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Evidence Review

Impact of Village Savings and Loan Associations (VSLAs)

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Volume 06

Issue 01

June 2024

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Abstract

This evidence review investigates the impacts of various community-based financial institutions, including Village Savings and Loan Associations (VSLAs), Self-Help Groups (SHGs), and Rotating Savings and Credit Associations (ROSCAs), in low-and middle-income countries. These institutions aim to enhance financial inclusion and economic empowerment among underserved populations by facilitating access to savings and credit. The review synthesizes findings from empirical studies to evaluate the effectiveness of these models in increasing savings, providing credit, improving economic stability, and fostering community development. Despite notable benefits in financial behaviors and empowerment, the broader economic impacts remain modest.

Main points

- VSLAs, SHGs, and ROSCAs collectively aim to improve financial inclusion by enabling community-driven savings and lending. Each model, however, operates under different structures and cultural contexts, affecting their outcomes and efficiency.
- The programs generally succeed in increasing savings rates among members and provide much-needed credit for personal and business use, fostering a culture of financial planning and responsibility.
- Their impact on broader economic metrics such as overall income growth, consumption, and long-term asset accumulation is limited.
- SHGs and VSLAs, in particular, have shown positive effects on female empowerment and social cohesion within communities, promoting gender equality and greater decision-making roles for women in household and business matters.

1 Introduction

Finance is needed when incomes and planned spending come at different points in time. The time taken between spending and income may vary from hours to a lifetime. Petty traders spend yesterday's savings to buy goods in the morning to sell during the day, or they buy the same goods on credit and repay with interests at the end of the day. While house owners take a mortgage on the house that is repaid during their, or even their children's, lifetime. The sequence of spending and incomes determines whether people save or borrow, with interest rates being the cost of early spending.

In village economies incomes will for many be seasonal and for the poor very close to subsistence level. This implies that they will have problems financing productive investments that can give larger incomes in the future, and some may be in a vicious circle where they take very expensive consumption loans just to survive the last months before the harvest. In most villages different forms of informal finance have evolved. The most common is local moneylenders, who will be more or less professionals. Some people will get loans from friends and neighbors, when in need, while others may have to go to the village moneylender. In most cases these informal lenders charge monthly interest rates, that are not compounded on a monthly basis. While friends may charge only 2% per month, and thus 24% per year, professional lenders may charge 5% for consumption loans the last months before the harvest, which for three months will add up to 15%.[1] On the savings side a common approach is to save in terms of assets, for example livestock, and then sell, or eat, these when in need.

Another common informal institution is ROSCAS (rotating savings and credit associations), which is a term used by observers to describe locally organized groups that we find all over the world from long before any development aid was envisioned. They go by local names (www.gdrc.org/icm/rosca/rosca-names.html). People come together every week, or month, with their savings, and one of them goes home with the pot to be used to finance some lump-sum investment. For the first person this will be primarily a loan, as he or she gets the sum first but will have to continue paying in consecutive meetings, while for the last person it will be a savings program as all contributions will happen before he/she receives the lump-sum. This illustrates the difference between savings and loan institutions: the stream of savings can be the same, only that loans provide the lump sum at an earlier stage. Most people are willing to pay interests to get the sum early, and in bidding ROSCAS this is done by bidding a reduction in the lump-sum to be received, the lowest bid will get the sum. ROSCAS will normally not have a savings account, people come with their savings, and one of them takes the savings home. Except for this, the VSLAs are very similar to ROSCAS.

In VSLAs people meet in groups and bring their savings, and they go home with a lump sum at some point. They may receive a sum early in the savings cycle, although it appears that most receive it towards the end, for example before planting or harvest. This means that a savings account is needed. The VSLA can thus be linked up to a formal finance institution, or an NGO, that gives interest rates. One can also imagine that the formal institution provides loans to the VSLA group, and not only a savings account, so that people can get larger lump sums earlier in the savings cycle.

[1] These numbers are based on my experience from South-Asia. But also in Africa interest rates can be very high, Aryeetey, E. (2005, page 17) says they vary from zero to 100%.

The groups can also have other purposes than saving, as in the self-help-groups (SHGs) we observe in India. These groups may meet also for other purposes. This can be entrepreneurship training, vocational training, literacy programs, health campaigns, etc. And if the VSLA, or SHG, is linked up to an external NGO then one may imagine that help can be provided as grants, instead of loans, in terms of cash or assets, with assets being livestock, seeds, fertilizers, sewing machines, etc, preferably followed by training.

2 Expected impacts of VSLAs

VSLAs that are linked to external NGOs will typically have larger administrative costs than traditional ROSCAS, which have basically no costs. The costs must be weighed against the benefits. There are in principle three different forms of funds available in a village economy: own savings, loans from others in the village, and external loans. In its simplest form, where no loan is provided before the end of the savings cycle, the VSLAs only utilize own savings as the members receive their own savings at the end, normally with interests. If a lump sum is received at an earlier stage there will be a loan element, where other villagers, or external institutions provide a loan. What measurable impacts can we expect?

The regular savings in the VSLA must be taken either from a reduction in other forms of savings, from uptake of loans (which is not uncommon for example among micro-credit clients), or from reduced consumption. The lump sum can be used to repay other loans, to invest in productive assets, other income generating activities such as labor migration, less- or non-productive assets (house improvement, vehicles, durables), life-cycle rituals (marriage, funerals), or just consumption. People will themselves judge whether the costs of savings are lower than the benefits of the lump-sum, so for any participant we have to assume that the impacts are positive. But whether this translates into measurable impacts is another issue.

Repayment of a high interest loan is definitely beneficial, but may even be against the rules of the VSLA. Repayment may help the borrower out of a poverty trap, and thus in the long run potentially make the person able to save and later make productive investments. Better housing or purchase of durables will lead to an easier life, and potentially free up time for productive purposes. But the general finding will probably be similar to other microfinance: we shall not expect transformative development, but some benefits for the borrowers, which is why they became borrowers in the first place.

3 Empirical studies

In empirical studies of the impacts of VSLA, as for any intervention including other microfinance and community based organizations, it is essential to establish the counterfactual, what would have happened without the program? The approach will be to find a control group that does not benefit from the program. One can use randomized control trials (RCTs) if these can be designed such that there is no, or minimal, spillover to the control group, and the RCT itself is done under the same, or similar, circumstances as the program. If this is not feasible, then one can look for randomization provided by nature (thresholds determined by age is one option), or control groups that can be argued are similar to the program group, for example similar districts without the program. Below we will report findings from studies that use proper identification (counterfactual) of VSLAs and similar microfinance programs.

We start with a few well designed studies of VSLAs, then go on to studies of similar programs, and finally studies where saving programs are supplemented with other components into so-called multifaceted programs that may help people out of poverty traps, and thus be transformative. These elements we can find also in the programs that Care implements or supports.

3.1 Impacts of VSLAs

There is, to our knowledge, only one well designed study of VSLAs that is published in a good journal (Karlan et al. 2017). This is, however, an essential study as it focuses on the VSLA as implemented by Care in three countries (Ghana, Malawi and Uganda). The programs were named ESCAPE in Ghana and SAVE UP in Uganda and Malawi. As described in the article, the program had three core components: group-based savings, loans from the group, and an emergency fund. And as they write: "VSLAs do not receive any capital through grants or external loans; the pots simply grow over time as individuals collectively accumulate more savings". They, however, reminds us that VSLA quite often will be a component in multifaceted programs, which we will discuss below, but from what we can see this was not the case for the programs they studied.

Impacts were measured 2-3 years after the program started, using a large sample RCT. It was found that the program had the expected immediate effects of increased savings and uptake of loans. Household business profits improved (although only in Uganda),[2] as did employment in those businesses (Uganda and Malawi). Women empowerment improved (although for the aggregate index only for Malawi) in the sense that more women were reported as the primary decision maker on business matters and expenses on food and education. But there was no impact on broader measures of household welfare, indicating that the program had no transformative impact: there was no impact (in any of the three countries) on household income, consumption, food security, or asset ownership.

In line with our discussion of what impacts to expect, the authors (third paragraph of the final discussion) put weight on the lack of external capital, and the similarity to Roscas, as an explanation for why there was no transformative impact. That is, saving of own funds may be important as a means to boost investment, but can also be used for a number of other purposes that will not necessarily affect aggregate measures, such as total income or consumption. This does not mean that the program is not useful, only that we should not expect too much from a savings program.

3.2 Impacts of SHGs

The program most similar to VSLA is the so-called Self-help groups (SHGs). Again there are not many well designed and published studies. The two we are aware of are both from India, respectively from Jharkand (Demont, 2022; Baland, Demont and Somanathan, 2020) and a district in Rajasthan (Desai and Joshi, 2014). On paper the SHG model is different from VSLA, and in an important way, as formal credit institutions in India are encouraged to provide credit to the SHGs, thus providing them with external funds.

[2] The country specific results are well hidden in supplementary excel files.

From what we can see, the two Jharkand studies use the same dataset, the groups started in the spring of 2002, with 24 program and 12 control villages randomly selected. Surveys were done in 2004, 2006 and 2009, thus long-term impacts could in principle be measured seven years after the program started. There were 18 x 12 =216 households in the control group, 18 x 24 = 432 in the intervention group, and 432 non-treated households in the treated villages, thus allowing for reporting of spill-over effects within village, although this is not reported, from what we can see. Note that the sample sizes are relatively small, so that any significant impacts have to be relatively large to be detected. Also note that the sample sizes reported in the articles combine the three rounds so that for example Table 2 in Demont (2022) reports an N of 629 for the control group, which is a bit misleading, although it says below the table that all three rounds are pooled.

As explained in Baland, Demont and Somanathan (2020) they report intention to treat estimates pooling the two samples from the treated villages. A random-walk procedure was used to select the control and non-treated households, while the treated households are randomly selected among those who have self-selected into the program. This implies that the study is not an RCT, households will tend to self-select into the groups based on characteristics that are not fully observed by the analysts. The first report on the data (Demont, 2013) discusses this is some detail. The articles say they use a diff-in-diff strategy, but all data is collected after the program started, so there are no pre-treatment observations for the treated villages, from what we can see. And since the treated household are self-selected, pre-treatment observations would have been useful. But they can, as Baland, Demont and Somanathan (2020) do, report any improvement over time in treated villages, as compared to control villages. They focus on child outcomes, and find that secondary school enrollment increases over time in treated villages. They find no change in overall child labor, but a switch from wage to domestic work over time.

Demont (2022) pools the rounds, from what we can see, and rather focuses on differences in rainfall between treated villages. The average impact for treated villages is not reported, from what we can see, so one may wonder whether the significant findings are just explained by variation in rainfall between villages, with no positive impact of the treatment in itself. Since the rounds are pooled we do not get information on whether incomes improve over time in treated villages.

The focus on the change for children over time in the treated Jharkand villages, and the variation between treated villages according to rainfall, suggests, to us, that after all these years there is no impact on total income or assets of the program. The improvement in school enrollment and decline in child labor over time in treated villages is however positive, assuming that we believe this is not due to self-selection into the program.

We now turn to the Rajasthan study (Desai and Joshi, 2014). Villages in Dungarpur district were randomly assigned as treatment (32 villages) and control (48 villages). Surveys were done at upstart of the program in 2007 and again two years later in 2009. They say the samples are pooled, indicating that they do not interview the same households in baseline and endline. For the treated villages they write: "The pooled sample include total of 1,410 women who resided in the villages where SEWA programs were in place. 748 of these women were interviewed in the 2007 baseline and 662 interviewed in the 2009 follow-up". The control village samples were of similar size. This is a straightforward study, where they compare average outcomes in treated and non-treated villages. There is a decline in income in both groups due to

drought, but more so in program villages. This effect disappears when control variables are added. Thus their conclusion is that there is no impact on incomes after two years. There is a positive impact, however, on female non-farm labor force participation and measures of female empowerment (say in household decisions and reporting of grievances to the authorities).

Based on the reported findings from these two SHG studies, the overall conclusion is that even savings groups that have access to external capital appear not to have major impacts on income, but they do have impacts on other indicators of human welfare.

3.3 Impact of ROSCAS

Before we turn to the multifaceted programs, let us report on the indigenous finance institutions that both VSLAs and SHGs copy. Since this is an indigenous institution, there will be no RCT available, and alternative methods must be used to identify any impacts. One study from India uses panel data, with individual fixed effects (Sedai, Vasudevan and Pena, 2021). This has the well known problem that individuals with a good upwards trend will tend to become members in Roscas, and thus do well even if the Rosca was not there. This argument, however, may hold also for alternative types of credit, such as moneylenders and banks, that are also studied in the article, see Table 7. Assuming that any bias is in the same range for all types of credit, the study indicates that loans from Roscas have a positive effect on a number of economic outcomes for women, in contrast to loans from moneylenders and banks, and membership in Roscas has a positive impact, in contrast to membership in SHGs. The results vary between indicators, so for example bank loans also have a positive impact on some indicators, while Roscas have a positive impact on all four reported indicators.

It is maybe not so surprising that institutions that have developed by themselves are more likely to have a positive impact, since people know what benefits themselves, while external agents will not have the same information. Such self-selection and self-implementation of Roscas mean that the estimated impacts on members may be high, but will at the same time not be a good estimate for the impact of SHGs or VSLAs that attempt to replicate Roscas. The externally organized programs will not necessarily have the same self-selection mechanisms, since the locals may expect the external agency to take some of the losses in case members run away from their obligations to save, or repay loans.

The external agencies, if successful, are likely to crowd out existing institutions, including Roscas. This will affect the composition of membership, the number of members, and the amount of loans taken. The external agencies will normally not be as informed as the Roscas co-members, so that the Roscas will end up with fewer but most likely more successful members. We shall thus expect the externally supported programs to have less impact than the Roscas, as indicated by the mentioned empirical study. It is beyond the scope of this note to go further into the large literature on Roscas, including their interaction with other types of credit. Thus this section is more of a warning that if SHGs or VSLAs are established in a village one should expect existing formal and informal finance institutions to be affected, which in turn may weaken the impacts of the new programs.

4 Multifaceted programs

The conclusion this far is that savings programs will increase savings, indicating that there is not full crowding out. There seem to be additional effects on business profits and employment in those businesses, as well as on female empowerment. But no significant impact on income, consumption, food security, or asset ownership. Adding external capital, as in the SHGs, add a positive effect on female non-farm labor force, but again no impact on incomes. The explanation for lack of impacts on aggregate income is probably two-fold depending on the location of the programs: in urban areas markets work relatively well, and adding one more financial institution will not make a big difference. This appears to be the case even for urban slums (Banerjee et al. 2015a).

Remote villages, on the other hand, meet a different, and more serious, problem of multiple market failures: poverty in itself means that people are not able to save, and lack of collateral means that they are not able to get loans. Saving and loan programs may help, but loans have to be repaid, and with long term incomes near subsistence level, one cannot expect to be able to repay large loans. The result can be village level poverty traps with stagnating demand and production: for one discussion of such traps see Hatlebakk (2014), which builds upon Banerjee and Newman (1993).

In these villages access to small loans and saving programs will not be sufficient. A big push may be needed, which simultaneously attempts to solve multiple constraints. Such multifaceted programs have now been implemented in many countries, copying what is often referred to as the BRAC model, after the Bangladesh NGO. The program may, in addition to savings and loans, include cash grants, assets, training, basic health and education, as well as investments in infrastructure and more efficient value chains. For an introduction to the program, and the first estimates of the positive impacts in six countries (Ethiopia, Ghana, Honduras, India, Pakistan, and Peru), see Banerjee et al. (2015b). The impacts are long lasting (Banerjee, Duflo and Sharma, 2021). And if some elements of the program are missing, the impacts disappear (Banerjee et al. 2022; Sedlmayr, Shah and Sulaiman, 2020).

5 Conclusions

Savings programs that are implemented in urban areas risk crowding out alternative sources of finance. There may thus be alternative uses of aid that work better by directly contributing to human capital, which is the most important asset for poor people in relatively well functioning urban labor markets. This includes vocational training, or basic health and education programs.

In remote villages, savings programs should preferably be combined with a range of other interventions to help people with the multiple constraints that sustain village level poverty traps. The description of CAREs savings programs indicates that some such components are in fact included (literacy and numeracy programs, emergency help, and leadership and entrepreneurial training).[3] We encourage more of this, potentially adding asset transfers in terms of productive capital and vocational training in the use of such assets, and make sure to combine program components in the same locations. That is the VSLAs programs can preferably be combined with other CARE programs such as the right to health programs.[4] It appears

[3] https://care.no/om-arbeidet-vart.

[4] https://www.care-international.org/what-we-do/health.

that the Mali country program has such a multifaceted character, although we do not know whether the different components are in fact implemented in the same remote villages.[5]

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