The Impact of Commitment Savings Accounts: The Case of Malawi
Xavier Giné

The utilization of improved inputs by smallholder farmers in many low-income countries, particularly in sub-Saharan Africa, remains low, despite their potential to increase agricultural productivity dramatically. Farmers argue that liquidity constraints are the main culprit and so many governments have implemented large-scale subsidy programs, which take a heavy toll on the budgets raising doubts about their sustainability.

Microfinance has made inroads in improving access to credit, but mostly for non-agricultural activities. Given the limited availability of credit for agricultural purposes, donors and academics have emphasized the need to explore the potential of formal savings. Low-income individuals have a hard time saving with financial institutions, although they do engage in more expensive and riskier ways to save – e.g. holding cash at home (subject to theft or fire), investing in durable assets with risky returns (such as livestock), participating in ROSCAs, or using deposit collectors (such as susu collectors in West Africa).

A number of explanations have been advanced for why formal savings are low. Transaction costs may be high because of substantial distances to branches, costly and unreliable transport, and mistrust towards formal financial institutions. In addition, financial illiteracy may prevent households from opening accounts due to a lack of knowledge about the benefits of formal savings and lack of familiarity with account-opening procedures. Other explanations focus on psychological factors, such as impatience (a strong preference for the present over the future) and issues of self-control (competing preferences that dictate different actions at different times). But in rural communities individuals are also often obliged to share their income with relatives and friends, discouraging the accumulation of assets and encouraging them to spend their income hastily before it is dissipated through demands from others.

The experiment
In order to understand the impact of facilitating access to savings accounts and to examine the importance of these barriers for formal savings, we designed a field experiment among smallholder cash crop farmers in Malawi. In partnership with a local microfinance institution, we randomized offers of account-opening and deposit assistance for formal savings accounts.

In order to test the importance of individual self-control problems or pressure to share resources with others in the social network, treated farmers were randomly assigned to one of two types of savings interventions. The first group was offered an “ordinary” bank account with standard features. The second group was offered the ordinary account as well as a “commitment” savings account that allowed account holders to request that funds be frozen until a specified date (e.g., immediately prior to the planting season, so that funds could be preserved for farm input purchases). Other farmers were assigned to a control group that was surveyed but not offered assistance with opening either type of savings account.
Results

We find that the commitment treatment had large positive effects on the amount of land under cultivation for the next planting season, agricultural input use, crop output and household expenditures in the months immediately after harvest (Figure 1). By contrast, treatment effects for individuals offered only the ordinary account are always smaller in magnitude and never statistically significantly different from zero.

We focus on two potential explanations for the large impact of the commitment treatment. First, the commitment account may have helped farmers solve their self-control problems, giving them the discipline to maintain their balances until the next planting season when they could be used for agricultural inputs. Alternatively, the commitment accounts may have helped farmers to refrain from sharing with others in their social network. Two pieces of evidence support the latter explanation. First, the actual amounts saved in the commitment accounts offered were very small, with most savings actually occurring in ordinary accounts. As a result, the commitment accounts did not literally “tie the hands” of farmers by preventing them from spending the revenues from the previous harvest. In addition, we find that the impact of commitment savings is higher for individuals who are wealthier at baseline, a sub-group of respondents that is likely to face higher pressure to share with others. The impact of the commitment treatment has no large or statistically significant relationship with hyperbolic preferences as expressed in the baseline survey.

Policy Implications

Our results point to a potentially low-cost means for microfinance institutions to raise farm inputs and incomes for current loan customers. There are relatively straightforward opportunities to offer farmers innovative savings facilities in the context of the organized marketing process of many crops. It is relatively common for lenders to have direct funds-transfer arrangements with cash crop buyers for loan recovery. When such arrangements exist already, current loan customers can simply be offered direct deposit of crop proceeds into commitment accounts.

Figure 1: Impact of Treatment on Savings, Production and Household Expenditures


Recent impact notes are available on our website: http://econ.worldbank.org/programs/finance/impact