

Book review on Michalis Drouvelis: "Social preferences: an introduction to behavioural economics and experimental research"

Michael Kosfeld¹

Accepted: 10 January 2022 / Published online: 31 January 2022 \circledast The Author(s) 2022

Social preferences: an introduction to behavioural economics and experimental research, by Michalis Drouvelis, Newcastle upon Tyne: Agenda Publishing, 2021, 205 pages, £22.99, ISBN 978-1-78821-417-9 (paperback).

Behavioural economic research has become an established field in the economics discipline over the recent years. The same holds for lab-and more recently fieldexperiments representing a powerful empirical research method. An important literature within these two fields has focused on so-called "social preferences", i.e., individual economic preferences modelling behaviour that takes the welfare of other parties into account. Classic papers by now include models of fairness (Rabin, 1993), inequity aversion (Bolton & Ockenfels, 2000; Fehr & Schmidt, 1999), and reciprocity (Charness & Rabin, 2002; Dufwenberg & Kirchsteiger, 2004; Falk & Fischbacher, 2006). The assumptions in many of these models are based on observations made in carefully controlled laboratory experiments, in which participants take decisions that allow for a thorough differentiation between social and non-social motives. Examples are the famous ultimatum game, first analysed by Güth et al. (1982), as well as numerous versions of the trust game (Berg et al., 1995) and public good game (Andreoni, 1988). In fact, the close interaction between theoretical and experimental research in the behavioural economics literature has constantly triggered newer generations of models that incorporate additional or alternative assumptions, thereby further improving the predictive power and "behavioural validity" of microeconomic theory. Examples are models incorporating image concerns (Bénabou & Tirole, 2006; Ellingsen & Johannessson, 2008) or Kantian morality (Alger & Weibull, 2013), just to mention a few.

In his new book *Social preferences: an introduction to behavioural economics and experimental research*, Michalis Drouvelis presents a very accessible and valuable introduction into the social preferences literature focusing on the experimental side of the field, i.e., on the thousands of lab and field experiments

Michael Kosfeld kosfeld@econ.uni-frankfurt.de

¹ Goethe University Frankfurt, Theodor-W.-Adorno-Platz 4, 60323 Frankfurt am Main, Germany

that have been conducted by behavioural economists elucidating our understanding of the characteristics, foundations, and consequence of human cooperative behaviour. As Drouvelis writes, the target audience of the book are undergraduate or graduate students with little prior knowledge of the field. The clear focus is on experiments, hence the presentation is non-technical and no mathematical knowledge is required to follow and enjoy the book. The book is intended to form the basis for a one-semester course that should be of interest to many teachers and students in economics and related disciplines. I expect it to attract mostly nonexperts as most active researchers in this area probably have their own courses on this topic already. But for this very reason, it is exactly the textbook that has been missing. The book covers the main relevant material and at the same time is focused enough such that non-experts will be interested to dig into the topic. Each chapter concludes with five key insights in which the main results and findings are summarized.

After a brief general introduction, which nicely explains also two of the key differences of economic experiments in comparison to experiments, for example, in social psychology (= monetary incentives and no deception), Chapter 2 opens the presentation with experiments on bargaining games. The classic in this area is certainly the ultimatum game. However, the reader also learns about the invention of another famous game that has been used in literally hundreds of experiments since then (and which in fact is not really a strategic game as only one player takes decisions): the dictator game. Forsythe et al. (1994) used this game to test (and reject) the hypothesis that fair offers observed in the ultimatum game are primarily the result of fairness concerns on the part of the proposer. As their (and later) results show, the key driver is the anticipation of fairness concerns on the part of the responder. Other important aspects of bargaining behavior that are addressed in this chapter are the impact of proposer and responder competition, the role of social distance, emotions and intentions, and the influence of the origin as well as the stake size of the resource that is to be shared.

Chapter 3 discusses trust and gift-exchange games. Drouvelis shows that, similarly to the previous chapter, key experiments on these games have isolated particular elements of the strategic situation to determine and disentangle underlying motives of the two players in the game. Examples are the studies by Cox (2004) and McCabe et al. (2003), in which action possibilities of the first mover (the trustor) or the second mover (the trustee) are modified to test whether outcomes in the trust game are, e.g., the result of unconditional altruism or of positive reciprocity. Drouvelis' discussion of these experimental studies highlights, in my view, an important general aspect of experimental economic research, namely that experiments are not only (and perhaps not even primarily) used to mimic naturally occurring real-life situations but to study behaviour in carefully designed controlled environments that allow researchers to open up the black box of human decision-making, both for explicit theory testing and for empirical exploration.

In the remaining chapters of the book Drouvelis considers—from various perspectives—what can be called the workhorse model of social preferences: the public good game. Chapter 4 opens the discussion by addressing the question whether positive contributions in the public good game can actually be interpreted

as voluntary cooperation or rather as the result of decision-making errors. Starting point is the stylized fact that average contributions typically start at around 50 percent of players' endowment and then continuously decline over the course of an experiment. In other words, players behave cooperatively at the beginning of the experiment but then seem to learn and behave selfishly at the end. Yet, the question is what *exactly* do players learn? Do they learn that contributing zero is the strictly dominant action in the game, or that others are unwilling to contribute to the public good? Again, the discussion in this chapter nicely shows that modifying the experimental design allows economists to answer the question. The key study in this context is Fischbacher et al. (2001), which was the first to identify an important driver behind both the manifestation and the decline of positive contributions: socalled "conditional cooperation", which can be understood as a particular example of reciprocal behaviour. The chapter discusses the main experimental design and results and concludes with a comprehensive survey of the available evidence for conditional cooperation both across different countries and various lab and field contexts.

Having shown that positive contributions in the public good game can indeed be interpreted as voluntary cooperation, the next question is what determines and explains the observed variation in cooperation outcomes. In chapters 5–8, Drouvelis provides an extensive discussion of such various factors that influence whether and how much players cooperate in the public good game. Chapter 5 considers the influence of pre-play communication, inequality, and social identity. Chapter 6 discusses the role of leadership, i.e., the effect of sequential decision-making, where one player (the leader) decides first and the remaining players (the followers) decide subsequently. Here, Drouvelis shows that it is not only the sequential nature of decision-making per se that matters, but also who is appointed as a leader and how.

A key instrument to promote cooperation is punishment. Experimental research has convincingly documented over the last decades that players are willing to punish free riders in the public good game even if this is costly. Emotions play an important role here. Once players know that free riders will be punished, contributions increase and cooperation stabilizes. Chapter 7 documents the available evidence in this domain, pointing also to the limits of punishment as an effective mechanism to sustain cooperation. One such aspect is the cost-to-impact ratio of punishment, i.e., the cost for the punishing player relative to the effect on the punished player; another is the possibility of counter-punishments, i.e., the possibility for a punished player to retaliate by punishing the punisher. Both aspects are shown to limit the positive effect of punishment on cooperation outcomes significantly.

Chapter 8 covers experiments analysing the endogenous implementation of punishment institutions. In these experiments, players are given the possibility to decide themselves, either by voting or selection, whether punishments can be imposed or not. Intriguingly, the results document an extra positive effect of endogenously implemented (compared to exogenously given) punishment institutions on cooperation outcomes—a kind of "democracy premium". In my eyes, these results nicely demonstrate how economic experiments can be fruitfully used to study processes of institution formation, a major topic in economics, which opens many possibilities for future research that go far beyond the analysis of social

preferences. An important issue in this context is third-party punishment, i.e., punishment from players, who are not directly affected by the freeriding of other players, but whose willingness to punish (or not) can turn out to be crucial for the enforcement of norms sustaining cooperation (cf. Kosfeld & Rustagi, 2015). Drouvelis discusses various papers at the end of this chapter that offer novel insights into this exciting and growing literature.

The majority of experiments discussed in the book study behaviour of so-called "WEIRD" subjects, i.e., participants from Western, Educated, Industrialised, Rich, and Democratic societies (Henrich et al., 2010). The final chapter 9 broadens the analysis by discussing important results on all of the above-mentioned topics (bargaining, trust, cooperation) from several cross-cultural experiments. My personal experience from teaching courses in experimental economics is that students particularly like these results. It is therefore good to see them included in Drouvelis' book.

The book has two appendices that should be helpful for newcomers in experimental economics who are interested in conducting experiments themselves as well as for teachers who consider running experiments in the classroom. The first contains a selection of sample instructions on key games discussed in the book. The second provides some important practical information for designing and running economic experiments. A set of notes offering useful references for further reading completes this highly recommendable book.

Funding Open Access funding enabled and organized by Projekt DEAL.

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References

- Alger, I., & Weibull, J. (2013). Homo moralis—Preference evolution under incomplete information and assortative matching. *Econometrica*, 81(6), 2269–2302.
- Andreoni, J. (1988). Why free ride?: Strategies and learning in public goods experiments. *Journal of Public Economics*, 37(3), 291–304.
- Bénabou, R., & Tirole, J. (2006). Incentives and prosocial behavior. American Economic Review, 96(5), 1652–1678.
- Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity, and social history. Games and Economic Behavior, 10(1), 122–142.
- Bolton, G., & Ockenfels, A. (2000). ERC: A theory of equity, reciprocity, and competition. American Economic Review, 90(1), 166–193.
- Charness, G., & Rabin, M. (2002). Understanding social preferences with simple tests. *Quarterly Journal of Economics*, 117(3), 817–869.
- Cox, J. C. (2004). How to identify trust and reciprocity. Games and Economic Behavior, 46(2), 260-281.

- Dufwenberg, M., & Kirchsteiger, G. (2004). A theory of sequential reciprocity. Games and Economic Behavior, 47(2), 268–298.
- Ellingsen, T., & Johannessson, M. (2008). Pride and prejudice: The human side of incentive theory. American Economic Review, 98(3), 990–1008.
- Falk, A., & Fischbacher, U. (2006). A theory of reciprocity. *Games and Economic Behavior*, 54(2), 293–315.
- Fehr, E., & Schmidt, K. (1999). A theory of fairness, competition, and cooperation. *Quarterly Journal of Economics*, 114(3), 817–868.
- Fischbacher, U., Gächter, S., & Fehr, E. (2001). Are people conditionally cooperative? Evidence from a public goods experiment. *Economics Letters*, 71(3), 397–404.
- Forsythe, R., Horowitz, J. L., Savin, N. E., & Sefton, M. (1994). Fairness in simple bargaining experiments. *Games and Economic Behavior*, 6(3), 347–369.
- Güth, W., Schmittberger, R., & Schwarze, B. (1982). An experimental analysis of ultimatum bargaining. Journal of Economic Behavior and Organization, 3(4), 367–388.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83.
- Kosfeld, M., & Rustagi, D. (2015). Leader punishment and cooperation in groups: experimental field evidence from commons management in Ethiopia. *American Economic Review*, 105(2), 747–783.
- McCabe, K. A., Rigdon, M. L., & Smith, V. L. (2003). Positive reciprocity and intentions in trust games. Journal of Economic Behavior and Organization, 52(2), 267–275.
- Rabin, M. (1993). Incorporating fairness into game theory and economics. American Economic Review, 83(5), 1281–1302.

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