

Measuring Savings Group Participation Rates in Africa: Data Assessment and Recommendations

RESEARCH BRIEF

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"Demonstrating the Village Savings and Loan Association, northern Uganda, 2013" by Trust for Africa's Orphans is licensed under CC BY-NC-ND 2.0.

savings group participation rates—including gender differences in participation—vary depending on the data source. These data discrepancies can obscure the true breadth of savings groups in sub-Saharan Africa, while also impeding assessments of group utilization and effectiveness.

To estimate women's saving group participation rates in Kenya, Nigeria, Tanzania, and Uganda, the Evidence Consortium on Women's Groups (ECWG) conducted an analysis of two established data sets on financial inclusion; FinScope and Financial Inclusion Insights (FII). This research brief reviews the findings of the ECWG's analysis, including an assessment

Introduction

Many governmental and non-governmental organizations support savings groups to promote women's financial inclusion in sub-Saharan Africa. Systematic reviews suggest that savings groups are more effective at reducing poverty, increasing income, and improving food security than microcredit groups (Steinert et al., 2018; Duvendack & Mader, 2019). However, estimates of

Key Takeaways

Savings groups are a promising vehicle for reducing poverty, increasing income, and improving food security. Accurate estimates of savings group participation rates could support rigorous assessments of group membership, utilization, and effectiveness at a population level and could serve as a global public good to improve programming. The Evidence Consortium on Women's Groups (ECWG) analysis of two global data sources on savings group participation rates in Kenya, Nigeria, Tanzania, and Uganda found:

- Higher savings group participation rates of women than men across all datasets
- A higher savings group participation rate in Uganda than in the other countries, though we need to exercise caution in making cross-country comparisons.
- FinScope data have more group details, though variations in survey instruments complicate comparisons across countries.
- Financial Inclusion Insights (FII) data are less granular in this area, but well suited to cross-country comparison due to instrument consistency.

The data on savings groups suggest different participation rates, largely due to differences in the number and type of survey questions:

 Rates of participation in Accumulating Savings and Credit Associations (ASCAs) or Village Savings and Loan Associations (VSLAs) are much lower in FII data than in FinScope data.

Despite these limitations, the ECWG produced some estimates of participation rates in savings groups, mainly using FinScope data due to its greater level of detail on, for example, the frequency and type of financial activity.

Further improving measurement of savings group participation rates, and thus contributing to a global public good, could involve:

- Standardizing survey questions
- Collecting more detail on utilization, such as reasons for loans
- Triangulating data using management information systems, diary studies, and savings group-level data

of the trade-offs across different data on savings group participation. The two different data sources enabled the ECWG to provide estimates of savings group participation rates, but with significant limitations. It was particularly challenging to obtain comparable estimates of participation in savings groups across countries. For this reason, this brief also provides recommendations to improve the measurement of savings group participation going forward.

While Financial Inclusion Insights (FII) and FinScope data serve a variety of purposes and thus have different questions, standardizing and improving how savings group participation is measured could generate a global public good by improving researchers' understanding of on-the-ground implementation. Collecting detailed information on savings group participation, such as frequency of meetings and attendance, could improve interpretation of impact evaluation findings, which in turn could help implementers and policymakers improve savings group programming. Currently, most research on savings groups only provides limited information on implementation, complicating how impact evaluation results are interpreted and compared across settings, as well as limiting the ability of implementers and policymakers to learn from research. We also provide recommendations on how triangulation of data sources could further improve the utility of research on savings groups for implementers and policymakers.

Overview of Savings Groups

Savings groups have emerged as a reliable mechanism for people in sub-Saharan Africa to save money, pool risk, and access credit. Savings groups are described as "groups of 15 to 30 people, usually women, who meet on a regular basis to contribute to a common fund that is then used to support loans to group members as needed" (Gash & Odell, 2013, p. 11). There are several different types of savings groups, including:

- Rotating Savings and Credit Associations (ROSCAs) are a common form of informal savings
 association in which members gather at regular meetings to contribute a previously agreed-upon
 amount to a collective fund. At the end of each meeting, the collected sum is then given to a different
 group member on a rotating schedule (le Polain et al., 2018; Rim & Rouse, 2002).
- Accumulating Savings and Credit Associations (ASCAs) differ from ROSCAs in that the collected sum
 is not distributed at each meeting; rather, the fund is allowed to grow over time, and members may
 borrow from it as needed (le Polain et al., 2018; Rim & Rouse, 2002). ASCAs also tend to be more
 formal and can be time-bound or perpetual.
- Similar to ASCAs, Village Savings and Loan Associations (VSLAs) are groups in which members regularly contribute to a fund and can borrow interest-accruing loans from the fund as needed. Any interest earned is later shared among members (Karlan, Savonitto, Thuysbaert, & Udry, 2017).

This brief aims to provide participation rates in formal savings groups and thus distinguishes among participation in ROSCAs and both Savings-Group Time-Bound and Self-Help Group Perpetual ASCAs. ASCAs are more likely than other savings groups to include an emphasis on pooling savings and sharing risks and group solidarity and networks. To the extent possible, we therefore exclude participation rates in ROSCAs from savings group participation rates in this brief.

Systematic reviews and impact evaluations indicate that savings groups are more effective at reducing poverty, increasing incomes, and improving food security than microcredit groups (Steinert et al., 2018; Duvendack & Mader, 2019). In addition, impact evidence shows that savings groups can smooth consumption (Steinert et al., 2018; Karlan, Ratan, & Zinman, 2014), effectively reaching the poorest of the poor (Gash & Odell, 2013), and









stimulate empowerment under certain conditions (Karlan et al., 2017). This has important implications for gender equality, as women represent the majority of savings group participants (Gash & Odell, 2013).

However, there is mixed evidence on the impact of savings groups. For example, a meta-analysis did not find positive effects on assets, education, or health (Steinert et al., 2018), while an evidence synthesis found mixed effects on income and consumption (Gash & Odell, 2013). Further, as described earlier, success may depend on the specific type of savings group program.

Assessing the Data on Savings Groups Participation

Accurate estimates of savings group participation rates are important to understand the role of savings groups in improving women's empowerment and well-being, and the potential of savings groups to move to scale. There are no nationally representative surveys designed specifically to gather information on women's or savings group participation. Instead, the ECWG examined two established surveys that focus on financial inclusion and include relevant questions on savings groups in sub-Saharan Africa: FinScope and Financial Inclusion Insights (FII). We considered the instruments and sampling strategy for collecting data, and the resulting validity and reliability of savings group participation rate estimates for Kenya, Nigeria, Tanzania, and Uganda.¹ This analysis included assessing the strengths and limitations of each data source as well as the trade-offs between them. In addition, we compared estimates from these two data sources to estimates on savings group participation rates from rigorous empirical studies.

Analysis of FinScope Data

FinScope is an ongoing, nationally representative, cross-sectional dataset effort of FinMark Trust, intended to provide the first measures of financial inclusion and attitudes at an individual level. Data are available for over 30 countries, including Kenya, Nigeria, Tanzania, and Uganda, at a frequency of every two to five years depending on the country. FinScope data offer some detail on the frequency of contributions and the type of savings group to which members belong, and distinguish between member saving and borrowing behavior. However, questions vary by country and survey year, complicating cross-country comparisons of savings group participation.

The FinScope data² suggest that:

- Overall rates of adult savings group participation are 37% in Uganda, while participation rates in Kenya,
 Nigeria, and Tanzania are 13%, 12%, and 16%, respectively.
- Women are more likely to participate in savings groups than men in Kenya, Tanzania, and Uganda (gender-disaggregated data for Nigeria are not available). The gender difference ranges from 5.1 to 8.0 percentage points, depending on the country.
- Uganda reports the highest proportion of women participating in savings groups, at 39%.
- Adult savings group participation rates are similar in rural and urban contexts for Kenya and Tanzania (disaggregated data for Nigeria are not available). In Uganda, the savings group participation rate for rural individuals is 39%, as compared to 29% for urban individuals.

² Participation rates were calculated using data from 2016 in Kenya and Nigeria, 2017 in Tanzania, and 2018 in Uganda.









¹ This brief excluded Living Standards Measurement Survey and Global Findex data sources, because the former focuses on lending only, and the latter includes only two questions on savings groups that were likely to produce systematically biased estimates of group participation rates.

It is important to note, however, that cross-country comparisons must be made with caution, due to variation in group survey questions across countries. For example, whereas FinScope Kenya includes questions on ASCAs, FinScope Tanzania asks about savings groups generally, and FinScope Uganda combines savings groups with VSLAs. Additionally, there is a possibility that FinScope data in Kenya may underestimate rates of participation in ASCAs that originated as ROSCAs. This is because some ASCA members may still consider themselves as ROSCA members if ROSCAs transitioned to ASCAs.

Analysis of FII Data

Similar to FinScope, FII is a nationally representative dataset covering 12 countries, including Kenya, Nigeria, Tanzania, and Uganda. FII focuses on mobile money and digital financial services. These data provide less detail on individual financial activities, as the survey only asks whether respondents save with ASCAs or VSLAs. However, the benefit of FII is that it is more suitable for cross-country comparisons, because FII surveys are conducted annually and survey questions remain consistent across countries.

FII data for 2017 suggest that:

- Rates of participation in ASCAs or VSLAs range between 2% and 11%, depending on the country.
 These estimates suggest much lower rates of participation than the FinScope estimates.
- Women's participation rates in ASCAs or VSLAs are between 0.2 and 3.2 percentage points higher than those of men, depending on the country.
- Rural individuals' participation rates in ASCAs or VSLAs are 4.7 percentage points higher than those of
 urban individuals in Uganda. These rates are also 2 to 1.2 percentage points higher for rural individuals
 than urban individuals in Tanzania and Nigeria, respectively. However, in Kenya, the participation rate
 for rural individuals is 0.9 percentage points lower than the participation rate of urban individuals.

While FII allows for cross-country comparisons, FII does not provide information on the frequency and type of financial activity (for example, how often participants saved versus borrowed), thus limiting its utility for research on the quality of group member participation.

Comparison of Savings Group Participation Rates by Source

The ECWG found large discrepancies in the estimates of savings group participation rates between sources. First, estimates differ across FinScope and FII data. This is likely due to differences in the type and number of survey questions, as illustrated in Table 1. While FII has one survey question common across Kenya, Tanzania, Uganda, and Nigeria, FinScope has multiple questions that vary across countries. Similarly, there is variation in the group type specified in the survey: Whereas FII asks about saving with an ASCA/VSLA, FinScope questions ask about savings groups generally, ASCAs, and savings groups/VSLAs, depending on the country. Additionally, both FinScope Tanzania and Kenya differentiate between savings and borrowing, whereas FII does not, although the survey wording differs across countries. These differences in survey questions may explain some of the discrepancy in estimates across these data sources.









Table 1. Example of survey questions from FII and FinScope

FII	FinScope Tanzania	FinScope Kenya			
Kenya, Tanzania, Uganda, and Nigeria: Do you save with any of the following? Savings with an ASCA/VSLA (a group that lends to its members or to other people with interest)	 Please tell me which of the following do you sometimes use? (Savings group) Please tell me how you saved/where you kept the money you put away in the past 12 months? (Save with savings group) Please tell me where/from whom you borrowed money in the past 12 months? (Savings group) 	Which services and products are you CURRENTLY using? (Savings with an ASCA) Which services and products are you CURRENTLY using? (Loans with an ASCA)			

In addition, estimates from these two data sources differ from those available in the empirical literature; for example:

- Evidence from an impact evaluation of a VSLA program in Uganda (Karlan et al., 2017) found baseline participation rates to be 11%—lower than for FinScope data but within the range of FII data.
- A synthesis of seven randomized controlled trials in sub-Saharan Africa (Gash & Odell, 2013) found
 participation rates were between 3% and 15% in control communities (6% in Uganda), lower than for
 FinScope data but again within the range of FII data. However, findings suggested that newly
 introduced savings groups interventions often have take-up rates of higher than 30%.
- That same synthesis (Gash & Odell, 2013) found that 75% to 80% of savings group members in the
 interventions studied were women, whereas the FII and FinScope data showed much smaller gender
 differences in participation rates.

These discrepancies are likely the result of a combination of factors. For example, these sources have differences in savings group definitions, sampling methodology, characteristics of the samples, context, timing of surveys, and other measurement aspects. As a result, these comparisons across sources should be interpreted with caution.

Estimates of Savings Group Participation Rates

Taking into consideration the limitations of these data for estimating participation rates, the ECWG produced estimates of both overall and gender-disaggregated participation rates in savings groups for Kenya, Nigeria, Tanzania, and Uganda (Table 2). The estimates are based on expert consultations to validate methodological choices and to triangulate rates across different survey instruments, impact evaluations, and other quantitative studies.









Table 2. Percentage of individuals who accessed financial services from a savings group

	Total (% age 15+)		Male (% age 15+)		Female (% age 15+)		Rural Individuals (% age 15+)		Urban Individuals (% age 15+)	
Country	%	n	%	n	%	n	%	n	%	n
Kenya 2016	12.6%	8,665	8.7%	3,384	16.2%	5,281	12.4%	4,852	12.8%	3,813
Nigeria 2016-7	11.90%	Unclear	11.06%	2,983	12.75%	3,059	14.10%	3,715	6.52%	2,327
Tanzania 2017	16.1%	9,459	12.0%	4,119	20.0%	5,340	15.9%	6,846	16.5%	2,613
Uganda 2018	36.7%	3,002	33.9%	1,052	39.0%	1,950	39.0%	2,173	29.2%	829

Source: FinScope data; survey weights provided by FinScope applied.

FinScope served as the primary data source for these estimates, as it provided the most detailed information on savings group participation. FinScope data were used for the estimates for Kenya, Tanzania, and Uganda, whereas a combination of FinScope and FII data were used for Nigeria in order to disaggregate the data by subgroup. In Table 3, we provide details on the data sources used.

Table 3. Details on data sources used for estimates

Data Source	Details
FinScope Kenya 2016	Survey questions used: - E1. Which services and products are you CURRENTLY using? – Savings with an ASCA - E1. Which services and products are you CURRENTLY using? – Loans with an ASCA
Nigeria	The total comes from a FinScope Nigeria 2016 country report that estimates the number of adults who save through a savings group or club. Subsample estimates come from proportional allocation of data from a FinScope country report to subgroups based on Financial Inclusion Insights (FII) data from 2017. Sample sizes come from FII data.
FinScope Tanzania 2017	 Survey questions used: J1.1. Please tell me which of the following do you sometimes use? – Savings group. F4.1. Please tell me how you saved/where you kept the money you put away in the past 12 months? – Save with savings group. G5.1 Please tell me where/from whom you borrowed money in the past 12 months? – Savings Group.
FinScope Uganda 2018	 Survey questions used: F4.1.7: Please tell me which of the following did you use for saving or keeping money you put away in the past 12 months? – Savings group/VSLA. G6.1 Did you borrow money from anybody or any institution during the past 12 months? – Savings Group/VSLA. F10.2.1: Thinking about the group(s) you belong to, do you belong to a Savings group/VSLA?

Because FinScope survey questions and response choices vary by country, including the definition of group types used in questions, we recommend exercising caution in making cross-country comparisons.









Strengthening Participation Rate Measures

Our analysis reveals trade-offs in the measurement of savings group participation that merit consideration by implementers, policymakers, and researchers. The strengths and weaknesses of any data source for measuring group participation often derives from the analytic priorities of the survey. We cannot expect surveys focused on financial inclusion to exclusively focus on savings groups. We can, however, offer some recommendations to provide more accurate estimates of savings group participation rates, which would serve as a global public good to inform more effective implementation.

Standardize Measurement

The two survey programs we examined use different questions to measure savings group participation rates. For example, as shown in Tables 1 and 3, FinScope questionnaires ask about current savings and loans with an ASCA in Kenya, but saving and borrowing in the last 12 months with a VSLA or savings group in Uganda. By contrast, the FII survey only asks whether respondents save with ASCAs or VSLAs. Both within- and across-survey discrepancies limited our ability to make accurate comparisons across contexts.

Standardization, especially across instruments within the same survey program, would improve measurement of savings group participation. For example, while countries have different priorities and contexts, including consistent language about savings groups (e.g., specific questions for different types of savings groups) would improve the ability to compare data across contexts. Such standardization would facilitate cross-country comparisons, and improve the accuracy of participation rate estimates.

Expand Measurement of Participation

Participation in savings groups involves more than just membership. Meeting attendance, regular savings, and trainings provide insight into what may influence effectiveness. Survey instruments that include questions on the frequency of attendance as well as different types of financial activities allow for more detailed estimates of the coverage and utilization of savings groups, and thus strengthen the evidence base.

The FinScope questionnaire already includes some detailed measures of participation. For example, the Kenya data allow for a comparison of past and current usage of ASCAs and VSLAs, which can be used to examine dropout rates. Consistently detailed measures of participation allow for more realistic estimates of how well savings groups operate and benefit participants. While specific additions to instruments depend on survey and policy priorities, including questions on the following general topics could be beneficial:

- Credit: number, amount, frequency, interest rate, and purpose of loans
- Participation: frequency and purpose of attendance for meetings as well as trainings
- Savings: amount, frequency, purpose, and reasons for saving or not saving within the group
- Dropout: reason for ceasing membership

This information—for a broad range of both informal and formal savings groups types—would enable funders, policymakers, implementers, and researchers to gain a more nuanced understanding of both coverage and actual engagement with savings groups.









Triangulate Data

Triangulating data on savings group participation can both contribute to greater validity and provide a better understanding of coverage and utilization. Ideally, survey data on participation in savings groups would be triangulated with:

- Data from management information systems: These data could improve the accuracy and relevance
 of information about participation in savings groups, but only when triangulated with nationally
 representative survey data. For example, the Savings Group Management Information System (SAVIX)
 is a project management system that includes data on savings group membership and composition.
 However, it is important to note that these data are voluntary and self-reported by organizations, and
 therefore not nationally representative.
- Diary studies: Although more resource intensive, diary studies data may clarify savings group
 processes. For example, Catholic Relief Services implemented financial diary studies in Zambia that
 enabled researchers to analyze how participation in savings groups influenced household cash flow
 and overall economic well-being (Catholic Relief Services, 2013).
- Data collected at the level of the savings group: In the absence of management information systems and diary studies, the ECWG advises triangulating individual-level data with data collected at the group level (de Hoop, Peterman, & Anderson, 2020). This would strengthen information on attendance, savings, and credit while also providing insight into group dynamics and cohesion.

To effectively triangulate these data, it is important to ensure that data from the different sources are linked—that is, that they can be merged into a single dataset.

Conclusion

This ECWG analysis highlights significant variation in the estimates of savings group participation rates across available data sources. Although data sources consistently show higher savings group participation rates among women and Uganda shows the highest savings group participation rates, both within- and across-survey discrepancies limited our ability to make accurate comparisons across contexts.

Standardization and improvements in the measurement of savings group participation rates could serve as a global public good. Currently, little research on savings groups provides information on implementation, limiting the learning from impact evaluations and other research for implementers and policymakers. Augmenting individual-level survey data with management information systems data, diary studies, group-level data, and other qualitative data could further improve the utility of research on savings groups for implementers and policymakers.

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