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Market economies and pro-social behavior: Experimental evidence from Central Asia

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ABSTRACT

This study seeks to extend the body of knowledge of pro-social behavior in comparative market settings by reporting on a high-stakes ultimatum game and revelation game experiments in two transition economies: Kazakhstan and Uzbekistan. While controlling for cultural differences and framing effects, we find statistically significant differences in fairness and honesty behavior between the two countries. Specifically, subjects in Uzbekistan (in an earlier stage of transition to a market economy) are fairer and more honest than their later-stage Kazakh counterparts. Our experimental findings have implications for the literature on pro-social behavior and market economies, and more generally, on the transmission process between formal and informal institutions.

1. Introduction

In a series of experiments conducted in small-scale societies, Henrich et al. (2001, 2005, 2010) find strong evidence that pro-social norms[1] of fairness and reciprocity increase with greater market integration. The intuitive logic is appealing. Greater market integration dilutes the strong community enforcement mechanisms associated with small-scale societies, increasing the likelihood of opportunism. Recognizing this, and motivated to realize the gains from the greater division of labor, exchange parties respond by rewarding attributes such as fairness and reciprocity in dealings with strangers, while punishing incidences of unfair behavior. Accordingly, greater market integration strengthens pro-social norms toward strangers (Henrich et al., 2001, 2005, 2010).

However, in their treatment of market integration, Henrich et al. focus exclusively on the role of informal institutions (such as community enforcement mechanisms) in structuring and regulating exchange in rudimentary societies. Accordingly, their notion of market integration fails to account for (a) the vast, impersonal markets and highly specialized division of labor characterizing present day exchange, and (b) that exchange transactions are governed by both formal and informal institutions (North, 1990).

The purpose of this paper is to extend this line of research in both dimensions to examine whether pro-social behavior is stronger or weaker in more market-oriented economies. First, we broaden the focus to incorporate vast markets where exchange transactions are more ephemeral and anonymous (Platteau, 2000) to examine predispositions to be fair and honest toward strangers in situations where the gains from trade are enhanced, but where monitoring and community enforcement mechanisms become correspondingly more diffuse (Kandori, 1992). Second, by explicitly incorporating formal institutions which develop concurrently to support exchange in vast markets (North, 1990), we can examine whether pro-social behavior is crowded-in or crowded-out by more developed, market-compatible formal institutions (Bowles and Gintis, 1998; Frey and Oberholzer-Gee, 1997; Reeson and Tisdell, 2008).

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[1] Consistent with the emerging literature (cf. Krupka and Weber, 2009), we distinguish between the underlying "pro-social norms" and "pro-social behavior", where the former may trigger the latter. Accordingly, in the following we reserve the term "behavior" for actions exhibited by the experimental subjects.

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We investigate the above by conducting economic experiments with subjects in two transition societies: Kazakhstan and Uzbekistan. Specifically, we report on two high-stake experiments: the ultimatum game and the (novel) revelation game, which respectively tap into norms of fairness/reciprocity and honesty. In the one-shot ultimatum bargaining game (Güth et al., 1982), a proposer offers an allocation of money to a responder. If the latter accepts the proposed split, the payoffs are divided accordingly, whereas if the respondent declines the offer, neither player receives anything. In the revelation game, subjects must individually and privately decide whether to voluntarily reveal a monetary discrepancy in their favor to the experimenter. The canonical model of self-interest predicts that the respective dominant strategies of the above games would be to (a) offer the lowest possible positive offer (which, being preferable to receiving nothing, would be accepted), and (b) pocket the serendipitous money (Rubinstein, 1982).

Economies at different stages of transition provide an appropriate setting to tease out the predominance of pro-social vis-a-vis self-interested behavior. While early-stage economies are characterized by relatively small, homogeneous clan and kinship networks, endemic corruption and concern for the collective interest (Duch and Palmer, 2004; Platteau, 2000), more market-oriented, later-stage economies feature more impersonal trade with increasingly heterogeneous counterparts and enhanced pecuniary incentives. In this regard, Kazakhstan and Uzbekistan were purposefully selected on the grounds that, although exhibiting very high degrees of cultural homogeneity, a common historical heritage and similar initial conditions (Alam and Banerji, 2000; Pomfret, 1995), they display wide variations in the degree to which they resemble fully-functioning market economies, as evidenced by their respective European Bank for Reconstruction and Development (EBRD) average transition scores.

A number of related studies have conducted experiments in both single- (cf. Bahry and Wilson, 2006; Chen and Tang, 2009; Slonim and Roth, 1998) and comparative transition country settings (cf. Gächter et al., 2004; Herrmann et al., 2008), but without transition (or market integration) being the focal issue. Conversely, the few experimental studies that explicitly focus on transition (cf. Duch and Palmer, 2004; Ockenfels and Weimann, 1999) are conducted in single settings. There is thus a gap in the experimental literature examining the relationship between transition stage and pro-social behavior. In view of the documented role of such behavior in structuring exchange relations (Kahneman et al., 1986), the growing number of exchange transactions conducted with firms from transition countries (Peng, 2003), and the plethora of economies on the transition path (EBRD, 2009), this is clearly a non-trivial issue.

The remainder of this paper comprises five sections. Section 2 reviews the prior literature and develops two propositions. Section 3 describes the experimental design and procedures. Section 4 presents the experimental results and discusses their implications, while Section 5 concludes.

2. Market economies and pro-social behavior

Social norms represent common understandings as to what constitutes appropriate behavior among a significant proportion of a particular social group (Elster, 1989). They induce behavioral conformity, even at personal cost (Azar, 2004), and are enforced by extra-legal sanctions which may be both internal (embarrassment, guilt, and so forth) and external (such as disapproval, ostracism, and such like) (Posner, 2001). Social norms evolve through the mechanism of internalization – the greater number of community members who internalize the norm, the more other members will conform, given a conditional preference for conformity (Bicchieri, 2006). The underlying norms in a given society impact behavior (as evidence, for example, during experiments) either when an individual's attention is drawn to them or when they observe others behaving consistently in accordance with that particular norm (Krupka and Weber, 2009).

Various scholars cite evidence of the role of social norms of fairness, reciprocity, and honesty as countervailing forces to self-interest motives (Kahneman et al., 1986). For example, Azar (2004) finds evidence of fair behavior as people appear to tip in the same manner for both local restaurants (presumably to encourage good service next time) and when taking taxis (when there is little likelihood of repeat dealings). In experimental settings, offers in the ultimatum game are typically in the region of 40–50% of the stake and responders routinely reject offers lower than 20% (Camerer, 2003), and proposers in dictator game experiments customarily make positive offers even though the receiver has no opportunity to reject the proposed split (Forsythe et al., 1994). Similarly, several scholars attribute evidence of compliance in tax reporting (Wenzel, 2004), handing in full wallets to police stations (West, 2005), revealing invoicing discrepancies in their favor to suppliers (Frank et al., 1993), and returning fully-addressed and pre-stamped "lost letters" containing money to their rightful owners (Zsolnai, 2003), as manifestations of honesty norms.

On the basis of the foregoing, the pertinent question becomes: Is pro-social behavior likely to be stronger or weaker in more market-oriented economies? There are intuitive arguments to support each contention. On the one hand, a number of scholars aver that norms of fairness/reciprocation and honesty are likely to be stronger in more market-oriented economies with more developed formal institutions for three main reasons. First, whereas earlier-stage transition countries are characterized by exchange typically conducted within internally homogeneous, highly cohesive clan and kinship networks originally designed to circumvent planning restrictions (Platteau, 2000), exchange in more market-oriented later-stage transition countries is more ephemeral, anonymous, and conducted over a larger geographic and temporal space (Kandori, 1992). Accordingly, as market economies dilute the role of community sanctioning enforcement mechanisms, individuals need to establish and maintain a reputation for fair and honest dealings with strangers in order to achieve gains from trade in vast markets (Henrich et al., 2010). Second, by replacing a planned economy characterized by endemic corruption, where advantages were arbitrarily provided to some and not others (Kornai, 1986) with a merit-oriented market economy (where attributes such as performance are, in the main, commensurated accordingly), individuals are likely to be imbued with a greater sense of fairness (Pejovich, 2003). Third, the development of market-supporting formal institutions increases the efficiency of legal ordering mechanisms (enhancing observability and verifiability), reducing the pay-offs for deviant behavior, and thus encouraging fair and honest behavior to strangers (North, 1990). Indeed, in one of the few studies to touch upon pro-social behavior and transition, Ockenfels and Weimann (1999) find that West Germans exhibit significantly more cooperative behavior than their Eastern counterparts. On the basis of the foregoing discussion, we propose that:

Proposition 1a. Pro-social behavior is likely to be stronger in more market-oriented economies.

On the other hand, several scholars posit that norms of fairness/reciprocity and honesty are likely to be weaker in more market-oriented economies on three accounts. First, non-cooperative game theory would suggest that market economy conditions, characterized by greater impersonality, ephemeral contracts and ease of entry and exit (Bowles, 1998), attenuate monitoring problems and mitigate the sanctioning role of clan/kinship networks based on repeated interactions (Axelrod,