains of other participants present.

All participants in the experiment, whether present or not, will receive a transfer of 150 money units (MUs) to their bank accounts. Each participant may also receive additional gains through decisions made in the experiment.

The experiment will be conducted as follows:

In a few minutes, each participant present will be randomly matched with a participant *not* present. Each participant present has been provisionally allocated an endowment of 350 money units. Participants that are not present have *not* been allocated such an endowment. You will decide how to divide your endowment between yourself and the other participant in your pair.

To divide the endowment you will fill in a proposal form to be handed out shortly. Your proposal becomes the final division, provided that you fill in the form correctly, so that the proposal sums to exactly 350 MUs.

If you fail to fill in the form correctly, so that the proposal does *not* sum to 350 MUs, no further gains will be awarded to any of the participants in your pair. Therefore, please make sure that you fill in the form correctly!

You are not permitted to communicate with other participants during the experiment, verbally or by other means.

We will now randomly select one person to be "supervisor". The supervisor will be assigned

three tasks. First, the supervisor will randomly match each participant present with a participant not present. Second, the supervisor will ensure that the proposal forms are randomly distributed. Finally, the supervisor will, after the experiment has been concluded, ensure that actual earnings correctly reflect your proposals and that all earnings go to the right participant. For this job the supervisor will receive an amount in addition to the 150 MUs that every participant will receive. The reason why the group present includes one more person than the group not present is that we need a supervisor.

Once the forms have been distributed, we will no longer answer questions. It is thus important that any questions be asked now.

[A supervisor is randomly selected. The supervisor matches allocator-recipient pairs, and shuffles and distributes envelopes containing proposal forms.]

[The matching of pairs is saved, printed and remains visible on the screen during the course of the experiment]

You have now received an envelope containing a proposal form. You will also find a list of participants in front of you. You are no longer permitted to ask questions.

Please find your ID-number in the list of participants. Write your ID-number on the line labeled "ID-number" in the proposal form.

Has anyone *not* found their ID-number?

You are now going to fill in the proposal form. Please read the text on the proposal form carefully.

To be valid, your proposal must add up to exactly 350 MUs. If valid, your proposal will be the final allocation. If not, each participant in your pair will receive only 150 MUs.

You may use the blank piece of paper to record your proposal.

When you have filled in the proposal form, please put it back into the envelope. The envelopes will be collected when the time is up. You now have 5 minutes to fill in the form.

[The envelopes are collected when the time is up]

B Proposal forms

A1 treatment [baseline transfer, two methods for allocating funds to the allocator]

You have been provisionally allocated 350 MUs. Please indicate how you wish to divide this amount between the three alternatives {3}, {4} and {5}, which are specified below.

{1}   Your ID number _____

{2}   Total amount: 350 MUs

{3}   The person I have been matched with shall receive _____ MUs as a transfer to his/her account

{4}   I shall receive _____ MUs as a voucher

{5}   I shall receive {2} − {3} − {4}= _____ MUs as a transfer to my account

Please note: Transfers will reach bank accounts in approximately four weeks from today. Vouchers are valid from tomorrow. Vouchers are sent by ordinary mail and should reach addressees within a day or two.

B1 treatment [baseline transfer, one method for allocating funds to the allocator and one for the recipient]

You have been provisionally allocated 350 MUs. Please indicate how you wish to divide this amount between the two alternatives {3} and {4}, which are specified below.

{1}   Your ID number _____

{2}   Total amount: 350 MUs

{3}   The person I have been matched with shall receive _____ MUs as a transfer to his/her account

{4}   I shall receive {2} − {3} =_____ MUs as a transfer to my account

Please note: Transfers will reach bank accounts in approximately four weeks from today.

C1 treatment. [baseline transfer, two methods for allocating funds to the recipient]

You have been provisionally allocated 350 MUs. Please indicate how you wish to divide this amount between the three alternatives {3}, {4} and {5}, which are specified below.

{1}   Your ID number _____

{2}   Total amount: 350 MUs

{3}   The person I have been matched with shall receive _____MUs as a voucher

{4}   The person I have been matched with shall receive _____ MUs as a transfer to his/her account

{5}   I shall receive {2} − {3} − {4}= _____MUs as a transfer to my account

Please note: Transfers will reach bank accounts in approximately four weeks from today. Vouchers are valid from tomorrow. Vouchers are sent by ordinary mail and should reach addressees within a day or two.

A2 treatment [baseline voucher, two methods for allocating funds to the allocator]

You have been provisionally allocated 350 MUs. Please indicate how you wish to divide this amount between the three alternatives {3}, {4} and {5}, which are specified below.

{1}   Your ID number _____

{2}   Total amount: 350 MUs

{3}   The person I have been matched with shall receive _____MUs as a voucher

{4}   I shall receive _____ MUs as a voucher

{5}   I shall receive {2} − {3} − {4}= _____ MUs as a transfer to my account

Please note: Transfers will reach bank accounts in approximately four weeks from today. Vouchers are valid from tomorrow. Vouchers are sent by ordinary mail and should reach addressees within a day or two.

B2 treatment [baseline voucher, one method for allocating funds to the allocator and one for the recipient]

You have been provisionally allocated 350 MUs. Please indicate how you wish to divide this amount between the two alternatives {3} and {4}, which are specified below.

{1}   Your ID number _____

{2}   Total amount: 350 MUs

{3}   The person I have been matched with shall receive _____MUs as a voucher

{4}   I shall receive {2} − {3} = _____ MUs as a voucher

Please note: Vouchers are valid from tomorrow. Vouchers are sent by ordinary mail and should reach addressees within a day or two.

C2 treatment [baseline voucher, two methods for allocating funds to the recipient]

You have been provisionally allocated 350 MUs. Please indicate how you wish to divide this amount between the three alternatives {3}, {4} and {5}, which are specified below.

{1}   Your ID number _____

{2}   Total amount: 350 MUs

{3}   The person I have been matched with shall receive _____MUs as a voucher

{4}   The person I have been matched with shall receive _____MUs as a transfer to his/her account

{5}   I shall receive {2} − {3} − {4} = _____ as a voucher

Please note: Transfers will reach bank accounts in approximately four weeks from today. Vouchers are valid from tomorrow. Vouchers are sent by ordinary mail and should reach addressees within a day or two.