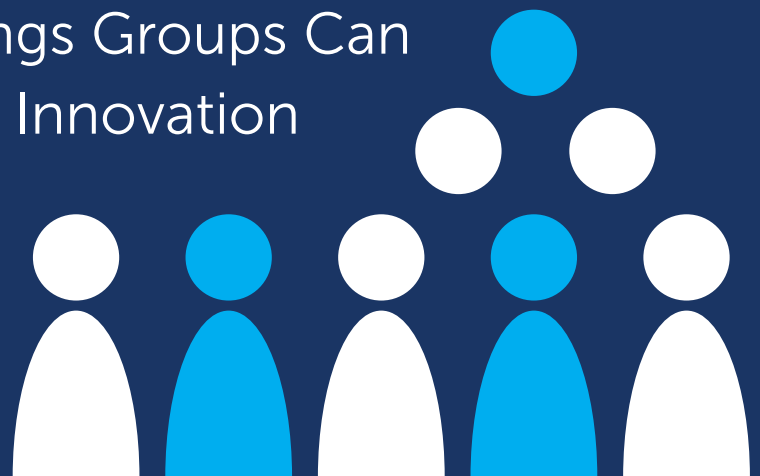


The Wisdom of the Group:

How Lessons from Savings Groups Can
Guide Financial Product Innovation



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Budgeting can be a daunting task for the poor. Poor families must stretch low, often-volatile income to meet basic consumption needs, and handle unforeseen expenses. Despite these challenges, the poor are able to save. They often do so in small amounts for short periods of time, adding to and spending down savings frequently.¹ But short-term saving seldom results in long-term assets—it is not a tool for building up larger sums.

The poor have an acute need for savings tools to amass lump sums of money, yet the supply of useful products often falls short, in part because formal providers face barriers to entry in this market. Depository products usually come with costly regulations, and low balances among low-income savers limit profitability.² However, financial institutions willing to look beyond account-level costs can still benefit from entering the low-income market. Products valued by users can boost take-up rates, strengthen brand loyalty, and lead to unique transactional datasets on consumer behavior.³ User fees may also be able to cover some costs.

In this note we focus on the savings group as a model for delivering products to address this market failure. Reviewing recent research, we extract the mechanisms that make savings groups effective. We then explore the potential to apply these factors to formal products that make sense for both providers and consumers.

Savings Groups – An Overview

The long history of savings groups in many parts of the developing world provides some evidence of their value among poor communities. They exist around the globe—*tandas* in Mexico, *susus* in the Caribbean and West Africa, chit funds in India, *wichin gye* in Korea, *seettuva* in Sri Lanka, *paluwagan* in the Philippines, and *mujin* in Japan to name a few⁴—and function in broadly similar ways, offering their members the opportunity to put money aside in the absence of—or as an alternative to—formal deposit accounts.

There is no one single model for savings groups. Broadly speaking, they are member-owned institutions consisting of a small number of people who agree to meet regularly, save money together, and draw loans from those savings.

There are many variations on this basic model, inspired by group needs and cultural context. Members of a common type of group, called rotating savings and credit associations (ROSCAs), make contributions to a shared fund, and at each meeting the group distributes the money in the fund to a different member. A cycle ends when each group member has received the shared pool of money once. Alternatively, some allow bidding to determine the order of receipt. A variation on the ROSCA model is the ASCA, or accumulating savings and credit association. ASCAs differ slightly in that the “pot” is held to accumulate until

The authors would like to thank Laura Freschi, Jonathan Morduch, and Timothy Ogden for their contributions to this briefing note.

any member needs a short-term loan. Interest earned on these loans is in turn distributed among all group members.⁵

Some financial institutions offer savings groups as a formal product, adapting the traditionally informal tool. Formal providers add value to the group model when they support group formation, define rules, safeguard pooled funds, or train members in accounting and financial literacy. The best known initiative is the creation of Village Saving and Loan Associations (VSLAs) by CARE, whose model has been replicated and extended to roughly 2 million people by organizations including Plan, Oxfam, Catholic Relief Services, and the Aga Khan Foundation.⁶

Notably, most existing formalized savings groups are run by non-profit organizations. Profit-seeking institutions may shy away from group-based products due to their low return on investment relative to cost. However, the logic of savings groups can inform the design of products for groups and individuals alike. Drawing together recent studies, this note discusses how these lessons may be applied to new kinds of financial products. It frames the research along the following questions:

- »» What value do savings groups provide for members?
- »» What mechanisms underlie their effects?
- »» What are limitations to the savings group model?
- »» How can lessons from savings groups inform the design of products that reduce cost, reduce risk, and help consumers save?

What value do savings groups provide for members?

Savings groups can achieve both financial and non-financial outcomes for their members. In 2013 the SEEP Network summarized a set of randomized control trials on savings groups. Nearly all of the studies reviewed in the report show an increase in savings among savings group members, with balances up to 54% more than non-group members. The SEEP summary also finds that across most studies, savings group members are more likely to obtain credit than non-group members.⁷

SEEP's report includes a 2013 evaluation of Savings for Change, an initiative that implements savings groups in five countries.⁸ This randomized experiment shows that group participation led to an additional \$3.65 in savings on average (over \$11.96 at baseline) and a \$149.38 increase in total household assets.

Further evidence on positive savings effects comes from a 2012 study that tested the effects of groups in Chile. Its authors find that group participants had savings balances that were approximately \$15 higher during the course of a year than those of non-group savers—a 64% increase.⁹

Group participation can also have non-financial benefits for members. The Savings for Change evaluation found that households participating in savings groups were significantly more food secure,

evidence that is more broadly echoed in the full SEEP Network report. Because group members had improved savings and regular access to credit, they were better able to manage food shortages during the lean season and maintain consumption levels.

Insofar as savings groups have effects that formal institutions seek to replicate, we next address what makes them work well.



What mechanisms underlie the effects of savings groups?

With a more nuanced understanding of how they work, savings products can be intentionally designed to meet both user and provider goals. Here we review research specific to savings groups alongside the broader behavioral economics literature to explain how groups help households increase savings.¹⁰ We highlight four mechanisms that lead to positive financial outcomes for end-users: peer pressure, regular prompts to save, a balance between structure and flexibility, and perceived legitimacy.¹¹

Peer Pressure in Savings Groups

Peer pressure within savings groups helps participants follow through on their desire to save. Two separate forces operate within this mechanism to increase savings:¹²

>> Public commitment gives group members an immediate reason to stick to their goals. Their line of internal reasoning might sound like this: “I committed in front of others to do something. I think of myself as someone who meets commitments and I want my peers to think well of me, so I have to follow through.” Public commitment also helps participants resist pressure from people in their social networks asking for financial assistance. Members can point to their savings groups as the reason they must not share any funds they have available.

>> Social norming helps participants understand their ability to save. They might think, “If my peers can do it, then I can do it too.” However, peers can also create negative social norms around behavior like missing payments to the group.¹³

One 2013 study observed the peer pressure mechanism at work in savings products in India.¹⁴ The researchers paired subjects with savings monitors in the same community. Every two weeks monitors received a progress report about their respective savers. The authors expected that people in the treatment group would save more than those in the control group because they knew that a fellow community member was watching their progress—and they did. Savers who selected their own monitors saw a 10-29% increase in their savings account balances, and those with randomly assigned monitors boosted their account balances by 40-60%. This research suggests that peer monitors can trigger the peer pressure mechanism and produce savings rate increases similar to savings groups.

Prompts to Save

Some people fail to save because it is not at the top of their mind. Savings groups overcome this problem of limited attention by imposing regular prompts to save, a second mechanism that drives savings group outcomes. Regular meetings act as reminders to keep group members focused on saving.¹⁵ Participants become accustomed to putting money away at a defined interval, which appears to help increase the amount that they save.

The 2012 study of savings behavior in Chile cited earlier lends insight into this mechanism.¹⁶ In the experiment's first stage the authors observed higher savings rates among people who made savings commitments in a group compared to those who saved individually. In a second evaluation, the authors sent some savers weekly text messages providing them feedback about their savings performance while leaving others to continue saving with no prompts. After a three month period, savers who received follow-up text messages had increased their account balances by \$34 (18,500 pesos) on average, compared to a 50-cent (262 peso) decrease in the control group's savings. Participants without weekly reminders faced negative effects from their limited attention to saving, while those with text messages overcame it and stayed focused on their goals. This evidence shows that regular prompts can boost savings both within and outside of the group model.¹⁷

Structure vs. Flexibility

Savings groups achieve a careful balance between structure and flexibility.¹⁸ Group members often democratically develop rules about meeting times, the length of

a lending cycle, interest rates, and other administrative processes. Members are held to the rules by social expectations and the promise of a lump sum payout. Yet the informal nature of groups also offers flexibility to allow for bending the rules by consensus. For example, some groups disburse payouts on a flexible basis by selecting the recipient of each pooled fund based on need, and by allowing members to bid to get a pot early. As economist Jenny Aker explains in an interview with FAI, users of savings products "want to have a little bit of that tying of the hand so they can't spend the money, but they don't want to be completely divorced from access to that money."¹⁹ Savings groups can offer such a balance to their members.

A 2013 behavioral economics study in Kenya demonstrates the importance of balancing structure with flexibility in a context outside of saving groups.²⁰ Researchers provided simple lock boxes to participants and randomized whether they or their loan officer kept the key. Perhaps surprisingly, those who held their own key accumulated more savings than those who did not: After six months, key-holders reported an average balance increase of \$8.40. The experiment exploited a form of mental accounting called labeling wherein individuals allocate savings for a specific use in their mind. In this case the boxes themselves acted as physical labels, imposing structure on the funds inside. Ownership of the key provided the flexibility component, allowing a level of access to funds. Dean Karlan of Innovations for Poverty Action highlights the need for getting the balance right. He says that benefits can come from "teaching people about their own self-control and

how to overcome their cash management problems on their own.”²¹

Perceived Legitimacy

Evaluations find that successful savings groups are run by a leader or organization perceived as legitimate by participants. When would-be savers worry whether their money will be available when they need it, they often do not save.²² Legitimacy, or at least the perception of it, motivates people to use savings groups as a financial tool. Ties to a saver’s community can strengthen the level of legitimacy attached to financial products. In support of this, research in India finds evidence that savings group members are willing to pay a higher price to save in a group led by a local authority as opposed to an outsider.²³ The study collected data on groups with leaders from both within and outside the community. It found that even though local leaders took a higher percentage of pooled funds as a fee than external leaders did, group members did not show any preference against them. The results imply that internal leaders bring an “extra benefit” to their groups, even when they come at a higher cost to participants.



Legitimacy can also come from the level of training that group leaders have received. The Savings for Change evaluation compares outcomes in groups with trained versus untrained leaders. It found a 40% savings group participation rate in places where leaders received formal instruction, compared to a 32% rate among villages

with no trained leaders. Group members with trained leaders also held \$61 more in livestock. While the study doesn’t prove that level of training caused these results, women reported “more confidence in the leadership, problem-solving, and conflict resolution capacities”—in short, more confidence in the legitimacy—of the trained group leaders.²⁴

What are the limitations to the savings group model?

As we’ve shown, savings groups can bring both financial and non-financial benefits for their members. Yet they are not without drawbacks that limit their effects, as with most financial tools targeting the poor. By understating both the mechanisms that make savings groups work, as well as their drawbacks, financial institutions can create innovative and effective tools that fill in where savings groups fall short.

One limitation to groups is that the value of funds accumulated within savings groups tends to be objectively small.

Second, because of the rotating nature of payouts, a household may not be able to access savings when they are most needed: if all households in a village must pay school fees at the same time a savings group is unlikely to be of much help in reaching that goal.

Third, savings groups come with magnified risk to consumers in that they form on the basis of trust among members. Even though groups tend to informally screen

out people whom they deem unreliable, the structure still poses risks for accepted, supposedly trustworthy participants. Individual members can and sometimes do break the rules and defect once they receive their payout. Others may drop out for unavoidable reasons, losing whatever funds they had already contributed. Breaches of trust negatively affect savings outcomes for all members of the group.

Finally, savings groups have limited growth potential. With only the infrastructure and marketing strategies available to the informal sphere where they operate, savings groups can struggle to spread and scale up.



Formal providers have an opportunity to meet consumer financial needs in areas where savings groups fall short, and the best strategy may not be to replicate groups in a formal setting. For one, the consumer risk inherent in the trust-based group model is high. It makes groups more difficult to market and guarantee, especially in the formal sphere where most consumers are accustomed to products targeting individuals. Furthermore, the administration of savings groups does not present clear economies of scale. Since nearly every group requires its own leader, the cost to run one group doubles to run two, quadruples to run four, and so on. Compared to typical deposit accounts that can be lent out for a profit and administered by the thousands, savings groups as a formal product present an

intimidating prospect for many for-profit institutions.

Understanding both the limitations of and the positive mechanisms behind the savings group model can lead the way to the development of innovative products that meet the needs of poor households. With this in mind, we next explore how to deliver products that reduce cost and risk while helping low-income consumers save.

How can lessons from savings groups inform the design of products that meet the goals of both customers and providers?

Gaining the benefits of the savings group in a formal setting requires innovation around the mechanisms that make groups work. In this section, we discuss how to adapt the four mechanisms outlined above into the design of non-group products.

>> The savings monitor study shows that a single community member, rather than an entire group, can exert sufficient peer pressure to increase savings. The strategy of pairing savers to monitors eliminates the need to coordinate full groups. Alternatively, savings products might give consumers the option to make their savings commitments public, which would require even less coordination between parties. For example, financial institutions could hold savings commitment ceremonies to help hold savers accountable to their goals.

» Text message technology makes it simple to replicate the regular prompts to save intrinsic to savings groups, as demonstrated by results of the text message reminders study in Chile and elsewhere.²⁵ While reminders to save continue to receive attention among academics, they have so far not been extensively implemented by formal financial institutions. Many banks use texting as a platform to help clients check account information, but currently most stop short of offering text messages as savings prompts.

» Commitment savings research indicates that the right balance between structure and flexibility does not require a group.²⁶ Participants in the Kenyan lock box study required only a box that was both lockable and accessible. The ideal balance may vary from household to household and even seasonally. While it may not be feasible to tailor a different balance of commitment and flexibility for each customer, financial institutions should explore ways to incorporate soft commitment mechanisms into their savings products. For example, a study in Morocco found that children in families receiving cash transfers “labeled” for education (but with no enforcement that the funds actually be used for education) stayed in school longer than families receiving more restrictive transfers.²⁷ Simply labeling funds landed in the “sweet spot” of soft commitment.

» Most formal products already come with an inherent degree of legitimacy compared to informal options. Providers can work to uphold positive reputations by following transparent policies that give consumers reason to trust them. The research on local-versus-external group leaders in India further points to the importance of

maintaining community ties, and results from the Savings for Change evaluation stresses the benefits of having trained staff.

Financial institutions might also leverage their legitimacy by targeting products to existing savings groups. For example, deposit accounts could be designed specifically for self-administered groups in the community. Any member could deposit funds into a communal account, while withdrawals would be limited according to each group’s rules. More opportunities for profit would probably lie in serving accumulating savings groups, which hold savings for long periods, lending out the pooled money as needed, rather than rotating ones.

In Sum

Reasonable concerns about cost and risk have kept many providers from transplanting the savings group model directly into the formal financial sphere. Yet useful product innovation can result from applying the mechanisms that make savings groups effective—peer pressure, regular prompting, a balance between structure and flexibility, and perceived legitimacy—to non-group products.

In this brief note, we have described a set of strategies to apply savings group mechanisms to formal financial products. These strategies are informed by academic studies that designed experimental products to answer specific research questions. The next step is to put these research pilots into wider circulation on the ground, and then continue to iterate and improve low-cost, low-risk products that help poor households save.

Notes:

1. For more on strategies the poor use to save, see Collins, D., Morduch, J., et al. (2010), *Portfolios of the Poor: How the World's Poor Live on \$2 a Day*, Princeton University Press; and Deaton, A. (1992), *Understanding Consumption*, Oxford University Press.
2. In one study of traditional bank models, a bank in Latin America offering low-income savings products needed an average balance of \$800 to break even. Gateway Financial Innovations for Saving (2013), "Big Banks and Small Savers: A New Path to Profitability," Rockefeller Philanthropy Advisors, Inc.
3. Ibid.
4. Low, A. (1995), "A Bibliographical Survey of Rotating Savings and Credit Associations," Oxfam Publishing.
5. For a more detailed overview of savings groups, see Allen, H. and D. Panetta (2010), "Savings Groups: What Are They?," The SEEP Network.
6. Singer, J. (2008), "Backgrounder on VSLA's, MasterCard Foundation."
7. Gash, M. and K. Odell (2013), "The Evidence-Based Story of Savings Groups: A Synthesis of Seven Randomized Control Trials," The SEEP Network.
8. Bureau of Applied Research in Anthropology, University of Arizona, and Innovations for Poverty Action (2013), "Final Impact Evaluation of the Saving for Change Program in Mali, 2009-2012."
9. Kast, F. et al. (2012), "Under-Savers Anonymous: Evidence on Self-Help Groups and Peer Pressure as a Savings Commitment Device," NBER Working Paper No. 18417.
10. See the appendix for an overview of the studies mentioned in this section.
11. In some savings group models, loss aversion is likely another important mechanism. It incentivizes meeting attendance and saving behavior in setups where members must be present to recoup their payouts. If they start to participate and then defect from the group, they risk never recovering the money that they had already put towards the shared fund. Kremer, et al.'s research on collateralized loans for rainwater harvesters in Kenya shows strong results for the effects of loss aversion when incorporated into the design of financial products.
12. Kahneman, D. (2013), *Thinking Fast and Slow*, Farrar, Straus and Giroux.
13. Giné, X. et al. (2011), "Strategic Default in Joint Liability Groups: Evidence from a Natural Experiment in India," Working Paper.
14. Breza, E. and Arun C. (2013), "Savings Monitors," Columbia Business School.
15. See Mullainathan, S. and Shafir, E. (2013), *Scarcity: Why Having So Little Means So Much*, Macmillan for an overview of issues related to limited attention and the benefit of routines.
16. Kast, F. et al. (2012), "Under-Savers Anonymous: Evidence on Self-Help Groups and Peer Pressure as a Savings Commitment Device," NBER Working Paper No. 18417.
17. For more evidence on how reminders affect savings, see Karlan, D. et al. (2010), "Getting to the Top of Mind: How Reminders Increase Saving," NBER Working Paper No. 16205.
18. Traditional rotating saving and credit associations are not very flexible, however. They favor clear rules with reliable structure versus flexibility. Variants, like accumulating saving and credit associations and chit funds, build greater flexibility and functionality into the mechanism.
19. Aker, J. (2013), Personal interview.
20. Dupas, P. and J. Robinson (2013), "Why Don't the Poor Save More? Evidence from Health Savings Experiments," *American Economic Review*, 103(4): 1138-71.
21. Karlan, D. (2013), Personal interview.
22. Karlan, D. (2014), *Innovation, Inclusion, and Trust: The role of Non-Profit Organisations in Microfinance*, Plan International.
23. Vandewalle, L. (2011), "The Role of Accountants in Indian Microfinance Groups: a Trade-Off Between Financial and Non-Financial Benefits," Working Paper from University of Namur.
24. Bureau of Applied Research in Anthropology, University of Arizona and Innovations for Poverty Action (2013), "Final Impact Evaluation of the Saving for Change Program in Mali, 2009-2012."
25. See, for example, Karlan, D. et al. (2010), "Getting to the Top of Mind: How Reminders Increase Saving," NBER Working Paper No. 16205.
26. See Brune, L. et al. (2014), "Facilitating Savings for Agriculture: Field Experimental Evidence from Malawi," Working paper., De Arcangelis, G. et al., "Directing Remittances to Education with Soft and Hard Commitments: Evidence from a Lab-in-the-Field Experiment and New Product Take-Up Among Filipino Migrants in Rome," World Bank Policy Research Working Paper; and Ashraf, N. et al. (2006), "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines," *The Quarterly Journal of Economics*.
27. Benhassine, N. et al. (2013), "Turning a Shove into a Nudge? A 'Labeled Cash Transfer' for Education," NBER Working Paper No. 19227.
28. The icons on pages 4, 6, 7, and 9 were sourced from the Noun Project. Credit goes to the designers Claire Jones (page 4), Matt Brooks (page 6), Gilbert Bages (page 7), and Jessica Locke (page 9).



Appendix

SAVINGS GROUP-RELATED RESEARCH

Title	Author	Location	Year	Conclusion
Final Impact Evaluation of the Savings for Change Program in Mali, 2009-2012	Bureau of Applied Research in Anthropology at the University of Arizona & Innovations for Poverty Action	Mali	2013	Group participation leads to higher savings and other positive, non-financial outcomes among members. Group members with trained leaders save more than those with untrained leaders.
Under-savers Anonymous: Evidence on Self-Help Groups and Peer Pressure as a Savings Commitment Device	Kast, Meier & Pomeranz	Chile	2012	Group participation leads to higher savings among members. Follow-up text message lead to higher savings among participants outside of a group model.
Savings Monitors	Breza & Chandrasekhar	India	2012	Peer pressure from savings monitors leads to higher savings among participants outside of a group model.
Why Don't the Poor Save More? Evidence from Health Savings Experiments	Dupas & Robinson	Kenya	2013	Participants holding the key to their own lock boxes save more than those who do not hold their own key.
The Role of Accountants in Indian Microfinance Groups: a Trade-Off Between Financial and Non-Financial Benefits	Vandewalle	India	2011	Group members with local leaders show no preference for external leaders, even though local leaders take a higher cut of pooled funds for themselves.
Can Self-Help Groups Really Be "Self-Help"?	Greaney, Kabosky & Van Leemput	East Africa	2013	Groups that had administrators paid with membership fees increased borrowing, saving, business investments, and attracted wealthier members compared to groups that had administrators paid on a salary.