

Village Banking and Microenterprise Development: Evidence from a Randomized Experiment in Kenya

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Hundreds of millions of people in developing countries earn their living through small-scale businesses (World Bank, 2004; de Soto, 1989), but many of these businesses have no employees other than the owner and very low levels of working capital (Banerjee and Duflo, 2007). In Kenya, employment in small and medium enterprises has been estimated to account for more than 20% of adult employment and for 12-14% of national GDP (Daniels and Mead, 1998). Small-scale entrepreneurship of this sort has long been identified as a mechanism to alleviate poverty. However, while substantial attention has been paid to microfinance as a strategy to enable small businesses, the impact of credit schemes on business outcomes, especially for the very poor, is still very unclear.¹ Further, many banks that target the ultra-poor realize low or negative profits.² As a result, microfinance has been moving increasingly towards for-profit ventures that focus on relatively richer clientele (i.e. Malkin, 2008).

A complementary approach to enabling the poorest is to focus on savings instead of credit. Recent research has suggested that significant demand exists for formal bank savings, even in the absence of credit, and that the provision of these services can have substantial impacts. For instance, Johnston and Morduch (2007) show that over 90% of Bank Rakyat Indonesia clients save but do not borrow, and Kaboski and Townsend (2005) find that pledged savings accounts have a significant impact on long-term asset growth in Thailand. However, little is known about the impact of these savings products on individual or household outcomes, particularly among the poorest.

In this paper, we present the results from a randomized field experiment which provided poor daily income earners (market vendors, bicycle taxi drivers, and self-employed artisans) with formal savings accounts in a village bank (sponsored by K-REP) in Western Kenya. To estimate the impact of the program on individual outcomes, we make use of a unique dataset collected from 185 self-reported, daily logbooks. These logbooks include detailed information on income, expenditures, market investment, and health, and so make it possible to examine the impact of the accounts along a variety of dimensions that typically are not easily measured. On average, we find that the accounts had substantial positive impacts on investment and expenditures for women, but no effect for men. Four to six months after the opening of the account, the daily average private expenditures of women sampled for the account was about 36-43% higher than those of women in the comparison group. Our preferred estimate of the increase in productive investment is about 114 Kenyan shillings (US \$1.75), which is equivalent to roughly a 42% increase in average investment. We also find some suggestive evidence that the accounts increased the amount of market credit that women gave out. The

¹ One of the few randomized controlled trials of which we are aware is Karlan and Zinman (2007).

² For instance, Morduch (1999) shows that banks that target the “rich poor” are more successful than those that target the poorest.

accounts did not crowd out other types of savings. However, the impacts were highly heterogeneous: only 60% of women had more than one transaction in the account, and only 43% saved more than 900 Ksh (US \$13.85).

These results suggest that the existing informal savings mechanisms used by individuals in rural Kenya are ineffective in allowing at least some people to save as much as they would like. In this part of Kenya, the principal sources of informal savings are investments in animals or durable goods, participation in Rotating Savings and Credit Associations (ROSCAs), and informal cash or in-kind savings at home. Each of these strategies has its own difficulties in facilitating asset accumulation. Animals must be tended after, may get sick or die, and the resale price may fluctuate greatly over time. Participating in ROSCAs has been shown to be a popular way to save in Western Kenya, particularly among women (Gugerty, 2007), but some people may not be able to save as much as they want in a ROSCA. In addition, since ROSCA payouts are typically determined by a fixed rather than random order in this part of Kenya, it is difficult to access ROSCA savings in a timely manner. Meanwhile, money saved at home can be appropriated by others more easily than money saved in a bank. Many people in developing countries face constant demands on their income, and so it may be difficult to refuse requests for money if the cash is readily available in the house (Platteau, 2004). It is also possible that savings at home could be lost or stolen. In addition, if individuals have present-biased preferences (i.e. Laibson, 1997; Gul and Pesendorfer, 2001; Gul and Pesendorfer, 2004), they may also be more tempted to spend the money if they hold it in cash.³

Our results are generally consistent with previous, non-experimental studies of the impact of financial services on the poor. Aportela (1999) exploits the expansion of a Mexican savings institute targeted to low-income people and finds that the branch expansion increased the average savings rate of households by five percentage points. However, Aportela is not able to estimate the impact of the program on household expenditures, investment, or other outcomes. Burgess and Pande (2005) find that the rapid expansion of a rural banking program in India (which offered access to both savings and credit products) in the 1980s caused a significant decrease in rural poverty.

In addition to asset and wealth accumulation, savings accounts could potentially lessen household susceptibility to income shocks. We do find some suggestive evidence that the accounts had some effect in making household less vulnerable to illness. In particular, we find that women sampled for the account are less likely to reduce their business investment levels when dealing with an illness episode in the household, and are better able to smooth their labor supply over own illness. However, this result seems to be due to the fact that the accounts increased income – women were not more likely to withdraw money from their accounts in direct response to health shocks.

Overall, our results suggest that about half of female daily income earners in rural Kenya face substantial savings constraint that can be overcome with a standard savings account. This suggests that microfinance services have the potential to reduce poverty if they include microsavings along with microcredit services. However, we find no effect of the accounts for men, on any dimension.

³ Experimental studies in the Philippines (Ashraf, Karlan, and Yin, 2006) and in the United States (Thaler and Benartzi, 2004) have shown that commitment savings products can be effective in increasing savings.