If the worst comes to the worst: Dictator giving when recipient's endowments are risky ☆

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ABSTRACT

Donors may often not be sure whether a recipient really needs their help. Does this uncertainty deter generosity? We experimentally investigate a situation in which donors do not know the financial endowment of the recipient for certain, but still have some information on the distribution the endowments are drawn from. In the experiment, we find that uncertainty does not deter generosity. In fact, if we filter out selfish dictators, under most specifications of uncertainty dictators give more, compared with the donation dictators make to a recipient they know to have the expected value of the endowment with certainty. They are particularly concerned about the possibility of a recipient leaving the lab with no payoff from the game.

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1. Introduction

> But where there is danger, rescue is near.
> Wo aber Gefahr ist, wächst das Rettende auch.
>
> Hölderlin Patmos 1803

If people see someone in need, many are willing to help. Charities collect substantial amounts of money. Even under the controlled conditions of the lab, and with guaranteed anonymity, participants are willing to share a sizable fraction of their endowments (Engel, 2011). Yet frequently donors may not be sure that the recipient truly needs help. How needy is a beggar in the street, how much money does a political campaign require, how deprived is a school? We model such situations as a dictator game in which the endowment of the beneficiary is unknown or uncertain. We investigate how this uncertainty affects generosity. Does the possibility that the recipient might actually not be in need deter giving? Or do donors play it safe and keep giving to make sure that those who really need their help do not suffer? This is a question of high practical relevance. The recipient of generosity often has a hard time to prove that she truly needs help. If this certainty cannot be proven to the requisite standard, a lot of recipients might be deprived of help they dearly need.

We study this question experimentally. In our baseline, we provide the recipient with a fixed endowment of 5, while the dictator is endowed with 10 tokens. Hence we operationalize need as the exogenously imposed difference between the dictator's and the recipient's endowment. We compare the baseline with situations in which the recipient's endowment is randomly drawn from distributions with different characteristics. We test whether dictators' choices systematically vary with (a) the endowment being certain or uncertain, (b) the number of realizations a lottery over the recipient's endowment may take, (c) the standard deviation of this lottery, (d) the skewness of the lottery, (e) the presence or absence of information about the expected value of the lottery, and (f) the possibility that the recipient actually has no endowment at all. In all treatments but one, dictators are sure that, in expectation, the recipient's endowment is 5.

On average, dictators' choices in our treatments do not differ substantially from participants' choices in the baseline, except if even the expected value of the endowment is unknown. However, our experimental design allows us to identify selfish dictators, and once we filter them out we observe treatment effects. Overall, non-selfish dictators are more generous if the recipient's endowment is uncertain. Generosity increases with the number of possible realizations of the lottery over the recipient's endowment, and with its standard deviation, and decreases the higher the recipient's endowment may be.

The main experiment is preceded by eliciting transfers for 11 differently-sized fixed endowments of the recipient. Using these choices, we cannot only compare the attitude towards the recipients between treatments, but also within subjects. While riskaversion over the recipient's endowment could explain the transfers, the estimated parameters are not only inconsistent between certainty and uncertainty, but also between the different treatments with uncertainty. Our results suggest that dictators care mostly about the possibility of zero payments for the recipient and not the expected overall payments.

To investigate how strongly the risk of a recipient having no endowment at all triggers generosity, we take an additional look at the treatment in which the dictator has no information about the recipient's neediness, i.e., her endowment. We run one additional treatment that differs from this situation only by the fact that the recipient has a guaranteed endowment of €1. Transfers in the additional treatment are substantially and significantly lower and no longer differ from the baseline where the recipient's endowment is €5 for sure. This shows that the critical feature is not uncertainty per se, but the fear that the recipient might receive nothing at all, which in our experiments would coincide with the highest possible neediness.

2. Related literature

It is a well-established fact that dictator giving under certainty responds to the recipients' neediness, i.e., the size of the recipients' endowments (Engel, 2011). The more needy they are, the higher the transfers. If recipients appear less deserving, but equally needy (for instance, since bad circumstances are their own fault), they receive less. They receive more if it is uncertain whether they deserve help (Fong, 2007; Fong and Oberholzer-Gee, 2011). If transfers influence the probability of winning a lottery, dictators give less than in a traditional dictator game (Brock et al., 2013). They also give less if it is uncertain how much the recipient will benefit from the transfer (Cettolin et al., 2016). These dictator games with risk on the side of the recipient keep the recipient's endowment fixed. To the best of our knowledge, we are the first to investigate how dictators react to the fact that the recipient's initial endowment, and hence her neediness, are uncertain. If it is not sure whether the recipient needs help, the donation risks being wasted. We show that this uncertainty does not deter generosity. On the contrary, donors give more to prevent zero outcomes for the recipients. We see this as an important contribution to the literature.

In our experiments, we introduce neediness, and uncertainty about it, through the recipients' endowments and the distributions these endowments are drawn from. Without uncertainty, the dictators' generosity usually decreases as the recipients' endowments become larger (see the meta-study by Engel, 2011).[1]

Generosity not only depends on the endowment or wealth of the recipient, but also on the reason why the recipient is in need. Fong (2007) presents evidence from a field experiment in which donors are presented with background information about three women on welfare. One of the three women had provided little information, so that donors did not know whether she deserved help. The second woman's questionnaire conveyed the impression of her being rather lazy, while the third woman's questionnaire made it clear that she had done whatever she could to earn a living herself. Donors transferred significantly more if the reason for deserving help was uncertain or a lack of luck, compared to laziness. Fong and Oberholzer-Gee (2011) manipulate the deservingness of recipients by matching them with low-income public housing residents who either had a drug problem or a disability. In their baseline treatments, dictators either know their match and are certain about the recipient's deservingness or receive no additional information and remain uncertain. Being matched with a disabled recipient tends to increase transfers. If dictators are able to buy this information, they strongly reduce transfers to people who belong to the less-preferred group of drug addicts, and overall all recipients are worse off.[2]

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[1] Based on studies in which recipients were given differently large endowments (e.g., Andreoni and Bernheim, 2009; Bardsley, 2008; Bolton and Katok, 1998; Carpenter et al., 2010; Cox, 2004; Eckel et al., 2005; Korenok et al., 2008).

[2] Related to this is favoritism towards groups. Yamagishi and Mifune (2008) investigate whether shared group membership promotes altruism if dictators know the social background of recipients, but not vice versa. Norton et al. (2013) manipulate whether the social background of the recipient is or is not ambiguous.