Income Hiding and Informal Redistribution: A Lab in the Field Experiment in Senegal

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In a context where people heavily rely on their social networks and have limited access to financial markets, redistributive obligations can lead to hidden costs. In this project we estimate these costs by relying on an original lab-in-the-field experiment conducted in Senegal which has the unique feature of combining a small scale randomized controlled trial (RCT) and a lab experiment. The lab component allows us to estimate the cost of the informal redistribution taking place in the community, through the elicitation of the willingness-to-pay to hide income and to identify the relevant population: two thirds of the experiment participants are ready to forgo up to 14% of their gains to keep them private. Based on the RCT component, we find that giving the opportunity to hide their income to people fearing the redistributive pressure allows them to decrease by 27% the share of the gains they devote to transfers to kin out of the lab. They reallocate this extra money to health and personal expenses. This is the first paper to both identify the individual cost of this informal redistribution and to relate it to real-life resource allocation decisions, in a controlled setting.

INFORMAL REDISTRIBUTION IN SUB-SAHARAN AFRICA: GOING BEYOND THE RISK-SHARING PARADIGM

In developing countries and especially in Sub-Saharan Africa, social norms of redistribution are particularly prevalent (Platteau, 2014). These sharing norms encompass informal rules that explicitly or tacitly enjoin individuals to redistribute part of their income to people belonging to their social networks, such as members of one’s household or extended family, friends or neighbors. Informal redistribution accounts for the realization of these norms, meaning the set of realized interpersonal transfers in kind or monetary. These transfers are found to be frequent, widespread, mostly concentrated in the extended family and to represent substantial amounts in various African countries (Baland et al, 2011; Jakiela and Ozier, 2015). They shape social and economic lives of individuals: people make resource allocation choices accounting not only for their personal socio-economic condition but also for their relative situation to members of their social networks.

The economic literature has mainly focused on the risk-sharing dimension of these interpersonal transfers (for a review, see Cox and Fafchamps, 2008). Indeed, in a context with limited or no access to formal financial markets and to welfare-state provision, as is the case for most Sub-Saharan African countries, individuals are structurally vulnerable to life risks and economic shocks. Informal redistribution thus represents an informal insurance mechanism aimed at palliating this vulnerability. However, the anthropological and sociological literature has described other motives for this redistribution, based on customs, social prestige seeking, pure altruism or well-internalized norms (e.g., Wright, 1994). The fact that interpersonal transfers can be driven by motives beyond risk-sharing is important in the assessment of the impact of this informal redistribution on economic incentives and resource allocation decisions.

There is a recent and growing interest in the economic literature on the hidden costs of informal redistribution. Indeed, this redistribution, akin to an informal tax, can lead to distortions in resource accumulation decisions. Redistributive pressure may distort directly their incentives to work or invest (Hadness et al., 2013). In addition, hidden indirect costs could derive from the adoption of strategies aimed at circumventing or lessening the pressure to transfer (Baland et al., 2011), which are widespread in Africa and often costly (Platteau, 2014). The direct and indirect effects of informal redistribution can subsequently constitute an important barrier to economic development in developing countries.

In the present project, we focus on the widespread strategy that consists in keeping one’s revenues unobservable from one’s social network, and in particular from one’s extended family. The propensity to hide resources (even within the household) is not only common in Senegal (Boltz and Villar, 2013), it is also prevalent in other African countries such as Ghana (Castilla and Walker, 2013), Kenya (Jakiela and Ozier, 2015) and Burkina Faso (Hadness et al., 2013). This suggests that the focus of this paper on informal redistribution in Senegal has implications for other countries as well and is not specific to this society.
MEASURING THE HIDDEN COST OF INFORMAL REDISTRIBUTION IN A LAB EXPERIMENT IN THE FIELD

Measuring the impact of redistributive pressure on resource allocation with non-experimental data is extremely difficult. One reason is that sharing norms and strategies to avoid redistribution, considered as deviant behaviors, are hard to observe. A controlled lab experiment in the field constitutes a useful tool because the introduction of random variations in the redistributive pressure faced by individuals (through the observability of income or the selection of the pool of observers) allows for the effect of informal redistribution to be properly identified. Only a few papers in the literature have attempted to measure the distortive role of sharing norms on resource allocation decisions using this kind of data. Jakiela and Ozier (2015), using wind-fall income, explored how observability among participants from the same community in rural Kenya affects investment choice within the lab. Castilla and Walker (2013) look more specifically at how income observability may distort income pooling within the household between spouses in Ghana. Our paper builds on the above-mentioned papers and contributes to the growing literature in being first to both identify the cost of informal redistribution and to relate it to real-life resource allocation decisions in a controlled setting.

The study we carried out is aimed at measuring the hidden cost of informal redistribution and the distorsive effects of social obligations for redistribution on individual resource allocation choices. We rely on an original experiment which has the unique feature of combining a small scale randomized controlled trial (RCT) and a lab experiment. The lab component allows us to estimate the cost of informal redistribution, through the elicitation of the willingness-to-pay to hide income and to identify the relevant population who is most affected by the redistributive pressure. In the RCT component, we use the random variation of the observability of lab gains provided by the experimental setting to measure the impact of redistributive pressure on income allocation out of the lab. The idea here is that we test whether the structure of expenses is different depending on the observability of income. In particular, we expect that the opportunity to hide lessens the redistributive pressure and translates into a lower share of the resource devoted to redistribution and an increase in “constrained” expenses. This should be all the more true for individuals under high redistributive pressure.

The experiment was conducted from the end May till mid-June 2014, in 7 different poor communities in the department of Pikine, in the region of Dakar, Senegal. The areas covered were urban, sometimes very densely populated. For each community, the experiment was conducted over two weeks. First, we proceeded to the sample selection and the administration of both the household and individual baseline questionnaires. We then invited the selected participants to the lab phase, organized on Sundays. One week later, the enumerators went back to administer a questionnaire to subjects. Our final sample is of 797 participants, 2/3 of women, 20% of household heads and 78% of ever married individuals.

WHAT DO WE LEARN FROM THIS STUDY?

The first set of questions we try to answer relates to the identification of the cost of informal redistribution: are people willing to pay to hide their income? If yes, what is their marginal propensity to pay to keep their windfall income hidden? Is there heterogeneity in this willingness to pay (WTP)? We find a high willingness-to-pay to hide income: 65% of subjects prefer to receive their gains in private rather than in public and among them, they are ready to forgo on average 14.3% of their unobserved income. We show that variables correlated with a higher redistributive pressure increase the WTP to hide income for both men and women, although these variables differ across gender.

Second, we investigate the distortions in resource allocation choices caused by the redistributive pressure. Looking at out-of-the-lab allocation choices, individuals with preferences for hidden income who however received their gains in public spend on average 23% of their income on transfers to kin. In contrast, individuals with similar preferences when they got the opportunity to hide transfer 6 percentage points less – accounting for a decrease of 27% in the share devoted to transfers – and reallocate this extra money mostly in private expenditures and in health expenditure (although the effect is weaker for the latter). Interestingly, the decrease in transfers is largely driven by transfers to kin outside the household relative to transfers within the household. Women in poor households invest a lower share of their income when they are able and willing to hide, suggestive of investment being a strategy to gain more control over their resources and to transfer less.
POLICY IMPLICATIONS

The strong willingness-to-pay for income privacy and the considerable impacts on resource allocation it induces point to the importance of designing adequate financial products such as savings, especially when they guarantee secrecy from other household or kin members and would offer more control over resources to individuals. An appropriately designed formal insurance scheme that would be able to offer at least as good insurance as the extended family would allow two thirds of the population to save 14% of their revenues. This is all the more important since the populations at stake are also the most vulnerable groups. Indeed, pressed by the social obligations to redistribute, poor women do some small daily investment, such as reselling goods, that do not allow them to improve their economic conditions. Offering them a safe and unobserved saving device would allow them to capitalize for a larger investment and help them to escape this poverty trap. However, further research is necessary to capture the general equilibrium effects, including the benefits of social redistribution in terms of risk-sharing as well as the distortionary costs as identified here. Understanding the inter-linkages between formal and informal institutions would help assessing the effects of the introduction a large scale insurance scheme in a context of family-provided insurance. Therefore, this paper calls for further research investigating the welfare gains associated with the design of adequate financial products, e.g. savings schemes, offering people more control over their resources.

TO GO FURTHER


Références :