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Mixed feelings: Theories of and evidence on giving

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ABSTRACT

This paper examines possible motives and institutional factors that impact giving. Specifically, I consider alternative theories parallel to dictator experiments that generate evidence on both allocation decisions and their effect on feelings. A number of new empirical findings as well as new interpretations for previously reported findings result. A novel test distinguishes warm glow from impure altruism and rules out the former as the sole motive for giving. Very generous donations to charities that aid the needy (with modal gifts of the entire dictator's stakes) cannot be attributed to familiarity with the charities. A charity that offers a matching grant increases its revenues by drawing donors and donations away from one that does not, although aggregate charitable donations do not rise. Additional results on emotions paint a picture of "mixed feelings:" generosity creates good feelings when the recipients are charities and bad feelings when they are fellow students. No group of dictators, however, feels better, on average, than a control group that is given no opportunity to donate. I propose a simple model that accounts for these results on allocation behavior and feelings by incorporating elements of two approaches, unconditional altruism and social preference theories, that to date have mostly evolved independently. A critical feature of this model is the social norm, and the results of the experiments corroborate the theory in the context of two norms of distributive justice that are important to real world giving: equity and need.

> The sentiment or affection of the heart from which any action proceeds, and upon which its whole virtue or vice must ultimately depend, may be considered under two different aspects, or in two different relations; first, in relation to the cause which excites it, or the motive which gives occasion to it; and secondly, in relation to the end which it proposes, or the effect which it tends to produce — Adam Smith, *The Theory of Moral Sentiments*, 1759 (1809), pg. 42.

1. Introduction

People donate a substantial fraction of their wealth to a wide variety of individuals and groups, including educational institutions, political campaigns, civil liberties organizations, public broadcasting, fellow students in laboratory experiments, and NGOs that aid the needy (a record $308 billion in the US in 2008, according to Giving USA). Specific gifts vary greatly, though, and are sensitive to context and framing effects as demonstrated in the laboratory by List (2007) and in the field by Alpizar et al. (2008) and Frey and Meier (2004), among others. Theoretical treatments of giving are no less varied than these empirical findings. The model of *pure altruism*, which is based on a selfless concern for others, is usually traced to Gary Becker's seminal paper (Becker, 1974). Andreoni (1989) formally added the notion that giving produces a pleasurable feeling, called *warm glow*, which is formulated as a preference for giving *per se*, distinct from the benefit enjoyed by the recipient. Altruistic behavior is sometimes attributed to warm glow alone, as in Harbaugh (1998), or to a combination of pure altruism and warm glow, which Andreoni (1989, 1990) calls *impure altruism*. Alternately, social preference models, like those of Bolton and Ockenfels (2000), Charness and Rabin (2002) and Fehr and Schmidt (1999), explain departures from strict self-interest based on different combinations of social norms that most often include inequity aversion, efficiency and reciprocity.

This paper reports the results of an experimental study that examines the effects on giving of various real world factors, such as recipient identity, recipient endowments and the availability of matching grants. It also presents simple models of altruism and tests the explanatory power of the alternate theories against behavioral and self-reported evidence from the experiments. The theories considered are placed into the broad categories of *conditional altruism* or *unconditional altruism*, similar to the distinction Fong (2007) makes. Unconditional altruism does not formally depend on social norms and includes pure altruism, warm glow and impure altruism. Conditional altruism, on the other hand, does depend on

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norms, and can incorporate motives such as inequity aversion, need, efficiency, cooperation, conformity, spite, and reciprocity.[1] Thus, conditional altruism includes social preference theories. This paper proposes a more general version of conditional altruism that incorporates elements of both social preference theories and unconditional altruism, viz., a role for feelings. This is in line with Adam Smith's claim that feelings provide one side of the equation for unselfish acts, namely, the motive, whereas the other side pertains to the purpose or consequences of such acts, i.e., the norms. Interestingly, Becker also motivated his 1974 paper by reference to feelings and to social conditions, arguing that giving could increase or decrease utility. The proposed model of conditional altruism draws on Smith's and Becker's thinking while integrating more recent developments on altruism and social preferences. The experiments permit specific tests of the theory on the norms of equity and need, two motives that arguably account for a largest fraction of giving in the real world, e.g., to such charities as the United Negro College Fund, ACLU, political organizations, Habitat for Humanity, Feed the Children, CARE, and UNICEF.

The behavioral evidence in this study comes from donations across different contexts. In the literature on altruism, the major focus has been on the *crowding out hypothesis*: if gifts are motivated by pure altruism, public spending will crowd out private donations dollar-for-dollar. If, on the other hand, warm glow or impure altruism apply, crowding out will be incomplete. The results of many previous studies, including those of actual charitable giving and experiments, cast doubt on complete crowding out, although estimates range widely. In the field, Kingma (1989) finds only about 13% crowding out, whereas Payne (1998) estimates crowding out at an average rate of about 50%. Many experimental studies employing public goods designs come to qualitatively similar conclusions. For example, Andreoni (1993) reports incomplete crowding out even after taking into account possible subject confusion (Andreomi, 1995), Palfrey and Prisbrey (1996, 1997) find little or no pure altruism but significant evidence of warm glow and subject error, whereas Goeree et al. (2002) report warm glow, error and (pure) altruism.

Nevertheless, the above results could be driven, in part, by factors not controlled in such studies, as their authors acknowledge. With field data, for example, incomplete crowding out might also reflect imperfect information about government spending or a concern by donors for status or prestige (see McGranahan, 2000). Despite greater control, public good games are fraught with significant subject error, presumably because of their complexity and uncertainty. Their results could be additionally confounded by strategic considerations, as Bolton and Katok (1998) illustrate. This leads Bolton and Katok to study the simple and non-strategic *dictator game*, where one group of subjects, called the *dictators*, receive a fixed sum of money, which they may then share, if they wish, with anonymous counterparts, or *recipients*, in another room. Their variation of this experiment leads to a high, but still incomplete, level of crowding out.

Social preference theories have usually been formulated around results from laboratory experiments, and, as previously stated, explain giving based on social norms. This might involve a single norm, such as equity in the Fehr and Schmidt (1999) model, or multiple criteria, such as efficiency, equality and reciprocity in Charness and Rabin (2002). Variations in giving across experiments are explained by contextual differences that affect trade-offs, e.g., by differences in the strategic environment that affect the relative importance of self-interest, equity, efficiency and/or reciprocity. Some experimental results, however, suggest people can be opportunistic in their use of these norms, e.g., Dana et al. (2007), Bolton et al. (1998) and Konow (2000a).

Feelings, or *affect* in the terminology of psychologists, are the other variable measured in this study. In dictator games, Ellingsen and Johannesson (2008) and Xiao and Houser (2007) find that dictator transfers increase at the mere anticipation of recipients' expression of their feelings about those transfers. Here, however, we are interested in the feelings of the dictators and whether more generous donors experience more pleasurable feelings, or *positive affect*. Konow and Earley (2008) find that generosity is positively correlated with various self-reported measures of *long-run* subjective well-being, i.e., with overall or average happiness. The current study, on the other hand, focuses on the kinds of emotions often associated with warm glow, viz., the effect of giving on short-run feelings (or *short run-affect*). Bosman and van Winden (2002), Charness and Grosskopf (2001) and Kirchsteiger et al. (2006), among others, have utilized such measures in economics experiments. Harbaugh et al. (2007) arrive at equivalent results using neural evidence of reward and self-reported subjective well-being in an fMRI study of charitable giving. The current study employs a self-report instrument but, in contrast to these other studies, uses a before-and-after, rather than single occasion method: subjects report short run affect prior to and following the previously unannounced allocation decisions, which provides individual level data of any impact of giving on feelings.

This paper, as most other studies that connect theory to social preferences, considers evidence from laboratory experiments. Aside from facilitating comparisons to those studies, the double blind dictator design used here helps to minimize the confounding effects of prestige, status, confusion, expectations, and strategic motives, and specific measures allow additional controls, including over subject familiarity with recipients. On the other hand, Levitt and List (2007) identify many of the pitfalls in abstracting social preferences from the laboratory to the real world. For example, Carpenter et al. (2008a) find significant differences between students and non-students in their choices both of which charities to support and how much to give. Nevertheless, Levitt and List point out that drastic variation in behavior in the laboratory "does not necessarily imply that preferences are labile. Rather, we view such data as evidence that when critical elements of the situation change, behavior will change in predictable ways." Indeed, Loewenstein and Small (2007) provide examples of how self sacrifice varies widely, not only in the laboratory but also in the field, in response to changes in context.[2]

Mindful of these issues, this experiment adopts procedures aimed at enhancing external validity. Subject payments are framed as

[1] Note that this is a broader definition of conditional altruism than some usage that refers only to reciprocity.

[2] One criticism of experimental studies of altruism is that the stakes are so small relative to total subject income or wealth that subjects should contribute either all or none of their experimental endowments, depending on how altruistic they are (I thank Alexander Cappelen for raising this point and, thereby, stimulating this discussion). That is, unconditional altruism is really a strawman in these studies, which usually result in a high incidence of interior decisions. This is valid concern in principle, but I think there are at least two reasons to believe it is not a serious problem in practice. First, by one view, this is a question of whether the experimental frame "takes," i.e., whether subjects apply externally valid rules to the experimental context. This is a core question for the experimental method, but it is not clear that it is any more critical for altruism than for other preferences, e.g., assuming subjects act instead on equity, do not most know whether, relative to the average counterpart, they are rich, and should give away all, or poor, and should take all? As Benz and Meier (2008) and Eckel and Grossman (2008) find, laboratory experiments with modest stakes can produce results that are qualitatively similar to those with larger stakes in the field, even if the effects are quantitatively attenuated. Second, the experimental context and stakes are actually in the range of many real world decisions. As Andreoni (2006) points out, most real world giving does not occur spontaneously but rather, as in the experiment, in response to a prompt, e.g., mailed solicitations. Moreover, many of these implied requests of and actual donations to real charities are in the range of experimental stakes, e.g., change for bellringers, price margin on products of firms that donate a percentage of profits, weekly tithes, donations to university charities (e.g., Frey and Meier, 2004) and public good contributions (e.g., Alpizar et al., 2008). Even the "windfall" quality of experimental endowments can be ameliorated by framing this money as earnings for a task subjects perform (e.g., List 2007).