

Contents lists available at SciVerse ScienceDirect

Journal of Economic Behavior & Organization

journal homepage: www.elsevier.com/locate/jebo



Are dictators averse to inequality?

Oleg Korenok, Edward L. Millner, Laura Razzolini*

Virginia Commonwealth University, 301 West Main Street, Richmond, VA 23284-4000, United States

ARTICLE INFO

Article history:
Received 30 July 2009
Received in revised form 28 June 2011
Accepted 12 March 2012
Available online 26 March 2012

JEL classification: C91

D63 D64

Keywords:
Dictator game
Other-regarding preferences
Maximin
Altruism

ABSTRACT

We present the results of an experiment designed to identify more clearly the motivation underlying dictators' behavior. In the typical dictator game, recipients are given no endowment. We give an endowment to the recipient as well as the dictator. This new dimension allows us to test directly for inequality aversion. Our results confirm that the inequality between dictator's and recipient's endowment is a key determinant of the dictator's giving. As we increase the recipient's endowment from 0 to an amount equal to the dictator's endowment, the mean amount passed drops from 30 percent to less than 12 percent of the dictator's endowment, and the proportion of dictators who pass positive amounts falls from 75 percent to 26 percent. Thus the majority of dictators exhibit behavior consistent with inequality averse preferences. On the other hand, only 24 percent of dictators split payoffs equally suggesting that maximin preferences are less important drivers of dictators' giving.

© 2012 Elsevier B.V. All rights reserved.

1. Introduction

In the standard dictator game the dictator receives an endowment that she allocates between herself and the recipient. A selfish dictator should keep the entire endowment leaving the recipient with nothing. However, many experimental studies find that, on average, only 30 percent of the dictators pass nothing. The remaining 70 percent pass at least a portion of their endowment. Thus, dictators appear to be motivated by considerations beyond their own personal payoffs. The question is: "What exactly are these additional considerations?"

A traditional explanation rests on the idea of inequality aversion suggested by Fehr and Schmidt (1999) and Bolton and Ockenfels (2000). Inequality aversion implies that individuals dislike differences in final payoffs and are willing to sacrifice their own payoffs to achieve more equal outcomes. Fehr and Schmidt and Bolton and Ockenfels show that inequality aversion can explain outcomes that are not consistent with purely selfish behavior in a variety of settings, including the standard dictator game. In the standard dictator game, inequality is at its maximum, as dictators receive an endowment while recipients get nothing. By passing at least a portion of their endowment, dictators can move the final outcome toward a more equal distribution.

Charness and Rabin (2002) and Engelmann and Strobel (2004) compare the predictive ability of inequality aversion, efficiency concerns, and maximin preferences in the context of multiple one-shot distribution experiments. Efficiency preferences require maximizing the sum of final payoffs, while maximin preferences require maximizing the smallest payoff among subjects. Both studies find that efficiency and maximin preferences are important for subjects when choosing among

^{*} Corresponding author. Tel.: +1 804 828 7187.

E-mail addresses: okorenok@vcu.edu (O. Korenok), emillner@vcu.edu (E.L. Millner), lrazzolini@vcu.edu (L. Razzolini).

¹ See, for a discussion, the excellent survey by Camerer (2003).

different final allocations and that the role of inequality aversion has been exaggerated in explaining subjects' choices. However, whether these results have similar implications for dictator games is not clear.²

In this paper, we present the results of an experiment designed to identify more clearly the motivation underlying dictators' behavior. In the typical dictator game, the recipient's payoff is completely determined by the amount passed. We give an endowment to the recipient as well as the dictator. The maximin model predicts that the amount passed should equalize the final payoffs. The inequality aversion model gives a more general prediction that the amount passed should fall to zero as the recipient's endowment approaches the dictator's.

Our results confirm that the inequality between the dictator's and the recipient's endowments is a key determinant of the dictator's giving. As we increase the recipient's endowment from 0 to an amount equal to the dictator's endowment, the mean amount passed drops from 30 percent to less than 12 percent of the dictator's endowment, and the proportion of dictators who pass positive amounts falls from 75 percent to 25 percent. Thus the majority of dictators exhibit behavior consistent with inequality averse preferences. On the other hand, only 24 percent of dictators split payoffs equally suggesting that maximin preferences are less important drivers of dictators' giving.

A number of recent experiments include treatments in which the recipient's endowment is positive. None examine directly whether giving is motivated by inequality aversion and, therefore, the details of their designs differ from ours. We vary only the recipient's endowment in an otherwise standard dictator game. On the other hand, Bardsley (2008) and List (2007) add an option to "take" from the recipient's endowment; Bolton and Katok (1998) and Eckel et al. (2005) simultaneously vary the endowments to both the dictator and the recipient; and in Crumpler and Grossman (2008) the dictator's pass does not change the recipient's final payoff. In our design dictators may only pass; the recipient's endowment changes while the dictator's endowment is constant; and the amount passed affects the recipient's final payoff. Finally, Konow (2010), as part of a study on altruism, designed a "subsidy" treatment in which the recipients are given a positive endowment independent of the dictators' endowment. Konow tests the competing theories of pure altruism, warm glow giving, and impure altruism. His design is the closest to ours. Unlike all previous experiments, our experiment has a within-subject design which allows us to compare choices of the same subjects across multiple budget sets.

Three sections follow. Section 2 describes the experimental design. In Section 3 we report the results and discuss whether the behavior of individual dictators is consistent with various types of preferences. Section 4 concludes.

2. Experimental design

The dictator is given an endowment $E_d > 0$ and chooses from it a discrete amount, P, to pass to the recipient, subject to $0 \le P \le E_d$. Let E_r denote the endowment given to the recipient. In the standard dictator game, $E_r = 0$. In our experiment, the recipient may also be given a positive endowment. That is, $E_r \ge 0$. The final payoffs to the dictator and to the recipient, π_d and π_r , are, therefore, given by

$$\pi_d = E_d - P$$
 and $\pi_r = E_r + P$.

Each dictator completes a total of eight decisions for different values of the endowments, E_r and E_d :

```
E_r \in \{\$0, \$2, \$4, \$6\} when E_d = \$6,

E_r \in \{\$0, \$4, \$8, \$12\} when E_d = \$12.^3
```

A particular level of inequality between the dictator and the recipient characterizes each decision. We define inequality as $i = (E_d - E_r)/E_d$, and it ranges from 0, when the two endowments are equal, to 1 when, as in the standard game, the recipient's endowment is \$0.⁴

The experiments were conducted in the Experimental Laboratory for Economics and Business Research at Virginia Commonwealth University, with student volunteers recruited from basic and intermediate economics courses. We conducted 4 sessions with a total of 68 subjects, 34 dictators and 34 recipients. Subjects earned an average of \$11.21. The procedure follows.

Recruited subjects enter the lab and are randomly divided into two groups. The groups sit facing each other on opposite sides of the room. The monitor reads the instructions aloud.⁵ The instructions conclude with a quiz designed to help the participants become familiar with the type of choices involved in the dictator game. The monitor checks the quiz to confirm that all subjects clearly understand the nature of the choices. After the quiz, a common and public toss of a die determines which of the two groups contain the dictators (Blue players) and which contains the recipients (Green players).

² Engelmann and Strobel state that their results do "not necessarily imply that [efficiency concerns and maximin preferences] are equally important in other classes of games . . . " (2004, pp. 857–858).

³ We did not allow for the recipient's endowment to be greater than the dictator's because neither inequality aversion nor maximin predicts positive pass beyond this point.

⁴ Compared to the design by Konow (2010), we systematically vary the recipient's endowment over a wider range of inequality values. He compares the amount passed under E_r = \$0 and E_d = \$10 with the amount passed under E_r = \$4 and E_d = \$10.

⁵ Instructions are available at http://www.people.vcu.edu/~lrazzolini/dictator.pdf.

Download English Version:

https://daneshyari.com/en/article/883789

Download Persian Version:

https://daneshyari.com/article/883789

<u>Daneshyari.com</u>