

Financial Inclusion and business development of marginalized households: the case of Village Savings and Loan Associations (VSLAs) in Uganda.

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### **Non-Technical Summary**

We study savings and borrowing groups (SBGs) and their ability to provide financial inclusion to ultra-poor, vulnerable households. SBGs are group-based financial institutions that are spreading extremely fast in sub-Saharan Africa and elsewhere. In 2014, an estimated 10.5 million households are members of SBGs, a tenfold increase relative to 2008<sup>1</sup>. Because the only type of outside intervention required is training and occasional financial auditing, SBGs can be set up in remote areas, and are therefore within reach of poor rural households who are usually not reached by traditional banking or microfinance interventions. However, the extent to which the poorest and most vulnerable members of a community benefit from inclusion into these groups depends on the group composition. In particular, the benefit of inclusion into a SBG depends on its members' ability to save, to borrow, to utilize the borrowed funds, and to repay the group.

The goal of this research is twofold. First, we build a theoretical model of SBG participation and use it to study how the characteristics of group members shape the individual saving and borrowing decisions, as well as the collective performance of the group. The main result we derive is that savings and borrowing decisions by one member of the group impose an externality on other members of the group. Crucially, whether this externality is positive or negative depends on whether the demand for loans is rationed, that is, whether every person who wishes a loan of a certain size can get it. When there is no rationing, the supply of funds available exceeds the demand for loans, and every additional dollar saved by one reduces the return on savings for everyone else. This negative externality causes the other members of the group to reduce their savings. An agent who increases her borrowing from the group, on the other hand, causes an increase in the equilibrium return on savings, which in turn increases savings by everyone else. However, when the group does not generate enough funds to satisfy the demand for loans, the sign of the externalities generated by an increase in savings or borrowing are reversed. In this case, additional contributions to the group create a positive externality on potential borrowers, because

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<sup>1</sup> Currently, 1.2 million people belong to SBGs in Uganda, where we conduct our intervention. These statistics are taken from the Savings-Led Working Group (SLWG) of SEEP. See [http://www.seepnetwork.org/filebin/docs/SG\\_Member\\_Numbers\\_Worldwide.pdf](http://www.seepnetwork.org/filebin/docs/SG_Member_Numbers_Worldwide.pdf)

rationing is eased and more people are able to meet their borrowing needs, while additional demands for funds create a negative externality as they worsen rationing.

We then evaluate the theory using data from a RCT we conducted in Uganda. This program identifies members of the community with significantly lower socioeconomic characteristics, and organizes new savings groups that include those identified members with other, self-selected members of the population. To study the implications of this inclusion of vulnerable populations, in our experiment we randomly assigned some identified vulnerable participants to groups that had many other vulnerable members, while others were assigned to groups with few vulnerable members. In other words, we created exogenous variation in the vulnerability profile of peers for a random sample of vulnerable group members.

The empirical evidence points to three main results. First, less vulnerable groups saved and borrowed at a significantly higher scale than more vulnerable groups. Total savings in the less vulnerable groups was, by the end of the first cycle, 30% larger than the comparison. We find weak or no evidence that the intensity of use of resources differed between the two types of groups, suggesting that the returns to savings was not compromised.

Second, we find that the vulnerable themselves save and borrow less when placed in more vulnerable groups. Again, the magnitude of the difference in savings and borrowing is significant: the vulnerable enrolled in highly vulnerable groups save 20% less and borrow 45% less on average than those enrolled in less vulnerable groups. Since our vulnerable participants were randomly assigned to groups, this difference in savings and borrowing is driven by the characteristics of their group. Third, savings and borrowing from other group participants does not vary significantly with the treatment. That is, while vulnerable groups operate at a smaller scale, this seems to affect differentially the vulnerable and the non-vulnerable. However, because there was no random assignment of non-vulnerable participants, it is hard to establish the extent to which this result is due to unobserved and systematic differences in the demand to save or borrow for these members. The overall welfare implications for the vulnerable and the non-vulnerable will become clearer once an in-depth endline data collection process is concluded.

While we do not know whether groups are rationed, the data is very consistent with the prediction of the model where all groups are rationed. As a consequence, we argue that preselected, vulnerable households are better off when placed in sparse groups, where the majority of the group is non-vulnerable. This conclusion is relevant for the creation of SBG in areas where there is the possibility of including both vulnerable and non-vulnerable households in the same SBG. It also suggests that SBGs created in areas in which the majority of the population is vulnerable may be more acutely unable to meet the demand for loans. The functioning of these groups can be improved by providing outside funds, as well as by changing the rules of functioning of the group so to encourage early savings (that can be lent out multiple times).