



## Distributive and reciprocal fairness: What can we learn from the heterogeneity of social preferences?

Linda Kamas<sup>a,\*</sup>, Anne Preston<sup>b,1</sup>

<sup>a</sup> Department of Economics, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053, United States

<sup>b</sup> Department of Economics, Haverford College, 370 Lancaster Avenue, Haverford, PA 19041, United States

### ARTICLE INFO

#### Article history:

Received 13 October 2010

Received in revised form 15 August 2011

Accepted 5 December 2011

Available online 13 December 2011

#### JEL classification:

A13

C91

D03

D63

#### PsycINFO classification:

2900

3020

#### Keywords:

Fairness

Justice

Social preferences

Trust

Reciprocity

### ABSTRACT

This study evaluates people's concerns for distributive fairness (equality of outcomes and payoffs to those worse-off) and reciprocal fairness (receiving what one is due based on one's past actions) using dictator, ultimatum, and trust games. In the dictator games we classify individuals' preferences as self-interested, inequity averse, efficiency maximizing, or compassionate social surplus maximizing. We find that the different utility functions of the social preference types guide participants' behavior in the ultimatum and trust games. The self-interested and efficiency maximizers make the lowest offers in the ultimatum game, are least likely to reject a low offer in the ultimatum game, and send back the least amount in the trust game. Consistent with the goal of maximizing the sum of payoffs however, efficiency maximizers and compassionate social surplus maximizers make the highest offers in the trust game, and in attempts to ensure equal outcomes, inequity averters make low offers. Because those classified as self-interested or efficiency maximizing do not exhibit concern for pure distributive fairness, we identify positive offers as first movers in both games as evidence of expectations of reciprocity by second movers and some choices as second movers as clear evidence of their own concerns for reciprocal fairness. Furthermore, we find strong evidence supporting general concern for reciprocal fairness in the trust games where the modal response of second movers in all preference groups is to equalize payments across participants.

© 2011 Elsevier B.V. All rights reserved.

### 1. Introduction

Most people value fairness, but there is considerable disagreement on what exactly is meant by “fair”. In this paper, we consider two fairness principles, “distributive fairness”, the concern for how money or goods are distributed among individuals, and “reciprocal fairness”, the belief that one should receive what one is due based on one's actions (i.e. positive actions should be rewarded and harmful actions punished).

We begin by identifying participants' concern for distributive fairness through a set of dictator allocation decisions. The dictator decisions categorize people's preferences as self-interested, efficiency maximizing, compassionate social surplus maximizing, or inequity averse. Those who are inequity averse or compassionate social surplus maximizing reveal a concern for distributive fairness because they are willing to give up money to reduce inequality or to raise incomes of those who are worse-off, while the self-interested and efficiency maximizers do not.

\* Corresponding author. Tel.: +1 408 554 6950; fax: +1 408 554 2331.

E-mail addresses: [lkamas@scu.edu](mailto:lkamas@scu.edu) (L. Kamas), [apreston@haverford.edu](mailto:apreston@haverford.edu) (A. Preston).

<sup>1</sup> Tel.: +1 610 896 1059; fax: +1 610 896 1041.

The subjects then participate as both first movers and second movers in ultimatum and trust games. Using utility functions consistent with the different preference types, we can predict behavior in ultimatum and trust games with and without additional attention to reciprocal fairness. Concerns for reciprocal fairness in both games are exhibited both in first-mover expectations that the responder may reward or punish depending on perceptions of the fairness of the offer and in second-mover responses.

The results of the games allow us to achieve two goals. First, we show that people with different types of social preferences behave differently in strategic environments. While there is a body of literature showing that social value orientation affects economic behavior in strategic games, most of this work does not distinguish between different ways of being pro-social, in particular, it does not distinguish between inequity aversion and efficiency/social surplus maximization. We show that inequity averters, efficiency maximizers, and compassionate social surplus maximizers behave very differently and that their decisions are predictable given their social preference type. Second, we utilize our preference classifications to distinguish pure reciprocal fairness from distributive fairness for select groups of individuals depending on their preferences.

## 2. Distributive and reciprocal fairness

### 2.1. Defining fairness

Theories of justice provide several ways of conceptualizing what is fair. For example, Konow (2003) distinguishes four categories or families of justice theories – equality and need, utilitarianism and welfare economics, equity and desert, and context – while Schmidtz (2006) identifies four elements of justice – equality, desert, reciprocity, and need. We focus our analysis on two categories, which we identify as “distributive fairness” (encompassing both equality and need) and “reciprocal fairness” (possibly a type of desert). “Distributive fairness”, in our analysis, refers to concern about the distribution of money or goods without reference to people’s actions or behaviors, and may focus on the equality of the final distribution as well as on the well-being of those who are worse-off (i.e. need).<sup>2</sup> This type of fairness value is consistent with Rawlsian views of justice (i.e. the difference principle or maximin) as well as the social preference models of Fehr and Schmidt (1999), Bolton and Ockenfels (2000), and Charness and Rabin (2002) that identify inequity aversion and maximin social welfare maximization.

The “reciprocal fairness” of our analysis may be considered a type of desert since it requires that people receive what they are due in response to past actions. While the notion of desert may be the response to a broad spectrum of factors, we conform to Rachels’ (1997) “Principle of Desert” as: “People deserve to be treated in the same way that they have (voluntarily) treated others.” Alternatively, Konow discusses reciprocity under the rubric of context, rather than desert, and Schmidtz treats reciprocity as its own category of justice, distinguishing it from the more general desert principle by emphasizing the response to personal relationships rather than behavior in general; that is, an individual should reward (or punish) someone who has treated him or her well (or poorly).

The emphasis on voluntary actions is important. Consequently, if an action helps or harms another but is not due to the actor’s desire or is not under his or her control, the associated reciprocal fairness response may differ or be non-existent. Economists have used the term “intentions” to describe fairness based on responses to perceived positive or negative orientation of others. Behavioral theories such as Rabin (1993) and Dufwenberg and Kirchsteiger (2004) model intentions while the models of Charness and Rabin (2002), Falk and Fischbacher (2006), Cox, Friedman, & Gjerstad (2007), and Cox, Friedman, & Sadiraj (2008) incorporate both distributive and reciprocal fairness. Regardless of the name, desert, reciprocity, or intentions, this notion of fairness refers to the idea that people who intentionally treat others well deserve to be treated well and those who willfully harm others deserve to be punished. We use the term “reciprocal fairness” to identify this type of fairness behavior.

### 2.2. Experimental evidence on concern for fairness

There is substantial evidence of concern for fairness in the experimental literature. There has been some debate over which type of social preference better characterizes peoples’ values; Fehr and Schmidt (1999), Bolton and Ockenfels (2000, 2006), and Fehr, Naef, and Schmidt (2006) argue that inequity aversion explains social preferences while Charness and Rabin (2002), Engelmann and Strobel (2004, 2006), and Fisman, Kariv, and Markovits (2007) report that surplus maximization and maximin better describe behavior in their experiments. However, there is evidence that preferences are heterogeneous and Kamas and Preston (in press) find that about half of those who hold consistent social preferences can be categorized as inequity averters and the other half as social surplus maximizers.<sup>3</sup>

<sup>2</sup> Fleischacker (2004) argues that this is a relatively modern view of distributive fairness. He says, “In its Aristotelian sense, however, “distributive justice” called for deserving people to be rewarded in accordance with their merits, was seen as bearing primarily on the distribution of political status, and was not seen as relevant at all to property rights.” This older view of distributive justice, then, focused solely on desert or merit and the value of giving to the poor was seen as beneficence, not justice. Rawls (1971) expresses a more modern view, “None of the precepts of justice aims at rewarding desert.”

<sup>3</sup> There is also evidence that women and arts and science majors are more likely to be inequity averters while men and economics/business majors are more often surplus maximizers (Andreoni & Miller, 2002; Andreoni & Vesterlund, 2001, Fehr et al., 2006, and Kamas & Preston, in press). Evidence of stable, heterogeneous preferences has been also found in public goods games, where people have been classified as cooperators, conditional cooperators (reciprocators), or free riders (Burlando & Guala 2005; Fischbacher & Gächter, 2010; Fischbacher, Gächter, & Fehr, 2001; Kurzban & Houser, 2005, and Volk, Thöni, & Ruigrok, in press). Chaudhuri (2011) provides a survey of this work. Erlei (2008) shows that some seemingly inconsistent behaviors may partly be explained by heterogeneous social preferences, and several authors (Cappelen, Hole, Sorensen, & Tungodden, 2007; Konow, 2003) argue that people’s views of justice may differ.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات