Trust and Reciprocity

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Contents

Abstract

This survey explores the contributions of behavioral economics, laboratory experiments, and field experiments to our understanding of the economics of trust, trustworthiness, and reciprocal behavior. A general summary presenting the evolution of trust and reciprocity, departing from pure self-interest in the understanding of “homo economicus”, begins the discussion. Next, an exploration of the games and academic contributions that isolate preferences (including social preferences, altruism, inequality aversion, and guilt aversion) from pledges of trust and from reciprocal behavior provides a foundation for behavior that is often misidentified as trust or conditional upon the actions of another. The survey concludes with a summary of theory and experiments that have identified trust and reciprocity in economics and human behavior.

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Introduction

The neoclassical theory of rational economic behavior has been built on the notion that individuals act in a purely self-interested manner. Based on this guiding principle, economists are able to create realistic models that track and predict outcomes in competitive markets with efficient supply and demand dynamics, enforceable property rights, and complete information. Many interactions involve these underlying assumptions, but often, economic interactions involve assumptions with regards to intentions, incomplete information, imperfect markets, and partial property rights. In "less perfect" exchanges between individuals, the predictions of purely selfish behavior often conflict with the empirical results. The deviation from self-interest in these types of exchange, where individuals show regard for others well-being, fairness principles, or a general willingness to empathize has been documented as early as in the work by Smith [1812].

> *As we have no immediate experience of what other men feel, we can form no idea of the manner in which they are affected, but by conceiving what we ourselves should feel in the like situation.*
>
> *Adam Smith, The Theory of Moral Sentiments*

Since economists began employing experimental methods and contingent valuation, evidence has been accumulating that supports the belief that rational economic behavior may include a concern for the welfare or actions of others, or, at a minimum, a departure from pure self-interest. Further empirical evidence supported the sharing of pecuniary rewards and economists began incorporating regard for the welfare of others, consideration of the actions of others', and an understanding of the intentions of others' as possible explanatory variables in economic behavior.

The analysis of bilateral exchange created a need to understand the empirical deviations from selfish behavior. In the exchange between two individuals, researchers found subjects foregoing guaranteed fiscal payments for the nonmonetary value of an exchange. Under certain circumstances, the second movers maximized individual payoff without regard for the initial action or the identity of the proposer. In other situations, the responder engaged in reciprocal behavior based on the generosity exhibited by the first mover or the perceived fairness of the initial action. Beyond the interpersonal exchange, each individual had the choice of maximizing individual monetary payoff or incurring an opportunity cost to achieve a greater group maximum. Furthermore, in sequential interactions, responders were observed reacting to the actions or intentions of the initial participants.

The empirical deviations from selfish behavior have suggested that a more robust or comprehensive understanding of human behavior is necessary to explore the reasons that subjects cooperate in exchange and bargaining, contribute to public goods, cooperate in games, punish at a personal cost, and seek social maximums as opposed to individual payoffs. Since bilateral and group interaction can determine the effort in the workplace, the longevity of interpersonal relationships, the levels of trust in virtual transactions, and the efficiency in markets, understanding the roles of trust and reciprocity are integral in predicting economic behavior. Economics provides many tools to understand the underlying human behavior and motivation for exchange involving social preferences, trust, trustworthiness, and reciprocal behavior [Charness and Haruvy, 2002].

Akerlof [1970] initially proposed "trust" in economic models as a means of addressing the "lemons" problem where there is asymmetric information about quality. Kahneman et al. [1986] tested the idea of intentions and the concept of fairness in exchange. The empirical strategy employed telephone surveys to determine acceptable motivations for raising the prices of products or cutting the wages of employees. The authors asked questions such as:

> *A hardware store has been selling snow shovels for $15. The morning after a large snowstorm, the store raises the price to $20. Please rate this action as:*
>
> *Completely Fair Acceptable Unfair Very Unfair*

The authors determined that the framing of the interaction was critical to the perception of fairness by customers and employees. The initial reference transaction (defined by market prices, competitor's posted prices, and previous transactions), the outcome to the firm and to the customers based on the decisions of the firm (context of the distribution of profit and loss), and the underlying motivation for the firm's actions (profit reduction, profit increase, or increases in market power) all played important roles in shaping the perception of fairness.

Kahneman et al. found that previous transactions and community standards significantly influenced concepts of fairness. Firms responding to profit reductions with higher prices or wage reductions were viewed as fair whereas firms seeking profit increases, particularly by leveraging increases in market power, were perceived as acting in an unfair manner. Utilizing a survey to assess trust and fairness was as an effective technique to question the assumption of pure self-interest. Other contingent valuation and revealed preference techniques have been used to understand trust and reciprocity, but laboratory and field experiments in controlled environments have provided some of the greatest insights. The most common games used to understand trust and reciprocity are the ultimatum game, dictator game, trust game (investment game and centipede game), gift-exchange game, public goods game, and the lost wallet game.

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