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Loss and Other-Regarding Preferences: Evidence From Dictator Game

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Abstract

The paper aims at studying other-regarding preferences of decision makers in the domain of losses. For this purpose the framework of the Dictator Game is adopted, with two research questions under investigation. First, how will the dictator divide the pie with an anonymous recipient, after a bi-directional loss of equal amount? Second, how will the dictator divide the pie with a poor recipient from a third world country after a bi-directional loss, where the loss of the recipient is bigger than that of the dictator?

Interestingly, the data illustrate that other-regarding motives of the dictators do not vanish in any of the treatments in which losses are introduced. The results are explained from the perspective of power-dependence relationship between the dictator and the recipient (Handgraaf et al., 2008, van Dijk and Vermunt, 2000).

Keywords: Dictator Games, Loss, Other-Regarding Preferences

JEL Classifications: C90, D63, D64, I30

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1 Introduction

In recent years, social psychologists and behavioral economists provide ample evidence that decision makers constantly violate the neoclassical assumption of self-interest, exhibiting other-regarding behavior (see Fehr and Schmidt, 2006 for an excellent review). Nevertheless, despite the rich literature ranging from theoretical models (e.g. Fehr and Schmidt, 1999, Bolton and Ockenfels, 2000) to laboratory and on-line experiments (e.g. Dreber et al., 2012, Eckel and Grossman, 1996, Amir and Rand, 2012), to the best of my knowledge, there is no sufficient testimony on other-regarding behavior of decision makers in the domain of losses in economic games.\(^2\) Given that monetary losses are integral part of daily life, and economic games are stylized representations of socio-economic phenomena, understanding other-regarding preferences of individuals in the domain of losses in economic games can help to uncover important features of microdynamics of human interactions. For instance, while the latest financial crisis was at its peak in 2008, between 2008 and 2009 individual giving in the USA followed an estimated decline of 3.6% only. “Even through a period of economic stress and volatility, Americans have continued to give” (GivingUSA, 2011). Can (at least part) of such behavior be a consequence of other-regarding preferences? Applying the knowledge accumulated in social psychology one can give a negative answer to this question, as there exists evidence that individuals in a loss condition are more own-outcome oriented (De Dreu et al., 1994, De Dreu, 1996), more individualistic (Poppe and Valkenberg, 2003) and more prone to unethical behavior (Kern and Chugh, 2009) than individuals in the gain condition. Hence, one should expect

\(^2\)Exceptional studies, that tackle decision making in the domain of losses in economic games, are Buchan et al. (2005) and Zhou and Wu (2011), who study human interactions in a Negative Ultimatum Bargaining Game (NUBG from here onwards), where counterparts have to bargain over losses rather than gains. Nevertheless, in a NUBG it is not possible to disentangle decision makers’ egoistically driven strategic concerns from their other-regarding behavior. Buchan et al. (2005) illustrate that in the loss domain both the offers by allocators and the demands by responders are higher than in an ordinary Ultimatum Bargaining Game (UBG from here onwards). Continuing this line of research, Zhou and Wu (2011) manifest that at similar levels of unfairness in wealth allocation, rejection rates are higher in a NUBG than in an UBG: “unfairness looms larger in losses than in gains” (page 582).
monetary losses to offset other-regarding preferences.

Stemming from the abovementioned paragraph, the main aim of the current paper is to understand the connection between monetary losses and other-regarding preferences of decision makers, who bare these losses. For my purposes I adopt experimental approach and select the Dictator Game (DG from here onwards). Nevertheless, I modify the framework of the DG, by imposing a bi-directional loss both on the dictator and on the recipient, in order to simulate a “crisis” scenario, where the society as a whole is embedded in losses. Two research questions are under scrutiny. First, how will the dictator divide the pie with an anonymous recipient, after a bi-directional loss of equal amount? Second, how will the dictator divide the pie with a poor recipient from a third world country after a bi-directional loss, where the loss of the recipient is bigger than that of the dictator?

DG is an ideal framework to study other-regarding preferences of the decision maker, given that the recipient is effectively helpless and cannot influence the behavior of the decision maker. In contrary to Nash equilibrium, which predicts the dictator to split the pie in a completely egoistic manner, empirical data demonstrate that other-regarding preferences do exist, as the dictator persistently transfers roughly 20%-30% of his wealth to the recipient (Camerer, 1997, 2003). Such variables as the name of the recipient (Charness and Gneezy, 2008), visual and oral impression (Burnham, 2003, Rosenblat, 2008), pre-play identification of participants and face-to-face communication (Bohnet and Frey, 1999a, 1999b), friend as a recipient (Jones and Rachlin, 2006, Leider et al., 2009, Goeree et al., 2010), wealth level of the recipient (Eckel and Grossman, 1996, Brañas-Garza, 2006) may affect the allocation decision of the dictator. To the best of my knowledge, no paper has tried to uncover other-regarding behavior of the dictators after a certain amount of bi-directional loss.

I run four between-subjects treatments- “Standard”, “Standard & Loss”, “Poverty” and “Poverty & Loss”- via Amazon Mechanical Turk. Anticipating the results, I find that other-regarding preferences of the dictators are preserved both in “Standard & Loss”
and “Poverty & Loss”. I explain the results from the perspective of power-dependence relationship between the dictator and the recipient (Handgraaf et al., 2008, van Dijk and Vermunt, 2000). The response justifications of the dictators support the ex-post rational-ization of their behavior.

The rest of the paper is structured as follows. Section 2 provides brief literature review on DG and Amazon Mechanical Turk and poses predictions. Section 3 describes the experimental design of the current paper. Section 4 depicts the results. Section 5 provides a short discussion and concludes the paper.

2 Literature Review

2.1 Dictator Game

The first version of DG was run by Kahneman et al. (1986). Since then over 120 studies have been published on the topic, resulting in more than 600 treatments (Engel, 2011). In a context-free anonymous DG the behavior of the allocator is well-documented: on average allocators send 20%-30% of their wealth to the recipients (Camerer, 1997, 2003). Nevertheless, the allocation decisions made by the dictators have been proven to be sen-sitive to various treatment manipulations, ranging from (theoretically predicted) egoistic splits in situations where the dictators exert effort to earn their endowments (Cherry et al., 2002, Oxoby and Spraggon, 2008), to elevated benevolent splits in situations, where the recipients are “needy” (Eckel and Grossman, 1996, Brañas-Garza, 2006). Regarding DG with “needy” recipients, Eckel and Grossman (1996) compare allocations to an anony-mous student subject with those to a charity organization (the American Red Cross). The authors find that “when an anonymous individual is replaced with an established char-ity, donations triple...” (page 188). Brañas-Garza (2006) conducts a similar experiment with Spanish participants. He compares an anonymous DG, with DGs in which i) the
recipients are poor, ii) the recipients are poor and they receive the donations in the form of medicines. In the treatment with poor recipients on average 66% of the total endowment is donated (15€), while in the treatment with medicine on average 80% of the total endowment is sent to the poor recipient.

Departing from abovementioned studies I introduce a bi-directional loss both in a context-free DG and in a DG with a “needy” recipient. To the best of my knowledge, the paper is the first one to study allocation decisions in such a setting.3

The literature in social-psychology predicts that self-interest may loom larger in the domain of losses than in the domain of gains. For instance, De Dreu et al. (1994) demonstrate that “…loss framed individuals are more own-outcome oriented than those with a gain frame” (page 504). In their experiment (in contrast to variations in the difference between one’s own and the other individual’s outcome) variations in the own outcome better explain satisfaction with outcomes in loss condition than in gain condition. Moreover types of outcomes (either gains or losses) affect the social value orientation of the individual (individualism, competition, pro-social orientation) (Poppe and Valkenberg, 2003). In the gain condition of the experiment decision makers start with nothing and allocate positive amounts to them and their counterparts (who also start with nothing). In contrary, in the loss condition both the decision makers and their counterparts start the game with pre-defined endowments and incur losses because of the decision makers’ choices. Unsurprisingly, there are more individualistic subjects in the loss condition than in the gain condition. A recent experimental study by Kern and Chugh (2009) illustrates that a problem framed in loss condition may induce more unethical behavior than an identical problem framed in gain condition. In the experiment “the entrepreneur was trying to acquire an as-yet-undefeated (hypothetical) competitor. The negotiating agent was trying to acquire an as-yet-unrealized (hypothetical) commission. The stereo seller was trying

3Since a complete discussion of different DG treatments is beyond the scope of the current paper, one can refer to Engel (2011).
to acquire an as-yet-unsecured (hypothetical) sale” (page 382). Even in a completely hypo-
thetical scenario, where no real stakes are under risk, the subjects, who are in the loss condi-
tion, are more prone to obtain “insider information” and to cheat than subjects in the gain condition.

To conclude, stemming from abovementioned studies, one can expect losses to offset other-regarding preferences of the allocators.

### 2.2 Amazon Mechanical Turk

Amazon Mechanical Turk (AMT from here onwards) has recently turned into a popular means of experimental data generation for social scientists. AMT is a crowdsourcing marketplace, which allows individuals (businesses) to assign paid tasks (called HITs-Human Intelligence Tasks) to a big population of workers (also called “turkers”) all over the world. The advantage of AMT is that it is a relatively cheap and fast device for data collection (Rand, 2012). The median hourly wage paid to a “turker” can be as low as 1.38$ (Horton and Chilton, in the press). Studies exploring the demographics of “turkers” find that “turkers” in the US are educated (69% possesses university degree) and have a median age of 30 (Ross et al., 2010).

However, AMT is not exempted from problems as well. The three most critical issues discussed in the literature that can affect the quality of experimental data are i) trust in experimental instructions, ii) apprehension of instructions by the subjects and iii) insufficient attention devoted to the experiment by the subjects (Rand, 2012). With respect to the first point, Horton et al. (2011) illustrate that “turkers” believe in experimenters almost as much as the subjects in physical lab. Regarding the second and the third points, “catch trials” and instructional manipulation checks, pinpointing inattentive subjects, can help to solve the problem (Paolacci et al., 2010, Oppenheimer et al., 2009).

Nevertheless, despite the shortcomings of AMT, the researchers have been able to
successfully replicate (even complex) experimental studies conducted in the physical laboratory. Paolacci et al. (2010) study whether “turkers” exhibit identical heuristics and biases as the subjects from a physical lab. For this purpose they use three classic experimental tasks from heuristics and biases literature: “Asian disease problem” (Tversky and Kahneman, 1981), “The Linda Problem” (Tversky and Kahneman, 1983) and the “Physician Problem” (Baron and Hershey, 1988). The authors find that the responses of AMT subjects are not different from those of students at a Midwestern U.S. university, concluding that AMT is indeed “...a viable alternative for data collection” (page 417). Horton et al. (2011) compare the behavior of AMT workers and that of physical lab subjects in a one-shot prisoner’s dilemma game, illustrating that the level of cooperation between the two settings is not different. Additionally, both AMT workers and physical lab subjects are equally likely to respond to framing effects. Suri and Watts (2011) go one step ahead of other scholars, running a repeated public goods game experiment via AMT, which requires direct interaction among group members. Even in such a complicated setting, the cooperation rate between “turkers” and physical lab subjects is not different.

Regarding DGs conducted via AMT, Amir and Rand (2012) depict that the mean level of allocations with $1 stakes is around 33%. Similar value is reported by Dreber et al. (2012). Raihani et al. (2013) illustrate that allocation decisions made by US “turkers” (in contrast to those made by Indian “turkers”) are invariant to the stake size ($1, $5 and $15).

3 The Experiment

The on-line experiment consists of 4 treatments with a between subjects design: “Standard”, “Standard & Loss”, “Poverty” and “Poverty & Loss”. “Standard” is used as a benchmark for “Standard & Loss”, while “Poverty” is a control for “Poverty & Loss”. “Standard” and “Standard & Loss” appear together in session 1, while “Poverty” and
“Poverty & Loss” appear together in session 2. Figure 1 graphically depicts the structure of the on-line experiment.

[Figure 1]

In each session subjects are faced with a loss scenario in 50% of the cases, which is randomly defined by the computer. The loss in the experiment is introduced as neutral as possible to prevent the language used to affect the results. Moreover, I did not provide the allocators any motivation why they may face a loss, as the main purpose of the paper is to check the effect of loss (and not the motivation of loss) on other-regarding behavior of the allocator. Additional information about the motives of loss (i.e. why the allocator suffered the loss) may interact with other-regarding preferences of allocators in unpredictable ways.

The starting message the subjects see is standardized across all treatments and appears as follows:

You have an initial endowment of 15$. As soon as you click Next, there are two possible outcomes, which occur in 50% of the cases. Either you will still have 15$ (there will be no changes in your initial endowment) or you will be left with 5$ (your initial endowment will decrease with 10$). Your task is to decide how to divide your remaining endowment (either 15 $ or 5 $) with a recipient. You are free to divide your endowment in any way you’d like to...

In “Standard”, the dictator has to play an ordinary DG, dividing $15 between him and an anonymous recipient according to his preferences:

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4Regarding the procedure: an HTML link in the HIT of the AMT directed the “turkers” into a Qualtrics survey, which included the treatments.

5Why do I choose a $10 loss? As already discussed in Section 1 of the paper, to the best of my knowledge, there are no papers discussing how bi-directional loss affects the preferences of the dictators. Hence, my idea is to check the relationship between a sufficiently big amount of loss and other-regarding preferences. $10 (2/3 of the wealth) seems a plausible amount for my purposes. If other-regarding preferences are preserved in case of a $10 loss, it will not pay off to check for smaller amounts. Increasing the size of the loss over $10 and checking how the size of the loss influences other-regarding preferences is beyond the scope of this paper. Nevertheless, it will be an interesting line of research.
There are no changes in your initial endowment: you still have 15$. Your recipient is a randomly chosen worker of Amazon Mechanical Turk. Unfortunately, we cannot provide you more information about the recipient. In the box below please indicate the monetary amount you are willing to contribute. (Your contribution cannot exceed 15$).

In “Standard & Loss”, I preserve the anonymity condition of the recipient, albeit I introduce a bi-directional loss of $10 before the allocation decision. The dictator is requested to split the residual pie of $5.

Your initial endowment decreased by 10$: you are left with 5$. Your recipient is a randomly chosen worker of Amazon Mechanical Turk. He participated in a task, where by clicking NEXT (as you did in the beginning of the survey) he could have either 10$ or 0$, which he had to keep for himself. He ended up with 0$. Unfortunately, we cannot provide you more information about the recipient. In the box below please indicate the monetary amount you are willing to contribute. (Your contribution cannot exceed 5$).

In “Poverty”, the dictator has to divide his endowment of $15 with a poor representative of a third world country who has an income of 99 cents per day and no savings at all. This treatment is by-and-large similar to that of Brañas-Garza (2006), albeit diverges in several directions. Firstly, the resources are allocated among 2 agents (a dictator and a recipient) rather than 4 (a dictator and 3 identical recipients) stemming from my intention to study the behavior of the dictator vis-à-vis a single recipient rather than the egalitarian outcome across different agent-receivers. Secondly, I don’t constrain the donations of subjects assigning €5 bills, which might artificially increase allocations (Brañas-Garza, 2006). Thirdly, the recipient is a single person in a poor community, rather than a poor community as a whole.

There are no changes in your initial endowment: you still have 15$. Your recipient is a real person, located in a poor community of a third world country. To prevent any sort of bias we do not provide you with the precise geographical destination of the recipient. According to the estimates of the UN (United Nations), representatives of the community your recipient is located in, live with an income of 99 cents per day and no savings at all. Your monetary contribution will be of great help for the recipient. Your contributions will be delivered through a famous NGO operating in the territory of the EU, hence there will be no issues connected with trust and corruption. In the box below please indicate the monetary amount you are willing
In “Poverty & Loss”, I introduce a bi-directional loss. The dictator has to decide how to divide the residual amount of $5.

Your initial endowment decreased by 10$: you are left with 5$. Your recipient is a real person, located in a poor community of a third world country. To prevent any sort of bias we do not provide you with the precise geographical destination of the recipient. According to the estimates of the UN (United Nations), representatives of the community your recipient is located in, live with an income of 99 cents per day and no savings at all. Moreover, the representatives of the community (including your recipient) suffered substantial material losses because of a natural disaster, which occurred lately. Your monetary contribution will be of great help for your recipient. Your contributions will be delivered through a famous NGO that operates on the territory of the EU, hence there will be no issues connected with trust and corruption. In the box below please indicate the monetary amount you are willing to contribute. (Your contribution cannot exceed 5$).

In all treatments, after the allocators have made their decisions, they are requested to answer an open question, providing justification for their choice. The purpose of such a setting is three-fold. First, by reading the justifications of the decisions, I can control whether the subjects understood the task or not. Second, an open question will impose extra cognitive load on the participants, inducing them to think more deliberately before making a final decision, as the logic of qualitative justifications should match with quantitative responses. Thus, my design allows me (at least) to minimize the issues concerning “turkers”’ apprehension of instructions and “turkers”’ attention during the experiment (Rand, 2012). Third, using the open question, I can uncover the internal perspective of the dictators.

Regarding payoffs, it is publicly known that three subjects from each session are randomly picked to be paid the endowment they choose to keep for themselves. Moreover, the recipients of the respective turkers are paid as well. In the first session 1 “turker” is

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6Obviously a subject cannot contribute $0 and write: “I wanted to be generous”. Such a behavior will imply that the participant was either not attentive or did not understand the task. Such an answer will be discarded because of inconsistency.

7The participants know that their decision would have real consequences both for them and for their
randomly paid from “Standard” ($10 contribution to the recipient), and 2 “turkers” from “Standard & Loss” (each made $2.5 contribution to the recipient). In treatments with poor recipients 1 “turker” from “Poverty” and 2 “turkers” from “Poverty & Loss” are randomly selected. Overall $15 (Turker 1: $10, Turker 2: $3, Turker 3: $2) are donated to UNHCR (The UN Refugee Agency) to help Syrian Refugees, as the latter provide solid match with the description of the recipients in the treatments.

In fact, the incentives to exhibit self-centered behavior are quite high. A selfish choice by the subject can bring him a maximum of $15 in treatments without losses and a maximum of $5 in treatments with losses. These amounts are respectively 75 and 25 times higher than “the reward for the hit”. Moreover, these amounts are approximately 10.9 and 3.6 times more than the median hourly reservation wage (1.38$/hour) (Horton and Chilton, in the press).^8

4 Results

Overall 159 AMT workers living in the USA took part in the on-line experiment as allocators.\(^9,10\) I end up with 37 observations in “Standard”, 37 observations in “Standard & Loss” and 37 observations in “Poverty”, 37 observations in “Poverty & Loss”. The following message appears in the instructions: "Please refer to the task as if you are making a real decision because the choices of 3 Workers will have real consequences both for them and for their recipients. We will randomly pick 3 answers: the chosen workers will get the money they kept for them, while their recipients will receive the money they decided to send to them."

Of course, one can argue that the magnitude of other-regarding behavior can be inflated, because of the fact that not all participants receive real monetary stakes. First, even in a completely hypothetical DG the evidence that the magnitude of other-regarding behavior will change compared to a DG with real stakes is not conclusive enough. For instance, Ben-Ner et al. (2008) illustrate that the behavior of allocators across incentivized and hypothetical dictator games is remarkably similar. Second, even if the magnitude of other-regarding behavior is inflated, it is so across all treatments. Hence, if all players get paid, one may evidence a decreasing trend in the average behavior with respect to the current experiment, but there is no prior reason to believe that the direction of the effects of treatment manipulations will differ compared to those in the current paper.

80 other “turkers” participated in the experiment as recipients for “Standard & Loss” treatment. They took part in the task mentioned in “Standard & Loss” treatment. By clicking NEXT 40 of them ended up with $0, while the other 40 ended up with $10. The recipients of “Standard” treatment were randomly chosen from the population of “turkers” that worked for me for other, unrelated tasks.

\(^{10}\)8 answers were rejected.
standard & Loss”, 40 observations in “Poverty” and 37 observations in “Poverty & Loss” treatments. There are gender differences neither across “Standard” and “Standard & Loss” ($\chi^2=1.367, \ p\text{-value}=0.242$) nor across “Poverty” and “Poverty & Loss” treatments ($\chi^2=0.09, \ p\text{-value}=0.76$). Homogeneity in this variable is important, as previous evidence suggests that other-regarding preferences may be heavily influenced by the gender of the decision maker (Eckel and Grossman, 2008).

4.1 “Standard” vs. “Standard & Loss”

Result 1: On average, other-regarding preferences of the dictator are not offset by loss in “Standard & Loss” treatment.

Figure 2 illustrates the mean value of allocations in “Standard” and “Standard & Loss”.

![Figure 2](image2.png)

The mean allocation in “Standard” equals to $5.865$ (39.100% of the endowment). The average is higher than usually evidenced in the laboratory setting (roughly 20%-30% of the endowment), albeit quite close to the average behavior found in DG played via AMT (around 33% of the endowment). The mean allocation in “Standard & Loss” equals to $2.243$ (44.865% of the endowment). Mann-Whitney U test cannot find significant differences in dictator behavior across “Standard” and “Standard & Loss” ($W=570.5, \ p\text{-value}=0.212$). Figure 3 depicts the frequency of the allocations in the two treatments.

![Figure 3](image3.png)

As it can be inferred from the figure, the amount of pure selfish allocators substantially increases, reaching from 1 in “Standard” to 7 in “Standard & Loss”. Interestingly, there are 6 allocators in “Standard & Loss”, that send their whole endowment to the recipient.

11Unfortunately I missed questions on age and education.
in contrast to 1 allocator in “Standard”. Such a behavior can be attributed to diminishing sensitivity to loss: the marginal effects in perceived well-being for changes close to one’s reference point are higher than for changes further away (Rabin, 1998). Hence, after having lost $10, the allocator may be (almost) indifferent between keeping $5 or giving it away, under the assumption that the initial message triggers a substantially high benchmark for a possible earning in case of $15 endowment (i.e. no loss).

However, in both treatments, the vast majority of allocations are in the “fairness” range of [20%-50%], with the 50-50 split being more preferred in “Standard & Loss”, than in “Standard”.

4.2 “Poverty” vs. “Poverty & Loss”

**Result 2:** On average other-regarding preferences of the dictator are not offset by loss in “Poverty & Loss” treatment

Figure 4 illustrates the mean value of allocations between “Poverty” and “Poverty & Loss”.

![Figure 4](image-url)

The mean allocation in “Poverty” equals to 11.125$ (74.167% of the endowment), while the mean allocation in “Poverty & Loss” equals to 3.58$ (71.620% of the endowment). A non-parametric Mann-Whitney U test does not detect significant differences across treatments (W=742, p-value=0.99).\(^{12}\)

Figure 5 depicts the histograms of allocations in “Poverty” and “Poverty & Loss”.

![Figure 5](image-url)

\(^{12}\) The observations are individual donations on a percentage scale.
In “Poverty” 50% of the Dictators (20 out of 40) choose to donate their full endowment to the poor recipient. 72.5% of the dictators favor the recipient, opting for allocation decisions where more than half of the pie goes to the latter (29 out of 40). The results are similar to the “Poverty Condition” of Brañas-Garza (2006, p. 315), where the dictators, on average, donated 2/3 of their endowment, with 40% of the whole sample exhibiting purely altruistic motives and 66.3% donating more than €7.5. In “Poverty & Loss” the quantity of dictators, who choose to donate their full residual endowment, is roughly the same in comparison with “Poverty” (21 out of 37, 56.757%). Moreover, the quantity of dictators, who opt for allocations that favor the recipients, does not bare significant changes as well (24 out of 37, 64.865%).

5 Conclusion

To my knowledge, the paper is one of the first to tackle social preferences of decision makers in the domain of losses in economic games. Two research questions are investigated. First, how will the dictator divide the pie in a DG, where both he and an anonymous recipient suffer simultaneous loss of equal amount before the allocation decision? Second, how will the dictator divide the pie with a poor recipient from a third world country after a bi-directional loss, where the loss of the recipient is bigger than that of the dictator?

Interestingly, the results reject the hypothesis, that self-interest looms larger in the domain of losses (at least in DG of the current paper). Neither in “Standard & Loss” nor in “Poverty & Loss” allocators act as outcome oriented, selfish individuals. An intriguing question is why such behavior occurs.

According to the “social utility model”, the decision makers extract utility from two sources: a) an absolute payoff component, reflecting the value of own outcome to the individual and b) comparative payoff component, reflecting the value an individual attaches to the outcomes of other interested parties in comparison with that of his own (e.g. Blount,
1995). Moreover, the power differential between the decision maker and his counterpart triggers feelings of social responsibility increasing the weight of the comparative payoff component in the utility function of the decision maker. Van Dijk and Vermunt (2000) illustrate that the fact that the recipient is powerless and can be easily exploited in DG induces allocators to act in a pro-social manner and conclude that “exploiting the powerless may be as easy as “stealing candy from a baby,” but, like the actual theft of a baby’s candy, increasing one’s own outcomes at the expense of the powerless may be considered as an inappropriate act” (page 19). In this vein, using a modified UBG, Handgraaf et al. (2008) testify negative relationship between recipients’ power and allocators’ offers: allocators act in a self-centered manner, if power difference shifts in their favor. Nevertheless, as soon as the recipients lose all their power (i.e. the modified UBG is converted to DG), the allocations become benevolent.

In case of a loss the interdependence between the dictator and the recipient is preserved: the dictator still possesses all the power residing within him, while the recipient can be easily exploited. Consequently, moral considerations and social responsibility of the dictators due to power asymmetry between the counterparts result in other-regarding allocations even in DGs with monetary losses. Such a conjecture is consistent with response justifications of the allocators, designed to uncover their internal perspective. Both in “Standard” and “Standard & Loss” allocators reveal concerns for their counterparts: “I wanted to keep a large portion, but also be generous to a stranger”, “This way we both get something good out of it”, “Why not? It seemed fair. The golden rule, you know”, “I felt bad that they ended up with nothing and I wanted to be fair and share some of my endowment”, “He lost all his money”, “Hopefully, by splitting it in half, we would each end up with something”.\(^{13}\) Furthermore, the more powerless the recipients become, the more are the allocators concerned for their counterparts: “If I keep, it’s barely anything, but it’s half a month’s pay for them”, “I feel the money that I give will help out a lot. It’s

\(^{13}\)The first three responses refer to “Standard”, while the last three to “Standard & Loss”
a good feeling to help others in need”, “The person described needs the money more than I do”, “The person needs the money more than I do. I would love to help them. : )”, “I have plenty so I am willing to give a large amount of my money”.14

To conclude, the data illustrate, that bi-directional loss on average does not vanish other-regarding motives of the allocators (at least in the current experiment).

References


14The first three responses refer to “Poverty”, while the last two to “Poverty & Loss”


6 Appendix

A Figures

Figure 1: The Structure of the On-line Experiment
Figure 2: Mean Value of Allocations in “Standard” and “Standard & Loss”

- "Standard": 39.100%
- "Standard & Loss": 44.865%
Figure 3: Histograms of Allocations in “Standard” and “Standard & Loss”
Figure 4: Mean Level of Allocations in “Poverty” and “Poverty & Loss”
Figure 5: Histograms of Allocations in “Poverty” and “Poverty & Loss”