Journal of Economic Behavior & Organization 143 (2017) 173–185

Contents lists available at ScienceDirect

Journal of Economic Behavior & Organization

journal homepage: www.elsevier.com/locate/jebo

The effect of social pressure on expenditures in Malawi☆

Jessica Goldberg

University of Maryland, United States

ARTICLE INFO

Article history:
Received 29 March 2017
Received in revised form 7 September 2017
Accepted 10 September 2017
Available online 12 September 2017

Keywords:
Redistributive pressure
Income sharing
Asymmetric information
Expenditure timing
Malawi
Field experiment

ABSTRACT

I vary the observability of windfall payments to 291 members of agricultural clubs in rural Malawi in order to study the effect of redistributive pressure on the timing of expenditures. While other studies have documented that social pressure affects the quantity of income and consumption, I focus on timing because spending money quickly may be a strategy for reducing obligatory transfers. Respondents who receive money in the presence of their agricultural club anticipate spending an extra 14 percent (0.28 standard deviations) in the week immediately following the payment than those who receive equivalent transfers in private settings. There are limited changes in the composition of spending, but some evidence that social pressure to share windfall income has a larger effect on poorer households.

1. Introduction

Social pressure to share income has been documented in developing and developed-country settings. This redistributive pressure can be embodied in mutually-beneficial informal insurance networks (Townsend, 1994) or generate unilateral contributions that reduce the welfare of net donors (Platteau, 2000; Comola and Fafchamps, 2010). In either case, though especially in the latter, there are incentives to hide income that can distort consumption (Kinnan, 2014), investment (Jakiela and Ozier, 2016), and borrowing (Baland et al., 2011). These distortions can affect timing as well as quantity of consumption and investment. Kinnan (2014) notes that consumption time-paths that would be suboptimal with perfect information can be used by households to hide income and therefore increase private utility when information is imperfect. Social anthropologists document similar a phenomena; for example, Maranz (2001) writes that pressure to share income means that individuals "often made wasteful or ill-considered expenditures just to keep friends from borrowing," and Foster (1965) notes that in peasant societies, "[a] person who improves his position is encouraged. . .to restore the balance through conspicuous consumption in the form of ritual extravagance," which is "a redistributive mechanism which permits a person or family that potentially threatens community stability to gracefully restore the status quo."

I test whether recipients of unanticipated windfall income alter the composition or timing of their spending in order to evade redistributive pressure using an experiment with members of Malawian agricultural clubs. In each of 154 clubs, one member is randomly selected to receive a windfall transfer in a public raffle, where all group members know the value of

☆ An earlier draft of this paper was circulated under the title "The Lesser of Two Evils: The Roles of Social Pressure and Impatience in Consumption Decisions." The research was supported by grants from the Rackham Graduate School at the University of Michigan. It was approved by the IRB committee at the University of Michigan. I thank Brian Jacob, Pamela Jakiela, David Lam, Laura Schechter, Jeff Smith, and Dean Yang for their helpful comments, Sai Luo for his outstanding research assistance, and Santhosh Srinivasan and Lutamayo Mwamlima for their assistance with field work. All errors and omissions are my own.

E-mail address: goldberg@econ.umd.edu

http://dx.doi.org/10.1016/j.jebo.2017.09.005
0167-2681/

the transfer and the identity of the recipient. Another group member receives an equal-value transfer in private; the group is not informed of the second transfer. Relative to the private recipients, then, public raffle winners are potentially exposed to greater social pressure to share income.

I survey recipients about how they plan to and actually spend their windfalls, with attention to the timing of purchases and to the identity of the intended consumer. While the composition of spending is similar for recipients whose windfall was observed and those who received money secretly, the timing of spending is not. Public recipients anticipate spending 14 percent (0.28 standard deviations) more of their prize money in the week immediately following the transfer than private recipients, and among those who are reinterviewed four months after the raffles, public recipients recall actual spending that is 24 percent (0.24 standard deviations) greater than reported by private recipients in period immediately following the raffles. This accelerated spending is consistent with a framework in which individuals face a time limited opportunity to evade redistributive pressure by reducing their cash-on-hand. It clearly demonstrates that public information imposes a constraint on the consumption patterns that individuals would choose if they were able to maintain privacy about their incomes, with a response along the timing of spending rather than the compositional measures that have been the focus of previous research.

In the framework of informal insurance, income observability may have positive welfare implications. A number of investigations of the extent of informal insurance find that idiosyncratic shocks to household income affect consumption, even after controlling for aggregate consumption (Townsend, 1994; Udry, 1994; Lund and Fafchamps, 2003). If information asymmetries about income contribute to limited commitment, then full information might increase the insurance provided through informal insurance networks.

While a growing literature recognizes the importance of social pressure as distinct from voluntary contributions to informal insurance networks, there are few direct estimates of how such pressure affects individuals' expenditures, and no previous experimental estimates that test strategies for evading redistributive pressure outside of the experimental lab. Well-identified estimates of the effects of social pressure are difficult to obtain, because it is a cause and consequence of complex and often unobservable relationships between individuals and institutions. Baland et al. (2011) rely on observational data about borrowing and savings at Cameroonian credit cooperatives and surveys asking members about reasons for simultaneous borrowing and saving. Kinnan (2014), the only previous paper to consider the timing of expenditures in response to redistributive pressure, documents auto-correlation in observational consumption data that is consistent with the predictions of a model of imperfect information and hidden income.

Previous studies experimentally vary observability of financial decision-making in order to study behavior under different information conditions. Ashraf (2009) studies intra-household bargaining by varying whether Filipino spouses' allocations of one day's wages are observed by their partners. Jakiela and Ozier (2016) offer Kenyan participants the opportunity to choose between stylized investment opportunities with different returns, when their decisions are either secret or announced to an audience including members of their extended family. Information matters in both contexts. Filipino husbands allocate more money to their private accounts when their decisions are secret, and Kenyan women forego profitable investments in order to hide returns from their extended families.

To my knowledge, only two other studies combines experimental variation in the observability of income with data about spending or consumption outside the lab. In urban Senegal, Boltz et al. (2015) measures willingness-to-pay (WTP) to hide income in the lab and sharing of income outside the lab. Wealthier men and women with higher positions in their extended family have higher WTP for income hiding. When given the opportunity to hide some income, personal expenditures rise, and, for those with positive WTP for privacy, transfers to kin fall. Castilla and Walker (2013) use an experiment with public and private lotteries to study intra-household bargaining in Ghana, and find non-cooperative behavior by husbands and wives. In addition to adding to the evidence about the existence of redistributive pressure, my experiment highlights the role that the timing of expenditures may play in evading such pressure.

I describe my experiment in Section 2 and the data in Section 3. I discuss the conceptual framework and the analysis in Section 4, and discuss the results in detail in Section 5. Section 6 concludes.

2. Experimental design

Individuals are exposed to pressure to share when income or consumption is observable. I manipulate the observability of income by making public and private windfall income payments in the form of raffle prizes to members of 154 agricultural clubs in four districts in the Central region of Malawi.[1] These clubs of approximately 10 members each were formed by extension agents employed local agribusiness Cheetah Paprika Limited in mid 2007 for the purpose of providing extension services and joint liability loans for agricultural inputs to farmers interested in growing paprika during the 2007–2008 growing season.[2] Club members are drawn from a single village to facilitate regular meetings, and grow maize (a staple crop) as well as paprika (a cash crop). The sample includes only one club per village.

In contrast to the samples in Jakiela and Ozier (2016) and Boltz et al. (2015), these clubs do not include more than one member of the same extended family. This restriction is imposed by the local microfinance institution that provides loans

[1] The experiment took place in Dedza, Dowa, Kasungu, and Lilongwe.

[2] Club members are participants in an experiment about using dynamic incentives to increase loan repayment rates (Gine et al., 2012).