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How fair shares compare: Experimental evidence from two cultures☆

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ABSTRACT

We use a suite of economic experiments to study social preferences governing the distribution of earned and unearned income in rural villages in western Kenya. Our experiments vary the extent to which income depends on individual effort while holding other aspects of the economic environment constant. Results suggest that, in rural villages, the relative weight placed on others does not depend on the extent to which those individual increased the total surplus through their own effort. However, more educated subjects and those drawn from villages closer to the road do reward others for their effort; their allocation decisions are consistent with models of reciprocity.

1. Introduction

People are sometimes willing to sacrifice their own payoffs to help strangers, reward helpful actions by others, and punish uncooperative behavior; the social preferences underlying such behavior have been documented in many societies by experimental economists. Social preferences are likely to play a particularly important role in the economic lives of those living poor, rural communities in the developing world: in such settings, people often rely on neighbors and relatives to help them cope with negative shocks, and voluntary transfers between households are common. This has prompted scholars to describe the rural village as a "moral economy" in which individuals are motivated by concern for their neighbors' welfare and aversion to inequality within the community.[1] Scott (1976), for example, highlights the primacy of the universal right to subsistence in the moral code of poor agricultural households, while Platteau (2000) argues that many traditional societies are characterized by egalitarian norms which discourage individual wealth accumulation. Though standard models of pure self-interest can partially explain transfers between households who interact repeatedly (cf. Coate and Ravallion, 1993), economic theory suggests that individual social preferences can both directly motivate some transfers and shape the space of enforceable informal insurance contracts (Foster and Rosenzweig, 2001). Existing experimental evidence suggests substantial heterogeneity in individual social preferences and conceptions of fairness; much of this variation occurs within

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[1] The term "moral economy" was popularized in this context by Scott (1976). See Fafchamps (1992) and Ravallion and Dearden (1988) for examples of its use in the economics literature.

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societies (cf. Fisman et al., 2014a), but we also observe large cross-cultural differences (Henrich et al., 2010). It is therefore important to provide a positive characterization the social preferences of individuals living in poor, rural communities, as they are a key input into any model of informal insurance or measure of social welfare.

In this paper, we use experimental economic methods to study the social preferences of villagers in rural western Kenya, focusing on the differential treatment of earned and unearned income. A key component of the egalitarian conception of fairness is the idea that all inequality is unfair (Cappelen et al., 2007); this distinguishes egalitarianism from theories of justice that view inequality as fair if it is caused by differences in individual ability or effort (Konow, 2003). Experimental studies in university labs in the developed world document what Fahr and Irlenbusch (2000) term an "earned property rights" effect: subjects allocate more to those who have increased aggregate income through individual effort.[2] Such findings suggest that a non-negligible proportion of university students in rich countries hold conceptions of fairness that distinguish between different sources of or justifications for inequality; in other words, they are not egalitarians. We ask whether similar earned property rights effects are observed in poor, rural communities with strong traditions of solidarity and mutual assistance. Arguments presented in, for example, Platteau (2000) suggest that poor villagers engaged in subsistence agriculture may view the distinction between earned and unearned income differently:

> "Inasmuch as 'work, in the sense of persistent individual effort, is never recognized as the reason of success' and success is attributed entirely to 'luck' and 'is never believed to be brought about or furthered by personal effort and initiative' [Rogers, 1969: 118–9], private appropriation of persistent surpluses is deemed to be unfair. In other words, a worldview that tends to consider any income as essentially 'unearned' naturally leads to a progressive concept of justice according to which rich people ought to share their income with others."
> Platteau (2000, p. 198)

This characterization of poor, rural communities in the developing world motivates the present study: we test the extent to which individuals living in agricultural village economies hold social preferences characterized by the egalitarian ideal of fairness which does not distinguish between different sources of inequality.

Our experimental design measures social preferences in benchmark treatments where luck alone governs income, and compares them to the social preferences revealed in treatments where income is determined by individual effort. The experimental setting allows us to vary the extent to which income depends on luck as opposed to effort while holding other aspects of the economic environment – and the individual attributes of those making and receiving transfers – constant. We then contrast the choices made by subsistence farmers in rural Kenya with those of individuals drawn from a standard university lab subject pool at a top US university. We view the university lab subject pool as a particularly interesting comparison population because of the tremendous importance of individual ability and hard work in competitive academic environments. Additionally, the use of a standard university student subject pool allows us to demonstrate that our experimental design replicates the earned property rights effects shown in other experiments involving student subjects.

Our experimental design includes four distinct treatments, each a modified dictator game in which one subject (the "dictator") divides a budget between herself and an anonymous "recipient" (another subject chosen at random from the same experimental session). Our experimental treatments differ along two dimensions: how the budget is generated, and who decides how to divide it. In each of the treatments we consider, the size of the dictator's budget is determined by the actions of one of the subjects – either the dictator or the recipient. In Luck treatments, one subject rolls a die, and the outcome of the roll determines the size of the budget. In Effort treatments, one subject engages in a real effort task for which she is paid a piece rate; that subject's earnings constitute the dictator's budget. We also vary whether the subject making the allocation decision (i.e. the dictator) is the same person who won or earned the budget. In Giving treatments, dictators divide money that they themselves won or earned; in Taking treatments, dictators divide money won or earned by the recipient. Our cross-cut design involves a total of four experimental treatments: Luck-Giving, Luck-Taking, Effort-Giving, and Effort-Taking. Our analysis examines the differences between allocations in the Luck and Effort treatments. If subjects drawn from rural villages hold egalitarian ideals of fairness, the conditions of production (luck vs. effort) will not impact allocation decisions. Alternative models of social preferences predict different types of earned property rights effects.

We report three main findings. First, we find only weak evidence of respect for earned property rights in our Kenyan village sample.[3] Subjects allocate recipients somewhat less in the Effort-Giving treatment than in the Luck-Giving treatment, but the effect is only marginally significant. There is no evidence of respect for the earned property rights of others; instead, dictators allocate recipients less in the Effort-Taking treatment than in the Luck-Taking treatment. Second, our experimental

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[2] See, for example, Fahr and Irlenbusch (2000), Cherry (2001), Cherry et al. (2002), and List (2007) for evidence that university student subjects treat earned and unearned income differently. In a similar vein, Hoffman et al. (1994) and Hoffman et al. (1996) show that dictators are less generous when they have earned the right to make the allocation decision. Cappelen et al. (2007, 2010, 2013a) arrive at a similar conclusion using a different experimental design, documenting the prevalence of fairness ideals that dictate that individuals are entitled to a share of total output that reflects their relative contributions of effort and ability. Notably, Cappelen et al. (2013b) observe similar patterns among university students in Uganda and Tanzania, suggesting that young elites in developing countries may hold conceptions of fairness similar to those held by educated young people in the developed world.

[3] This result was first reported in Jakiela (2011). That paper explores the sociodemographic correlates of dictator game giving in Kenya and the United States, and also documents the absence of earned property rights effects in the Kenyan village sample. The analysis presented here goes substantially further, exploring heterogeneity within the Kenyan village sample (with respect to community and individual level markers of development) and testing whether behavior in the Effort-Taking treatment is consistent with the predictions of theoretical models of reciprocity.