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THE ROLE OF INFORMAL GROUPS IN FINANCIAL MARKETS: EVIDENCE FROM KENYA

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Abstract

While the scale of informal finance in many developing countries has long been known to be extensive, data at the national level and particularly in Africa has been scarce. Moreover, financial sector development policy has firmly shifted its attention away from informal finance and towards working with the formal sector to provide inclusive financial services. However, some donors and policy makers are concerned that this approach is inadequate and will leave the poorest people unserved with even basic financial services, and are as a result experimenting with savings-led group-based approaches. This paper uses data from the 2006 Financial Access Survey carried out in Kenya to examine the scale, scope and nature of informal groups in order to assess the context for this alternative strategy. This survey provides the first significant nationally representative dataset to exist offering a much more detailed analysis of informal group operation than has so far been possible. First, we demonstrate the extent of use and estimated scale of savings currently flowing through these systems. Second, we examine the profile of use via socio-economic characteristics through the use of logistic regression analysis. We then turn to the reasons users give for engaging in groups, the way they are organised and the experiences reported by users having engaged with them. We conclude by drawing out the policy implications of this analysis for the new focus on savings-led group-based approaches and for policy towards the development of the informal financial sector.

Key Words: informal finance; ROSCAs; ASCAs; financial sector development policy; Kenya.

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1 Introduction

While the scale of informal finance in many developing countries has long been known to be extensive, data at the national level and particularly in Africa has been scarce. In the African context, it is informal group systems such as rotating savings and credit associations (ROSCAs) and accumulating savings and credit associations (ASCAs) that have appeared to be prevalent by comparison to moneylending and which first anthropologists and then economists have sought to analyse.

In the context of the current concern of financial sector development policy to deliver 'Finance for All' (World Bank 2008), the role of informal groups in the development and operation of the financial market poses a question for policy. This is whether to focus on extending the outreach of the formal financial sector which currently reaches less than 20% of African households (Honohan and Beck 2007) , or whether also to seek ways to work with these more informal systems to deliver a basic level of financial service to poor people. The key policy focus for inclusion was on microfinance in the 1990s, but there is a growing recognition that mainstream microfinance approaches have failed to reach significant scale and depth of outreach in many parts of the world with few countries gaining outreach of more than 1% of the population (Honohan 2004) particularly in Africa. Emphasis has shifted towards extending the outreach of the formal financial sector in the past ten years with little, if any, consideration given to the role of the informal sector (Helms 2006; World Bank 2008). Honohan and Beck see this as a necessary shift away from informal finance—and much microfinance that they see as also being based on group –based systems—which cannot deliver the potential for scale and risk pooling offered by the formal sector (Honohan and Beck 2007). That the formal sector should be developed to become more inclusive and offer these services effectively is without doubt important. However it begs the question as to whether there is any role for the informal sector in financial sector development policy . .

The relatively weak overall outreach of the microfinance sector, alongside some efforts for formal sector downscaling, has led to concern that the poorest people are likely to continue to lack access to basic and useful financial services. Some donors are therefore turning to experiment with the significant scaling up of savings-led group-based approaches, which are adaptations of the ASCA (e.g. Gates Foundation and Financial Sector Deepening, Kenya (FSDK)) as part of such an alternative, but complementary, strategy. So far this has only been attempted on a significant scale in India via the NABARD supported self-help group programme (Sinha 2009). This could be seen as a return to the point at which many microfinance interventions started. In the early stages of microfinance, one strategy was to lend to existing indigenous groups on the expectation that discipline in these systems was good and default was low. However, this strategy was misplaced and unsuccessful in many contexts (e.g. Kenya Rural Enterprise Programme's (KREP's) Chikola scheme). The mainstream microfinance model of group-based lending in part evolved from this experience with stricter and clearer design and delivery systems in which MFIs had much more direct hands-on management and stricter means for enforcing repayment. It is important to understand therefore whether and how this strategy differs from these earlier failed experiments and what it may have to offer a wider perspective on financial sector development.

The paper proceeds as follows. We first review the literature on ROSCAs and ASCAs to highlight the key ways in which their functions and role have been analysed. We argue that the fascination in the literature has been with their ubiquity and apparent success with its emphasis on seeking to explain this. The literature on their role in market development is in fact rather limited. In 1962, the anthropologist Clifford Geertz (1962) offered an interesting perspective, suggesting that they may operate as a 'middle rung' in the sense that they offered a means through which agriculturalists become traders in the cultural sense that they would develop relationships of specifically economic institutions in which the ritual solidarity that is the basis of such groups becomes subordinate to impersonal and increasingly formalised enforceable and legal rules. However, this raises the question as to whether ritual solidarity is in fact transformed into these more rule-based and enforceable economic institutions. The literature on what we term the 'pathology' of informal groups is more limited but important in this respect. It is this that raises deeper questions about their potential both as a means of successfully increasing outreach and in changing the 'mental models' of their users.

The paper then uses data from the 2006 Financial Access Survey carried out in Kenya to examine the scale, scope and nature of informal groups in order to assess the context for this alternative strategy. This survey provides the first significant nationally representative dataset to exist offering a much more detailed analysis of informal group operation than has so far been possible. First, we demonstrate the extent of use and estimated scale of savings currently flowing through these systems. Second, we examine the profile of use via socio-economic characteristics through the use of logistic regression analysis. We then turn to the reasons users give for engaging in groups, the way they are organised and the experiences reported by users having engaged with them. We conclude by drawing out the policy implications of this analysis for the new focus on savings-led group-based approaches and for policy towards the development of the informal financial sector.

2 Informal financial groups: A review

2.1 ROSCAs and ASCAs: Ubiquity and apparent success

The ubiquity of the ROSCA arises from the simplicity of its underlying financial intermediation mechanism. At its most basic it is a system in which a number of people form a group and contribute equal amounts on a regular basis to a fund which is usually (but not necessarily) given to one person on each occasion, until everyone in the group has received the money in turn. The order of rotation may be determined by ballot, by age or seniority or other social systems of preferment. Alternatively the payout may be auctioned with the person willing to take the largest discount receiving the payout. The remainder of the funds are then divided amongst those who have not yet won the payout. Hence, ROSCAs are a very basic and simple form of financial intermediation that has a very high degree of flexibility: the amount to be saved; the number of people in the system; the regularity of contributions; the number of people to receive a payout on each occasion; the use to which funds can be put; can all be determined by those participating.

The ASCA develops this basic form by allowing funds to accumulate in a fund which is not paid out or bid for at each meeting, rather those who wish to take loans do so with interest, the repayment of which enables the fund to grow. Savers, also sometimes called, shareholders, then earn a return on their savings in the form of a dividend when the fund is liquidated and paid out. A terminating ASCA is one where this is done on a regular basis, or alternatively, dividends may be paid out of the fund on, for example, an annual basis without it being fully liquidated. The majority of the literature has however focused on ROSCAs.

The fascination in the literature with ROSCAs has arisen from a growing appreciation of their flexibility and multi-purpose and multi-dimensional role in both economic and social life. First, from an economic perspective, Besley et al. (1993) demonstrated that ROSCAs are an efficient mechanism for saving to buy a consumer durable good since each individual (except the last) will be able to buy the good earlier than she would if saving alone. More recently, research has analysed the commitment aspects of ROSCAs, for which two explanations have been put forward: household conflict and self-commitment explanations. According to the first explanation there are conflicts within households and ROSCAs are a device through which women can commit the household to save more than the husband would like (Anderson and Baland 2002). However, Aliber (2001) and Gugerty (2007) claim that the main reason people join ROSCAs is self-control problems. Without a ROSCA all the potential small savings would be used in household needs. Only the group enables the members to save since the group encourages and enforces the members.

Economists have also debated the extent to which ROSCAs offer insurance, with the suggestion that bidding ROSCAs allow an insurance component, whereas those based on a pre-determined order do not (Gugerty, 2007). Platteau (1997) argues that ROSCAs are an example of 'balanced reciprocity' which is different to an insurance aspect which he calls 'conditional reciprocity' and that the insurance component of these systems is therefore limited. He argues that agrarian societies prefer insurance based on credit transactions because they better embody the 'balanced reciprocity' norm. Theoretical literature on credit groups (Ghatak 2000) suggests that screening into ROSCAs would involve safe borrowers ending up with safe partners while risky borrowers will end up with risky partners – what is termed 'positive assortative matching'. The function of groups intent on financial intermediation is therefore to exclude those who are likely to present a "bad risk" to the group and to ensure balanced reciprocity rather than redistribution. On this basis it is not surprising that only limited redistributive transfers operate *within* the framework of a ROSCA.

However few ROSCAs are based on a single period. If they operate 'well' in early periods they are likely to persist and people recognise that they have to build up a track record with the ROSCA before they make claims on it in terms of need. Where members are slow to pay, or do not pay, the member may be ejected, or if a more widespread problem, it is likely to collapse. The longevity of the ROSCA may therefore be an indication of whether an adequately balanced reciprocity is in operation. But participants face uncertainty when entering into the ROSCA and may be careful about the claims they may make in any particular group, as they are also uncertain as to their ability to deliver balanced reciprocity in the group. By focusing on ROSCAs in a single round as a means to delivering insurance, analysts overlooks these dynamics, and the way that social relationships allowing greater flexibility may be developed.

Indeed, Ardener argues that the social and economic functions of ROSCAs are inseparable (Ardener 1995). Velez-Ibanez suggests (after Lomnitz) that ROSCAs are an important means 'by which individuals can successfully counter the basic uncertainty of a marginal existence by generating methods of economic solidarity that mobilise available resources efficiently' (Velez-Ibanez 1983: p.113). In research on ROSCAs in Mexico, he maintains that while offering the material means to purchase gifts and to enable crucial ritual obligations to be met '[a]ccumulating money to meet such obligations selects for an increased number of social links and with that increase more access to favours' (Velez-Ibanez 1983: p.114). The favours may be reduced prices in the marketplace, an introduction to a job, assistance in childcare or medicine for a child and so on. While a feature of these favours may indeed be balanced reciprocity, these favours may operate well beyond the bounds of the ROSCA itself. As a 'cultural invention' that allows people to meet both biological and socio-cultural needs (Velez-Ibanez 1983), he describes ROSCAs as adaptive to varied circumstances and argues that it is this adaptability that has contributed to their continued use.

The combination of functions that ROSCAs appear to perform has led to discussion of where they fit in terms of economic development. Geertz's classic article argues that they represent 'intermediate' forms of institution between a traditional and more modern or developed societal context in which their 'functional significance is primarily to facilitate social and cultural change' (Geertz 1962: p.260). Even if peasants continue to works as peasants, Geertz claimed that they still needed the mindset of traders. Through ROSCAs, peasants 'learn to be traders, not merely in the narrow occupational sense but in the broad cultural sense; an institution which acts to change their whole value framework from one emphasizing particularistic, diffuse, affective and ascriptive ties between individuals to one emphasizing—within economic contexts—universalistic, affectively neutral and achieved ties between them…The theoretical as well as the practical interest of the association lies in its ability to organize traditional relationships in such a way that they are slowly but steadily transformed into non-traditional ones' (Geertz 1962: pp.260-1). He argues that the ROSCA therefore represents two contrary forces: "one which reflects the increased segregation of economic from non-economic activities and a freeing from traditional constraints; while at the same time have a directly contradictory attempt to maintain the dominance of the traditional values" (ibid:261)., Geertz sees them as a phenomenon of social transformation suggesting that they will be 'self-liquidating being ultimately replaced by banks, cooperatives and other economically more rational types of credit institution' (Geertz 1962: p.263).

2.2 ROSCAs and ASCAs: The pathology

The anthropological literature has been fascinated with ROSCAs as a 'cultural invention', and economists are concerned to theorise their role as a financial mechanism, but the literature does also reveal their limitations. As Bouman pointed out a 'low rate of default is assumed to be self-evident because of peer pressure…denials of misconduct ….are accepted by researchers at face value. Proper investigation is almost impossible without access to books and records. Outsiders, that is non members or former members may tell a different story' (Bouman 1995).

Key features of ROSCAs have allowed overly optimistic views to flourish. First is the fact that ROSCAs have clearly defined beginning and end points in the cycle. This allows them to be disbanded and re-formed with great regularity. Hence ROSCAs that have failed no longer exist, and if they dealt with only small amounts then people are likely soon to forget about them. Moreover, a ROSCA that 'survives' does so because the problematic participants are eliminated.

Therefore ROSCAs that have existed for some time necessarily demonstrate selection bias. Moreover, even for those that do exist, the membership may have changed in the process. A further result of this process is that when entering the field, researchers may find many ROSCAs are relatively young, that is, recently formed or only a few years old. This is because there is a high failure rate but new or young ROSCAs often are functioning well because people are keen for them to work.

Research on ROSCAs in Benin found that 26% of the ROSCA members had experienced problems in their groups, with 25% of ROSCAs experiencing 'premature death'. For about 40% of these respondents the reason was financial irregularities such as irregular payments to the pot, members leaving the group early and not being willing to continue paying or the groups organiser leaving with the money (Dagnelie and LeMay-Boucher 2008). They also found that ROSCAs that were organised and managed by one person performed much worse than ROSCAs that had a committee managing affairs, which therefore tended to have written rules and elected leaders. In Jamaica, Handa and Kirton (1999) found that 10% of their sample experienced problems in their ROSCA groups and these were mainly late payment (50%) or delinquency (25%) of the contributions. Anderson, Baland et al (2004) also discuss the problems of contributions faced in ROSCAS in Kibera slum, Kenya finding in particular that those who were late in the order or who had already received the pot often failed to pay.

A further reason why the literature tends to view default as minimal in these systems is that anthropologists tend to view the fact that funds are repaid in some form at a later date as repayment. Hence, for example, Nelson writes that the Kiambu group (120 members) was very successful, that there was no "wilful default" but reports 23 cases of what she calls 'negotiated temporary default', where members paid at a later date (Nelson 1995). Additionally Alila concludes that default is minimal in these informal systems and report that gifts were used in some cases to make up the default (Alila 1992). Indeed, the underlying issue here is that debt is a social relation and in many African systems regarded as open ended ((Zegers 1989); (Rowlands 1995)).

Drawing on Berry (1993), Johnson uses the term "negotiability" to refer to the flexibility of these systems in this respect. She argues that it is the fact that the underlying social relationships allow for renegotiation of debts that is a key reason for the popularity of these mechanisms in Central Kenya in the late 1990s (Johnson 2004b). This negotiability means that the risk of entering debt relations through these systems is reduced compared to borrowing from the formal sector and hence, in the context of uncertain livelihoods, is an advantage. However, it is this element of negotiability and its intrinsic flexibility that constitutes both the greatest strength of these systems and their greatest weakness since it also enables powerful individuals to manipulate them to their own advantage (Johnson, et al. 2002a). Hence, the power dynamics of the social relations in which these systems are embedded are also a key source of their failure.

Instances of ROSCA failure due to default suggest the influence of power relations in their operations. In reviewing the literature, Bouman (1995) reports failure due to the power of local authorities in Nigeria where the traditional system of the Ogba allowed power to be concentrated in the hands of a few headmen who abused it, and who were therefore able to manipulate *esusu* (ROSCAs) as a quick way to obtain wealth. The role of social relations of gender, kinship and age may also underlie problems of default and abuse.

Gender has been argued to be a factor by Burman and Lambete (1995), who report that in South Africa, the mobility of men means that the potential for them to migrate and leave debts behind is higher, and also that men tend to default with higher amounts. By contrast Ardener (1995) notes a number of features of women's involvement in ROSCAs: (i) the fact that social sanctions such as disgrace and shame act as mechanisms which force people to repay; (ii) the value members place on the social networking and solidarity which ROSCAs offer; (iii) the fact that women's ROSCAs tend to have smaller and lower contributions than men's; (iv) that women often prefer single sex ROSCAs and will actively exclude men; and (v) the opportunities for secrecy that ROSCAs offer in savings accumulation. However, Ardener herself makes a plea for a more detailed gendered analysis of ROSCA use, thereby suggesting that while this much is known, there is a need to answer a deeper question: how can this gender differentiation in ROSCA use be better explained?

Johnson analyses the greater prevalence of ROSCAs among women compared to men in the Central region of Kenya (Johnson 2004a). The analysis proposes two main causes of this differential use rooted in gender relations. First, that the amount of money which women wish to save is much smaller than that for men, and the purposes for which they save are smaller expenditures such as small household assets and items of clothing alongside supplements to everyday expenditure. Men on the other hand require access to larger amounts for larger expenditures for which they are responsible such as school fees, farm inputs and larger assets. Second, the sanction of shame is more effective for women than men in relation to such debts. Hence while this does not eliminate default it helps to explain why ROSCAs among women are much more prevalent than among men in the area.

A further factor affecting performance can be the involvement of close kin and groups vary in their rules over the involvement of close kin in a group. Some may decide to exclude close kin on the basis that social obligations among them may increase the risk and 'undermine the trust of other members' (Bahre 2002). However, friendship can also lead to sanctions not being pursued. In a detailed case study of a *tanda* in Mexico, Velez-Ibanez shows how misunderstandings and dissatisfaction regarding the motivation of the organiser in negotiating the order of ROSCA payout resulted in one of the organiser's friends deciding to default after he had received the payout. The friend was able to use a threat of revealing aspects of the organiser's behaviour that would damage his reputation with other members to conceal the fact and consequently the organiser paid on behalf of the friend (Velez-Ibanez 1983).

Age can also be a source of power within such systems and Bouman reports the case in Nigeria where young people started loan societies which sidelined elders since their domination of group mechanisms had meant they had used more of the benefits for themselves (Bouman 1994).

Apart from problems of non-payment of loans themselves are the problems of fraudulent use of the group's funds. Underlying problems of illiteracy and hence difficulties in over-seeing the books can either be a source of power since those keeping them can falsify them and other members will not know, or simply a source of mistakes which can lead to failure. Bouman reports fraudulent behaviour by *esusu* heads in Nigeria linked to illiteracy but that once more educated young men took over this was reduced (Bouman 1995). Problems of illiteracy and the potential for fraud become more acute in ASCAs than ROSCAs since the former necessarily involve more complex systems of book-keeping and may also involve the custodianship of funds belonging to the group that are not lent out. Indeed ensuring that as much money as possible is lent out reduces the risk of one member being in charge of a lot of money. By contrast ROSCAs have in-built mechanisms for transparency. For example, the uniformity of the contribution and payout, the fact that all the money is paid out at each meeting, enables members to know immediately whether a member has not paid. Research in Uganda into the losses involved in financial systems suggests that ROSCAs are less risky for poor people than ASCAs. In that context, Wright and Mutesasira found that the percentage lost of the amount saved in ROSCAs over the previous 12 months was 6% compared to 21% in ASCAs (Wright and Mutesasira 2001).

Anderson et al (2004) argue that the structure of ROSCAs is different depending on whether they involve more or less trustworthy clients. They find that those with less trustworthy clients are more formalised in terms of elected leaders and written rules than those with more trustworthy clients—based on indicators of formal employment, higher incomes, owning a dwelling and previous ROSCA participation. They found that the pot was larger and the group more likely to be dependent on random draws in less formalised groups which also involved more trustworthy clients on these indicators.

To conclude, the extensive literature on the ubiquity of ROSCAs and apparent success must be balanced with a view of their failure. For a number of reasons these failures may have been less evident to researchers—not least because failed ROSCAs are hard to study. Moreover, the embeddedness of their economic functions within wider social relations are both a reason for their success and failure. The dynamics of the power relations that social embeddedness involves can inevitably result in default and fraud. It is perhaps not surprising then that intervention which has been based on their apparent success has met with widespread failure, which led Bouman to conclude that ‘we must finally accept that indigenous self help societies have their own ways of helping themselves and their own views of what Utopia looks like and at what tempo to get there’ (Bouman 1995).

3 The use of informal groups in Kenya

This section discusses the use of informal groups based on the data from the Kenya Financial Access Survey 2006.[1] Logistic regression analysis[2] was used to assess the socio-economic, geographic and demographic characteristics of users of the three main types of groups, ROSCAs, ASCAs (both independent and managed) and Welfare Clan groups (WCGs). In discussing the results we refer to the differences in the likelihood that a service is used—this is always relative

[1] The 2006 FinAccess was the first nationally representative survey on financial access in Kenya. The sample size was 4420, large enough to have reliable estimates at the provincial level. The objective of the survey was to measure access to financial services (formal, semi-formal and informal). The results in this report are based on weighted data.

[2] The logistic regression model was defined as follows:

$$\log \hat{Z}_i = \log \frac{\Pr(servicuse)}{1-\Pr(serviceuse)} = \beta_1 X + \beta_2 X_2 + \ldots + \beta_j X_j$$

where X2,…, Xj represent the socio-economic characteristics of financial services users and Prob (service use) represents the likelihood of an individual using a financial service.

to a base category for each variable. Hence the regression results are reported as odds ratios, indicating the increased or decreased likelihood that a person with a particular characteristic uses the service compared to someone with the base characteristic. The analysis then examines the reported characteristics of groups and experiences in their use and uses chi-square tests to establish whether there is a significant association between characteristics of the groups and of users (e.g. gender, location). This is of course evidence only of association and not of causality. Unless otherwise indicated all results discussed were statistically significant.

Access strands indicate the proportion of the population using formal, semi-formal and informal services, and give the proportion completely excluded from financial service use. They are calculated on a mutually exclusive basis, with each person being allocated to the category related to the most formal service they use - figure 1 charts the access strands in Kenya. 18.5% of the population use formal services (have an account in the bank or in the Post bank or have an insurance product). 8.1% use semi-formal services such as microfinance institutions (MFIs) and Savings and Credit Cooperatives (SACCOs). Over 35% of the population has access to financial services through informal financial institutions, while 38.3% of the population is financially excluded.

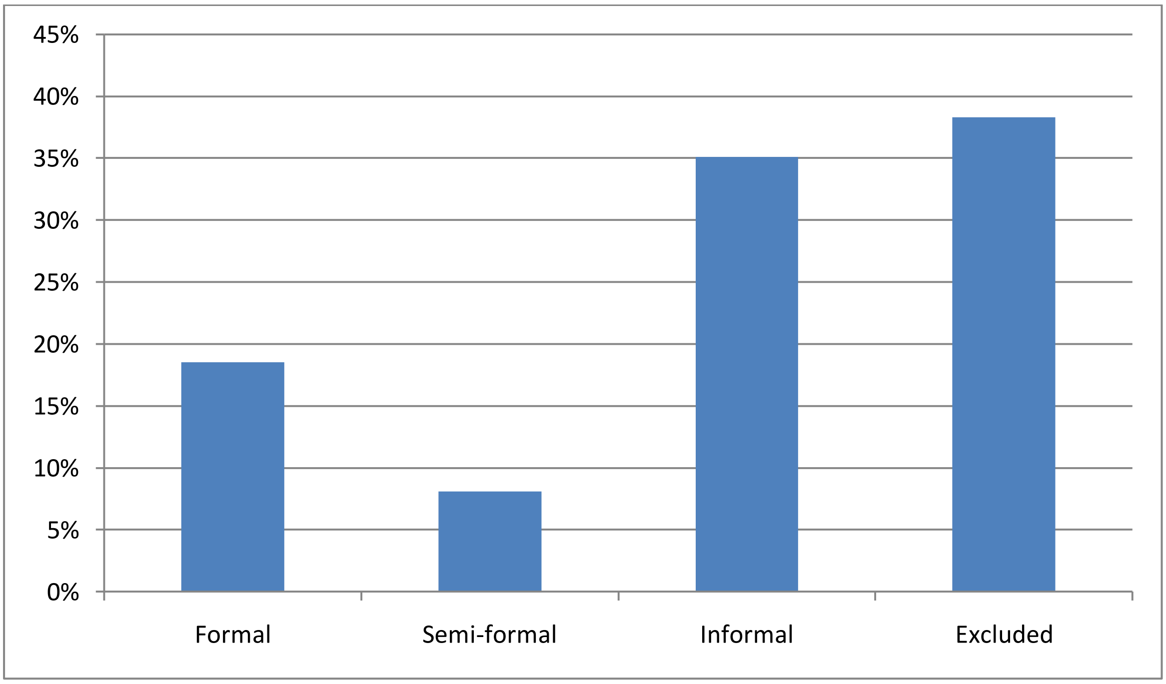

Figure 1: Financial service prevalence by access strand, Kenya 2006

Source: FinAccess Survey 2006

Among those who have some form of access, the informal access strand represents the largest proportion of the population and it is groups that dominate. Informal groups were classified under the following five types: welfare/clan groups (WCG); ROSCAs; individual ASCAs; managed ASCAs; and investment clubs. ASCAs were classified in two types because there is a model that operates in Central Kenya in which organisations manage ASCAs for a fee (see Johnson, et al. 2002b). Welfare/clan groups usually involve regular contributions into a fund which is used to assist members when they face particular problems—most often with the costs of funerals, but also hospital fees and related health care costs. In rural areas these groups tend to operate on the basis of clan groupings. Investment clubs involve people pooling funds to purchase assets. Overall ROSCAs are the most widely used informal group in Kenya (29.3% - not mutually exclusive), meaning that close to 5 million adults are members of at least one ROSCA. Welfare/clan groups are used by 9.1%, independent ASCAs 4.8%, investment clubs 3% and managed ASCAs 1.0%.

Table 1 reports estimates of the volumes of funds being intermediated in informal groups on the basis of the last contribution the respondent made. Based on the mean by service this suggests that ROSCAs mobilised some Kshs2.2bn (US$30.7m), with investment groups mobilising Kshs1.7bn (US$24.9m). Women's contributions were significantly lower in ROSCAs than men's: Kshs363 compared to Kshs652. However, the survey did not collect data on the frequency with which contributions were being made and therefore the data must be interpreted with care. In the main, ROSCAs operate weekly or monthly, and while we know less about investment clubs, if we work on the assumption than the majority operate on a monthly basis this suggests a total volume of at least Kshs60bn (around US$ 860 million) being intermediated through informal groups. This figure represents a flow of savings over the year equivalent to 3.7% of GDP in 2006. By comparison, the savings *stock* of Equity bank—which is regarded as the largest and most dynamic microfinance bank in Kenya—was US$176m at the end of 2006, with approximately one million savers whose average balances were US$165 (MixMarket,2009[3]). This suggests therefore that ROSCAs are offering a significant financial service.

Table 1: Estimated total contributions to informal groups at last contribution, Kenya 2006

(18+ years old)	Total members	Mean contribution (Kshs)	Total Contribution (Kshs)	Total Contribution (US$)
Welfare/Clan group	1,588,291	273	430,426,861	6,148,955
ROSCA	4,647,058	463	2,151,587,854	30,736,969
Individual ASCA	826,323	706	583,384,038	8,334,058
Managed ASCA	165,934	563	93,420,842	1,334,583
Investment Club	515,514	3387	1,746,045,918	24,943,513
Total			5,004,865,513	71,498,078

In terms of both scale of use and extent of contributions informal groups are therefore providing an important service for a large number of savers. We now turn to examine the profile of those using them in greater depth.

3.1 Socio-economic profile of informal group use

Logistic regression analysis was used to examine the influence of socio-economic characteristics on use of ROSCAs, ASCAs and Welfare/Clan groups (WCGs) and are reported in Table 2. The tables report odds ratios which represent the increased or decreased likelihood that a person with a particular characteristic uses the service compared to someone with the base characteristic.[4]

[3] http://www.mixmarket.org/

[4] Where the odds ratio is above 1 there is an increased likelihood, where it is below 1 the likelihood is reduced. Since the odds ratios below 1 operates with a lower bound of 0, an odds ratio of 0.5 indicates half the likelihood compared to the base group, an odds ratio of 0.33 a third (or three times less likely) and so on.

Overall ROSCAs are the most used savings - and hence credit service. Geographically, rural residents are more likely to use ROSCAs more than urban residents but this is not a significant influence. Region however is important. Those in Central Province are 1.5 times more likely to use ROSCAs than those in Nairobi, while those in Coast Province are two times less likely and those in North Eastern are 33 times less likely to use them.

Reflecting the long known prevalence of ROSCA use by women, the data indicates that women are more than two times more likely as men to use them. When it comes to marital status, being single significantly reduces the likelihood of being in a ROSCA by a factor of 1.5. Age presents an interesting influence on use with those who are 25-44 being mildly significantly more likely to use ROSCAs compared to 18-24 year olds, but this effect declining with older age groups although not significantly. Education levels are interestingly not a significant influence on use.

It is interestingly comparable to the fact that the mean age of members in microfinance schemes also tends to be in the mid-30s. Unlike in the case of ROSCAs, more educated people are significantly more likely to use ASCAs than those with no education. This may relate to the greater complexity of their operation compared to ROSCAs, and the recognition by those who are better educated of how to organise and use these to meet their financial service needs.

Source of income significantly affects the use of ASCA services. Those depending on pension and transfers and those employed in farming are much less likely to use them than those whose main income comes from farming (or fishing). Those working for government or the private sector are mildly significantly less likely to use them compared to the farmers.

The results for the poverty proxy of dwelling condition is not easily interpreted. On the other hand ownership of a radio appears to significantly increase the likelihood of using them, while have a car or mobile phone is mildly significant. On the other hand often being food insecure also mildly reduces the likelihood of using them. This suggests a somewhat stronger bias to their use by slightly wealthier groups than is the case for ROSCAs.

Welfare/clan groups are again not rurally biased but geographically more likely to be used by people in Central and Eastern provinces with significantly lower likelihoods of use in Coast and Western. While there is no gender bias in their use, single people are mildly significantly more likely to be excluded, and this may reflect the fact that membership tends to result from having married and set up a household.

Main source of income is a significant influence with those running their own business being more likely to use a ROSCA compared to those whose main income source is farming or fishing. Those employed in domestic chores and those dependent on pensions/transfers are two times less likely. However, what is interesting about ROSCAs is their relatively ubiquitous use across all income sources—even among government and private sector employees who are not significantly less likely to use them as we might expect given their significantly greater use of more formal services.

The proxy poverty indicators tend also to indicate that the use of ROSCAs is not as strongly poverty biased as might be expected: the impact of dwelling type is not significant, although the results suggest that those using firewood and candles for lighting may be relatively too poor to use them. The influence of bicycle ownership is significant in increased use but radios and mobile phones only marginally so.

Table 2: Logit regression results: Use of informal groups (odds ratios)

	ROSCA	ASCA	Welfare
Location—Base category: Urban			
Rural	1.10	1.18	1.24
Gender—Base category: Male			
Female	2.43***	1.55**	1.11
Marital status—Base category: Married			
Single	0.64***	0.80	0.63*
Divorced	0.88	1.52	0.95
Widowed	1.22	1.49	1.26
Age—Base category: Aged 18-24			
25-34	1.25*	2.02**	1.25
35-44	1.33*	2.48***	1.26
45-54	0.92	1.96*	1.57
55+	0.89	1.67	1.75*
Education—Base category: No formal education			
Primary	1.18	2.17**	1.15
Secondary+	1.12	2.58**	1.28
Region—Base category: Nairobi			
Central	1.46*	3.50***	3.38***
Coast	0.49***	0.45	0.18***
Eastern	1.35	1.25	2.27**
North Eastern	0.03***	---	---
Nyanza	1.33	2.07	1.60
Rift Valley	0.72	1.30	0.60
Western	0.90	1.48	0.41*
Main source of income/money— Base category: Sell produce from farm, livestock, and fishing			
Pension/transfer from family or friend	0.54***	0.33***	0.75
Employed on people's farm full time/seasonal	0.81	0.40**	0.71
Employed on domestic chores	0.53**	0.47	0.95
Government	0.97	0.76	1.44
Private sector	1.00	0.50*	1.02
Running own business	1.32**	0.69*	0.68*
Sub letting of land, house/rooms,	1.27	0.15*	0.80
Dwelling conditions—Base category: Temporary			
Permanent	1.21	0.38***	1.45
Semi-permanent	1.21	0.40***	1.54
Traditional	0.88	0.28***	0.85
Main source of lighting—Base category: Kerosene			
Electricity, solar & gas	0.98	0.69	1.04
Firewood, candle & others	0.33***	0.82	0.38
Main source of water—Base category: Tap			
Well	0.91	0.73	1.11
Surface water	1.06	0.80	0.89
Toilet facilities—Base category: Own flush toilet			
Shared flush toilet	2.05***	0.51	1.52
Latrine	1.45	1.43	0.96
Household assets—Base category for each: Asset not owned			
Radio	1.26*	2.67***	1.31
Television	0.91	1.05	0.84
Bicycle	1.30***	1.31	1.28*
Car	1.04	1.94**	0.75
Frequency of family without enough food to eat— Base category: Never			
Often	0.90	0.49*	2.95***
Sometimes	1.00	1.05	1.45*
Rarely	1.04	1.07	1.49*

Table continued on following page

Table 2 (cont.)

	ROSCA	ASCA	Welfare
Frequency of family feeling unsafe from crime inside home—Base category: Never			
Often	1.13	0.99	0.96
Sometimes	0.92	0.98	0.96
Rarely	1.11	0.84	1.09
Mobile phone usage—Base category: Do not use at all			
Use own mobile phone	1.27*	1.59*	1.13
Use somebody else's mobile phone	1.11	1.05	1.24
Number of obs.	4214	4084	4084
Pseudo R2	0.1051	0.1320	0.1311

Note: *, ** and * significance at the 0.05, 0.01 and 0.001 level respectively**

With respect to ASCAs (independent and managed combined), their use is not biased to rural or urban environments but people in Central Province are significantly more likely to make use of them than in Nairobi and this is the most prominent regional effect. As with ROSCAs, women are more likely to use them than men. Age has a stronger influence than in the case of ROSCAs, with those aged 25-44 years more likely to use them than those aged 18-24. This concentration in middle age groups, may also reflect periods of greatest economic activity over the life-cycle.

By comparison to ROSCAs and ASCAs, main income source has virtually no impact on the likelihood of being a welfare group member except owning a business which mildly significantly reduces the likelihood of use. Most of the do not suggest biases in their use except in the case of food security in which those who often experience this are much more likely to use them than those who never experience it, while those who sometimes and rarely experience it are mildly more likely to use them. This suggests that the poorest groups see them as important safety net providers.

This analysis has offered a detailed profile of the influence of socio-economic characteristics and poverty proxies on the use of different types of informal groups and suggests that ROSCAs are widely used across a range of characteristics but particularly by women, while ASCAs appear biased towards women, older people, more educated and wealthier people, while WCGs are also very widely used, do not suggest gender biases and are particularly used by those experiencing a degree of food insecurity, perhaps unsurprisingly suggesting greater reliance on them by the poorest people.

3.2 Reasons for belonging to informal groups

By far the most important reason for belonging to any type of group was reported for ROSCAs[5] and was to have a lump-sum to use in scheduled turn (see Table 3) and this confirms the main purpose of ROSCAs. However, the second most reported reason was to cope with unexpected emergencies, while the third was to socialise and meet friends, demonstrating the strong importance of the social dimension of these mechanisms; and the fourth was to keep money safe.

For ASCAs, the most cited reason —perhaps surprisingly—was to get money when they face an emergency; this perhaps underlines the importance of the credit component of these financial

[5] This section uses only the data for the first group that respondents reported having (i.e. 1647 responses).

mechanisms in responding to times of need. Once again, people belong to individual ASCAs to socialise and meet friends; to get money easily when they need it and to keep money safe.

Table 3: Respondents' reasons for belonging to informal groups[6] (responses for first group reported)

Group 1 18+ years old	n	%	ROSCA	WCG	ASCA	Mngd. ASCA	Invest. club
To have a lump sum to use when its your turn	809	49.1	73.0 (1)	3.5 (11)	20.2 (8)	12.1 (8)	17.2 (4)
To help when there is any other emergency	585	35.5	31.6 (2)	58.4 (2)	40.6 (1)	38.1 (2)	14.8 (5)
To socialize /meet your friends	385	23.4	25.4 (3)	16.7 (3)	31.3 (2)	7.1 (10)	20.6 (3)
To keep money safe	259	15.7	15.5 (4)	3.9 (10)	29.1 (4)	20.5 (5)	10.4 (8)
To invest in bigger things by pulling money/resources together	305	18.5	14.7 (5)	6.4 (8)	25.8 (5)	25.1 (4)	72.6 (1)
To help when there is a death in the family	384	23.3	14.2 (6)	68.3 (1)	15.0 (9)	11.2 (9)	10.7 (6)
The group buys you household goods or farm goods when it's your turn	195	11.8	13.1 (7)	10.3 (5)	7.7 (11)	4.1 (11)	8.5 (9)
To exchange ideas about business	216	13.1	11.1 (8)	5.3 (9)	23.2(6)	28.3 (3)	35.3 (2)
You can get money easily when you need it	205	12.4	10.2 (9)	11.2 (4)	29.7 (3)	41.1 (1)	7.5 (10)
Because you could not get money or help anywhere else	126	7.7	6.0 (10)	7.4 (7)	7.9 (10)	13.8 (7)	11.2 (7)
To increase income by lending	87	5.3	2.3 (11)	1.1 (13)	22.2 (7)	18.9 (6)	3.5 (13)
Because you inherited the position from your parent	16	1.0	1.2 (12)	1.7 (12)	0.0 (13)	0.0 (12)	4.2 (12)
It is compulsory for people in your clan/village	52	3.2	1.1 (13)	7.9 (6)	1.0 (12)	0.0 (12)	5.7 (11)
Total (% across)	1647	100	60.6	19.3	10.3	2.1	6.1

While this evidence confirms the financial intermediation roles of groups in enabling people to access useful lump sums of money, it is perhaps surprising to see that a key reason people value groups very highly is for their ability to get financial help in the face of emergencies. This underlines the key importance of the flexibility and responsiveness of these groups to respond to idiosyncratic shocks. While this result might have been expected for welfare/clan groups which are usually perceived to have strong social safety net functions it is more surprising to see this reasons as the most important one cited for ASCAs and the second most important for ROSCAs. This challenges Gugerty's (2007) findings for Western Kenya where she suggests that ROSCAs with a pre-determined order did not offer an insurance element and that this is only possible in bidding ROSCAs. By contrast Johnson found in Central Kenya (2004) that even pre-determined orders might be changed on the basis of need and there were a number of ways of doing this: either by discussing one's problem and negotiating with the group as a whole, or possibly by swapping with others on a bi-lateral basis. This evidence appears to underline the social welfare functions among ASCA and ROSCA groups, while also indicating their importance as a means of socialising and making and maintaining social networks both for friendship and business.

[6] These were pre-coded responses and respondents could report more than one response.

3.3 Features of informal group organisation

Respondents were asked about the organisational features of the informal groups to which they belong. Table 4 reports these across the different types of groups, and is ordered by the relative frequency of these characteristics for ROSCAs as the most used type.

Table 4: Features of informal group organization

First group	ROSCAs	ASCAs	WCGs	Investment Clubs
Holds meetings on regular fixed intervals	75.0 (1)	79.9 (1)	82.2 (1)	93.4 (1)
Elect officials	46.1 (2)	67.3 (4)	58.5 (3)	78.9 (2)
Have a constitution	42.7 (3)	68.7 (3)	59.2 (2)	74.0 (6)
Keep account record	32.5 (4)	63.3 (7)	36.6 (6)	74.1 (5)
Minute	30.8 (5)	64.7 (6)	34.9 (8)	67.0 (7)
Have a treasurer/finance person who is not the chairman	28.7 (6)	55.5 (8)	45.5 (5)	49.5 (9)
Certificate of registration	20.9 (7)	69.5 (2)	46.0 (4)	76.2 (3)
Book for any money received	20.0 (8)	52.7 (9)	33.4 (9)	57.9 (8)
A bank account	13.5 (9)	65.3 (5)	35.6 (7)	75.3 (4)
Passbook for recording savings or loans for each member	11.4 (10)	43.3 (10)	11.8 (10)	33.4 (10)
More than one signatory on the cheque book	6.5 (11)	29.4 (11)	11.0 (11)	35.6 (10)
Have a group cheque book	4.1 (12)	18.5 (12)	8.7 (12)	31.3 (11)
A money box with more than one key	2.0 (13)	0.7 (15)	1.5 (15)	1.1 (14)
Have accounts checked by an external auditor	1.9 (14)	10.4 (13)	3.6 (13)	17.7 (12)
Non member manager	1.0 (15)	3.5 (14)	1.6 (14)	5.8 (13)
N	998	203	318	100

For ROSCAs, 75% of members report regular meetings although it is surprising that this is the lowest figure reported across the different types of groups. This may reflect the fact that more of these groups than others operate in markets and similar environments where key people collect the savings and organise the payouts and meetings are not necessarily held. Only 46.1% reported that their groups elect their officials, which is again the lowest proportion across all types of groups. This pattern is significantly associated with location, more groups in rural areas undertake this practice compared to urban areas and more men than women.[7] 42.7 % reported having a constitution; again this is the lowest of all group types and was more significantly associated with rural areas than urban areas. 32.5 % of groups are reported to keep accounts and again this is the lowest proportion across all group types, and significantly more men reported that their groups keep records compared than women. That not many ROSCA groups are keeping accounts is not surprising since the operations of ROSCA are the simplest of all the informal groups.

A number of other features were also significantly more likely to be carried out by groups to which men belonged compared to those to which women belonged: keeping minutes, having a certificate of registration, a book to register deposits, a bank account, a passbook for recording financial operations and more than one signatory on the cheque book. This may suggest that men prefer groups to be better organised as a means of better ensuring the safety of their money. It fits with the general finding in the literature in Kenya that men find it harder to

[7] Chi-square tests were used to test this association.

operate in groups than women and suggests that they may therefore resort to greater formalisation to overcome their concerns about operation. This also resonates with Anderson et al (2004) who suggest that the structure of groups with more and less trustworthy clients differs, although they do not directly link this issue to gender dynamics.

For ASCAs, regular meetings are the most frequent feature, followed by certificates of registration, having a constitution, electing officials, having a bank account, keeping minutes and accounts. It can easily be seen that these features are much more common in ASCAs than in ROSCAs, and again these patterns tended to be more associated with men using these groups than women.

WCGs appear to be better organised than ROSCAs with more holding regular meetings, having a constitution, electing officials and having registration certificates. This is likely to arise as a result of the fact that they often collect funds monthly into a bank account on which to draw when they are needed. Investment clubs are clearly the most well organised, and this fits also with the bias towards their more educated and wealthier membership as indicated in section 3.1. These are also intermediating much larger amounts of funds than WCGs and ASCAs although not quite as much as ROSCAs.

3.4 Experiences in informal groups

Respondents were asked to report events that their group had experienced. The largest proportion (see Table 5) reported members leaving the group, followed by those who reported members not paying contributions. These experiences were the most common across all types of groups. The implication of this is that there would be strong effects on cash flow within the group and the reliability with which members receive their payouts. 11.5% also reported funds not available immediately although this was highest for independent ASCAs. Death of members was highest amongst welfare/clan groups and is likely to be another reason that funds fail to circulate. The experience of poor cooperation was highest for investment clubs and independent ASCAs, which are clearly forms of groups where agreement is required on what to invest in or to whom to lend.

If the various categories of theft and dishonesty within the groups are put together (those ranked 7,8,10,11 in Table 5), close to 20% reported these incidents. However, the implication from these responses still is that theft and dishonesty are overall not as prevalent as members leaving and non-payment of contributions.

Respondents were also asked in more detail the reasons why they stopped using ROSCAs and ASCAs. 8.6% of the total survey sample reported such reasons (see Table 6) with the most prevalent reason being not having money left to save. This was significantly associated with location (rural rather than urban), gender (women rather than men) and food security – those 'often' experiencing this. This reason was also by far the most important reason given for not belonging to groups amongst those who had used them in the past and is also consistent with the high reported frequency of members pulling out of groups.

Further reasons given for stopping use of ROSCAs were: money being taken away or stolen; the time and effort to attend meetings and fear of losing money. This latter reason was significantly associated with being urban rather than rural, perhaps suggesting greater problems of finding trustworthy group members in urban areas.

Table 5: Experiences in informal groups

	n	%	Rank
Members pulling out	665	41.6	1
Members not paying contributions	570	34.7	2
Death of many members	317	20.7	3
Members not co-operating in many decisions	313	19.3	4
Money/cash not available immediately	199	11.5	5
Poor administration	115	7.1	6
Dishonesty by members causing loss of money	110	7.0	7
Lost money through theft or fraud from a committee member	102	6.5	8
Officials elected in a manner that was not transparent	86	5.4	9
Lost money through theft or fraud from an outside party	71	4.7	10
Misuse of money by officials	57	3.6	11
Bad investment of funds	47	3.0	12
Overspending on certain items	47	2.8	13
Had to borrow extra money from a lending institution so as to continue operating	24	1.2	=14
Poor service with the bank or financial institution which serves the group	19	1.2	=14
Total	1647	100	

2.1% of the total sample reported reasons for stopping using ASCAs with the most frequently cited issue being high charges. This reflects the fact that ASCAs often charge their members high interest rates[8]. Then similarly to ROSCAs, the most prevalent problems were finding money to save, and fear of losing it. This last reason was significantly associated with people's level of education: with a higher proportion of those with secondary education stopping compared to those with no formal education – suggesting that it was a greater concern to better educated respondents. The fourth reason why respondents stopped using these financial services was the low interest rate paid on savings: one in ten stopped using ASCAs for this reason. This is a little curious as high interest on loans is usually related to high returns to savings – unless of course people do not repay, and given that fear of losing money was one of the more important reasons this suggests the link to poor returns.

Table 6: Respondents' reported reasons for stopping using ROSCAs and ASCAs

(18+ years old)	ROSCAs		ASCAs	
	%	Rank	%	Rank
No money left to save	20.3	1	17.7	2
Money taken or stolen	15.6	2	5.4	6
Time & effort to attend meetings	14.6	3	8.1	5
Fear of losing money	10.1	4	15.5	3
Low interest rates on savings	5.3	5	9.6	4
Erroneous charges	3.6	6	0.9	10
Staff did not treat well	3.2	7	2.3	9
Far away	3.2	7	1.1	9
High charges	3.0	8	18.1	1
Better offer from another institution	2.3	9	2.3	8
Time & effort to do transactions	2.2	10	0.9	10
Closed nearest branch	0.7	11	6.4	7
N	363		91	

[8] However, high interest rates produce high dividends on member's savings also, as long as payments are in fact made.

Respondents were also more specifically asked about the reasons why they lost money in ROSCAs and ASCAs and 14% of current ROSCA members and 15% of current ASCA members reported losses. The majority of these respondents reported this as due to theft or fraud (Table 6). This reflects the reasons for stopping using the service. Theft or fraud is significantly associated with the age of the member, with those aged 55+ the larger proportion reporting this issue. However, overall the numbers responding to this question were low and this seems to fit with the relative importance of reporting of theft/fraud as experiences in groups.

The second reason for losing money in ROSCAs was reported as 'went out of business/collapsed'. This was referring to the place in which savings were put and interestingly, the responses are significantly associated with gender with a larger proportion of men than women reporting this reason. Again, this is consistent with the view that men's ROSCAs are less successful than women's ROSCAs.

Table 7: Respondents' reported reasons why they lost money in ROSCAs and ASCAs

	ROSCAs	ASCAs
Theft or fraud	61.2	52.8
Business failure or collapsed	24.9	33.0
Did not yield returns on savings	20.8	11.9
Guarantor for someone who failed to pay	2.7	1.1
N	135	31

In summary, the key problem groups experienced in groups are people pulling out of the groups or not contributing followed by a mixture of fraud and dishonesty. What is rather interesting about this is that people not making contributions are one of the most common experiences and necessarily leads to the loss – or delayed payment - of funds, especially in ROSCAs when members do not pay their turn, but these are not the reasons which are cited for stopping using them or losing funds. This suggests that people are relatively tolerant of these problems and do not necessarily regard non-payment as leading to losses – perhaps because the people are known and debts will be paid in the future in alternative forms. This may underline the fact that these groups are important for responding to emergencies and being a means of creating friends and social networks such that people do not necessarily regard non-payment as the most important element, recognising that members face many problems. So that they may not get their money when it is their turn but recognize the difficulties members face in paying and hence this is not seen as not trusting them or creating a particular problem of dishonesty or fraud, more as a feature of the groups and a situation that you also might find yourself in.

3.5 Conclusions

This section has demonstrated the overall importance of informal group membership and use in Kenya in providing financial services for a significant proportion of the population, and many of whom are otherwise excluded from the formal and semi-formal sectors. It demonstrates the significant volume of savings being intermediated through them, but also points to the key problems that they face.

The analysis has demonstrated key barriers in the form of socio-demographic factors of gender, age, geographical location and education. Women are significantly more likely to use informal groups than men, and this overall results in their increased inclusion in the financial sector as a whole (Johnson and Nino-Zarazua 2009). Men's demand for financial services tends to be lumpier than women and is more likely to occur at the same time e.g. to fund school fees, agricultural inputs and this makes ROSCAs unable to cater to these needs. Moreover, and as this data also suggests women may operate more effectively in groups because of gender norms. Nevertheless, 43% of ROSCA participants are men, indicating that they also value these services. The findings indicate that men's groups were better organised. If the informal groups could be strengthen through simple tools that make them more transparent and easier to operate, more men might be more willing to participate and invest bigger sums in them.

The findings indicate that youngest age groups are less likely to use informal groups and this is likely to be due to their higher level of mobility and weaker social networks. Nevertheless, the large share of 18-24 year olds in the population raises the question of how to better facilitate access for young people. Finally, while ROSCA use was not strongly influenced by education, the use of ASCAs - a more complex service - was more strongly influenced. This raises the question of how their operations can retain transparency and accountability even if they the services they offer become more complex.

Findings also demonstrated differential access to informal groups across the country. People in Western, Coast and especially North Eastern are much less likely to use them compared to other Provinces. This suggests that policy priorities for financial service development – especially in the semi-formal and informal sectors – could be more regionally specific, but further research is needed to understand this in greater depth in terms of how it relates to underlying cultural norms and values which may affect the effectiveness of group financial operations.

The key reasons for belonging to informal groups extend beyond the key financial features of getting access to funds from ROSCAs and ASCAS to the fact that they enable people to obtain funds in emergencies and also provide social contact and networks. The ways in which the groups provide for emergencies are not fully detailed by this data, though for ASCAs can obviously operate straightforwardly through the quick provision of loans. Research elsewhere (Johnson 2004b) indicates that ROSCAs respond to these situations through a range of ways: people swapping turns in ROSCAs in order to get money when they need it either with agreement from the whole group or just between individuals; social welfare funds that the group also contribute to for such cases; and spontaneous contributions from members in response to crises. It is this flexibility to respond to emergencies that is therefore highly important and does represent elements of insurance - even if this is of the more balanced reciprocity form identified by Platteau.

Despite being the most prevalent type of group, ROSCAs are the least well organised. Moreover, the findings suggest a key difference in their organisation relates to gender with groups on which women report being less well organised than those on which men report. This may in turn derive from the fact that men are aware that their groups function less well and therefore seek to find approaches to formalisation to compensate for this. Investment clubs are on the other hand the less prevalent but much better organised and this might also derive from the relatively high volumes of funds they intermediate.

However, because ROSCAs serve many who have little money to save, people often pull out of them or do not pay their contributions, the most frequent experiences reported of these groups. But this data set does not fully capture is how this affects the operation of the group. Previous research (Johnson and Sharma 2007) shows that the delays people experience in receiving their ROSCA payouts or loans are not regarded as losing money but simply as others delaying payment. Users recognize the problems others face in paying—and indeed this data demonstrates that not having enough money to save was the main reason people are no longer using them or stopped using them. However, the key point to be made here is that this is not generally interpreted by users as losing money in these groups, rather it suggests a lot of tolerance for non-payment of contributions which does not mean that people do not trust each other or withdraw from the groups. Rather it underlines the interdependence of people in the group in seeking to create a financial mechanism that can cater to their needs when few other options are available.

4 Policy implications

Given these findings, the question for financial sector development policy is how to regard the role of informal sector groups. There are essentially three options. First, ignore them and focus on the development of the mainstream financial sector, which is the predominant current stance. Second, engage directly with informal groups in a bid to improve their operations in ways that will deliver higher quality services to some of the poorest people who currently lack access. Third, seek to understand the way informal groups not only provide services but develop the mental models of their users towards more rational and rule bound mechanisms and intervene to find ways to support this transition.

Engaging with informal groups has clearly been demonstrated to be problematic, as was evident from Bouman's conclusion cited above. This analysis further illuminates the reasons for this. Interveners who have sought to produce disciplined and effective financial intermediation in such groups run up against their multiple functions as emergency mechanisms backed by social support which inherently contain considerable flexibility which users employ to cushion the vulnerability of their lives and livelihoods. Approaches to working with groups must therefore consider how to deal with this tension and allow for this negotiability by enabling groups to serve their member's needs effectively and respond to emergencies. Hence improvements in their organisation do not necessarily mean being stricter per se as it is important to ensure this flexibility is retained. Microfinance practitioners who would evaluate group performance on the basis of a standard set of portfolio indicators would find low on-time repayment problematic. Indeed, mainstream microfinance, it can be argued has developed by removing this flexibility through the rigidity of its repayment schedules, monitoring and enforcement mechanisms. Working with groups on the basis of their own savings alleviates the need for rigid external performance assessment but may be done in ways that improve their transparency and accountability and hence effectiveness for users.

Recent approaches to engaging with informal groups in Kenya include the Decentralised Financial Services (DFS) project in Kenya and Village Savings and Loan Association methodology being used across a range of countries have developed simple tools for groups to manage their own operations independently and more effectively. DFS has developed toolkits to improve the governance and management of group-based financial systems, usually managed ASCAs, in order to improve their operations and improve the prospects for financial service provision in more remote areas. The aim was specifically to strengthen savings and credit groups in order to lower defaults, reduce the risk of members losing their savings and improve profitability, however this is done through the group's own assessment of its performance and support to better organise its operations.

VSLAs take a more formulaic approach by disseminating a model of financial intermediation based on a simple ASCA that builds in a number of mechanisms to aid transparency and accountability. These include payments that are set at a basic amount or multiples of this basic amount so that accounting is simple; a locked box which requires three members to unlock in order to improve accountability for money management; and a termination mechanism in which the funds of the ASCA are fully paid out every year or 18 months as a means of ensuring that all debts are repaid. These approaches are being demonstrated to be effective (Anyango, et al. 2007) and the VSLA approach is being expanded significantly across West and East Africa, and in Kenya in particular. These approaches do have the potential to allow the multiple functions of groups to operate in providing greater emergency support and flexibility as they are based on member's savings but have to negotiate the difficult tension over the use or abuse of this to damage member's interests and these are means by which the less powerful can be taken advantage of – a finding also evident from a detailed study of Indian SHGs (EDA Rural Systems and APMAS 2006).

Finally, even if policy decided not to engage with informal groups directly, the question arising from Geertz's view remains: to what extent do these operate as a means through which mental models are changed? The survey analysed here is among the first nationally representative survey of its kind but does not yet enable us to analyse the routes people take to formal financial sector access, and whether and how engagement in groups enables people to learn skills of financial management in relation to basic financial services. The evidence presented above is mixed and we have argued that it does not suggest that strict discipline and rule based approaches are the norm. It demonstrates that some groups are rather more formalised than others, but suggests that negotiability is a key feature. In previous research in Kenya, Johnson (2004) found both strict and 'kurekera' - patient - groups with the potential that people could be members of both types. This further demonstrates the adaptability both of the mechanism and the necessity of understanding the social dynamics. Never the less, savings-led group-approaches which demonstrate a stricter basis may enable people to develop their mental models and gain an understanding of how to use and interact with more formalised and rule-based systems, laying the basis for future interactions with the formal sector – an issue that requires further research.

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