META-ANALYSES OF THE DICTATOR AND ULTIMATUM GAMES

Esra Ahmed, University of Jendouba

ABSTRACT

Over the last many years, more than a hundred dictator game experiments have been published. This Meta study summarizes the evidence. Exploiting the fact that most experiments had to fix parameters they did not intend to test, in multiple regression the Meta study is able to assess the effect of single manipulations, controlling for a host of alternative explanatory factors. The resulting rich dataset also provides a tested for comparing alternative specifications of the statistical model for analysing dictator game data. It shows how Tobit models (assuming that dictators would even want to take money) and hurdle models (assuming that the decision to give a positive amount is separate from the choice of amount, conditional on giving) provides additional insights.

Keywords: Meta-Analyses, Dictator, Ultimatum Games.

INTRODUCTION

Kahneman invented the game as part of his programme that turned textbook assumptions into behavioural hypotheses. While normally a sizeable fraction of participants does indeed give nothing, as predicted by the payoff maximisation hypothesis, only very rarely this has been the majority choice. It by now is undisputed that human populations are systematically more benevolent than homo economics (Forsythe et al., 1994). Later experiments have explored this predisposition in two dimensions: situational and demographic. The former implicitly sticks to the claim that, at least at the population level, behavioural dispositions are human universals. It engages in refining the conditions under which benevolence is to be expected. The latter puts the research question upside down and uses the extremely simple design as a tool for quantifying systematic behavioural differences between populations (Eichenberger & Oberholzer-Gee, 1998; Houser, & Schunk, 2009).

The dictator game has become popular among experimentalists. In the one year of 2008, 30 new papers with this game have been published. It therefore is time to take stock, and to make the existing body of evidence accessible. Yet this paper aims beyond merely providing orientation. Implicitly, through their design choices, experimenters have generated data on independent variables they have not explicitly set out to test (Rigdon et al., 2009). They for instance have played a one-shot game with students, asking dictators to divide a pie of $10 given to them between themselves and an anonymous recipient from the same subject pool. What looks like a perfectly standard dictator game implicitly provides data on one shot versus repeated games; on games with students versus other populations; on manna from heaven versus earned money; on stakes; on a specified degree of social distance; on dictator-recipient anonymity versus dicta- tor identification. This evidence is untapped as yet. It is useful for two purposes.

The basis for testing the effect of isolated manipulations becomes much broader. More interestingly even, it becomes possible to control for alternative explanations to a degree that by far transcends what is feasible in individual experimental studies. That way one learns which effects are robust, and how big effects are once one control for other factors that have been shown to matter for the willingness of dictators to give (Dickson, 2009).

CONCLUSION

The following effects are very robust: If the recipient deserves, she gets more. If the dictator has old age, she gives more. If the dictator is identified, she is more generous. Children give less, as do groups. Other effects only show up when means are replaced by distributions. If one does, one finds that dictators give more when handling real money, and when they are identified. If choices are incentivized, this reduces generosity. Yet other effects only become visible if one further controls for unobserved heterogeneity. One then finds that dictators give more when they get a social cue, when they are middle aged (rather than being a student), or when they come from a developing country. Further effects were already visible in meta-regression, but become apparent in the original data only when controlling for unobserved heterogeneity. One then finds that dictators give less if the game is repeated, and if they have a concealment option.

REFERENCES

Dickson, E.S. (2009). Do participants and observers assess intentions differently during bargaining and conflict? *American Journal of Political Science*, *53*(4), 910-930.

Eichenberger, R., & Oberholzer-Gee, F. (1998). Rational moralists: The role of fairness in democratic economic politics. *Public Choice*, *94*(1), 191-210.

Forsythe, R., Horowitz, J.L., Savin, N.E., & Sefton, M. (1994). Fairness in simple bargaining experiments. *Games and Economic behavior*, *6*(3), 347-369.

Houser, D., & Schunk, D. (2009). Social environments with competitive pressure: Gender effects in the decisions of German schoolchildren. *Journal of Economic Psychology*, *30*(4), 634-641.

Rigdon, M., Ishii, K., Watabe, M., & Kitayama, S. (2009). Minimal social cues in the dictator game. *Journal of Economic Psychology*, *30*(3), 358-367.