

AGENCY FOR INTERNATIONAL DEVELOPMENT
PPC/CDIE/DI REPORT PROCESSING FORM

ENTER INFORMATION ONLY IF NOT INCLUDED ON COVER OR TITLE PAGE OF DOCUMENT

1. Project/Subproject Number

936-5450

2. Contract/Grant Number

DHR-5450-A-00-9084-00

3. Publication Date

10/91

4. Document Title/Translated Title

5. Author(s)

1. Slover, Curtis H.
2. Cuevas, Carlos E.
- 3.

6. Contributing Organization(s)

7. Pagination

27p.

8. Report Number

ESO # 1916

9. Sponsoring A.I.D. Office

R&D/EID

10. Abstract (optional - 250 word limit)

11. Subject Keywords (optional)

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

12. Supplementary Notes

13. Submitting Official

M. Brinkerhoff, R&D/EID

14. Telephone Number

(703) 875-4491

15. Today's Date

7/23/92

16. DOCID

17. Document Disposition

DOCRD [] INV [] DUPLICATE []

610-210-116
1991

Economics and Sociology
Occasional Paper No. 1916

INFORMAL FINANCIAL GROUPS IN RURAL ZAIRE

by

Curtis H. Slover

and

Carlos E. Cuevas

October 1991

Paper presented at the
Symposium on Technology, Culture, and Development in the Third World:
Lessons and Examples from Africa
May 23 - 25, 1991
Columbus, Ohio

Rural Finance Program
Department of Agricultural Economics
and
Rural Sociology
The Ohio State University
2120 Fyffe Road
Columbus, Ohio 43210-1099

Abstract

The hypothesis that informal financial groups (IFGs) in Zaire are adapted to their membership, their needs and their distinctive attributes was explored. IFGs were found to engage in a variety of activities in addition to providing the joint financial services of borrowing and saving: the most prominent of these activities was the engenderment of reciprocal obligations within the membership. Operating procedures were also found to be flexible and adaptable.

INFORMAL FINANCIAL GROUPS IN RURAL ZAIRE

by

Curtis H. Slover and Carlos E. Cuevas

Introduction

Informal finance in low-income countries has received increasing attention in recent years. The evidence from Africa--Cameroon, Gambia, Ghana, Niger, Somalia, and Zimbabwe--indicates vigorous and extensive savings activities in informal financial markets. In Cameroon, for example, it has been estimated that informal financial groups (IFGs) provide 27 percent of total credit to the financial sector, and account for more than one-half of total financial savings (Schrieder and Cuevas). Recent studies (Garson and Sonsola; Cuevas et al) have provided evidence of an active and highly monetized informal financial market in Zaire.

Of the various forms of informal financial intermediaries identified in Zaire, IFGs play the most important role in mobilizing funds, and in providing credit and depository services to rural households. Each village has several IFGs, each of which mobilizes, on average, between 250 thousand and three million zaires (Z) (\$500 to \$6,000 U.S. dollars) a year. This represents about Z 30 thousand (\$60 U.S. dollars) per group member, an amount equivalent to about 15 percent of gross household income (Cuevas et al).

Rotating saving and credit associations (ROSCAs) are a common type of IFG found in Zaire. Members of ROSCAs make regular contributions to a fund which is then given, in whole or in part, to each member in rotation (Ardender). The typical ROSCA consists

of an organizer and a number of voluntary members. The rotation is determined by various means which include bidding and drawing of lots. Other criteria, such as seniority, are also considered. When the rotation is completed, the group may continue for another cycle unchanged, commence the rotation with changes in membership, or disband. The collection and disbursement of the contributions which make up the fund may occur daily, bi-weekly, monthly, or with some other agreed-upon frequency.

In addition to ROSCAs, one finds in Zaire another type of IFG, the savings groups. Schrieder defines a savings group as "an association where a core of participants agree to save regularly on a contractual basis. The savings might be used for member and/or non-member loans on a interest-earning or interest-free basis" (Schrieder, pp.60). The essential difference in the services provided by ROSCAs and savings groups is that the joint financial services of borrowing and saving do not occur simultaneously in savings groups.

The importance and persistence of IFGs in Zaire and countries throughout the world, both developed and developing, have led many people to conclude that IFGs can serve as a project design standard to improve the operation of rural financial markets. Along this line, an idea that is gaining attention and being more extensively promoted by non-government organizations and other development agencies is the "linkage" approach of Seibel. Seibel proposes that banks could expand rural lending by offering loans to groups organized in, or as, ROSCAs, or to existing ROSCAs.

An attractive feature of group lending is that it reduces the risk of default through joint liability. However, the point that is so often missed is that joint liability, in itself, is not sufficient reason for members in a group not to default. Group formation is not a

simple process, and clearly requires a great deal of information on the members and potential members in a group. There is a need to understand the glue that keeps ROSCAs together before blindly adopting this particular organizational form. Further understanding of the dynamics of the group is necessary in any attempt at group lending, especially when the group is formed with the express purpose of obtaining loans from a formal financial institution. This point cannot be overstated. The extension of credit will change the nature of an IFG. "Hence, use of informal financial intermediaries as conduits of donor funds should be gauged very carefully against the possible damage to the roots of the system these linkages can entail" (Cuevas, p.12).

This paper explores the hypothesis that IFGs in Zaire are customized to their membership, their needs and their distinctive attributes. Specifically, IFGs are multi-functional: they provide the joint services of borrowing and saving, facilitate reciprocity, and provide emergency loans, thus suggesting the presence of economies of scope. By showing flexibility in their operating procedures, and engaging in a variety of means to manage risk, they also reduce transaction costs.

The multi-functionality of IFGs is addressed below first. Subsequently, IFG operating procedures are discussed, emphasizing their diversity across IFGs. The risk-management features of IFGs are analyzed in Section 4. Some concluding remarks follow.

The Multi-Functionality of IFGs

Economies of scope are said to exist when an institution can produce more than one output or service at a lower total cost than it would take to produce each output or service separately. Economies of scope are an incentive for IFGs to be multi-functional in output and/or services.

In Zaire, IFGs are in fact engaged in a variety of activities in addition to providing the joint financial services of borrowing and saving. They engender reciprocal obligations and social interaction within the membership, and provide loans and emergency loans as well. Table 1 shows that nearly 80 percent of IFGs are multi-functional. All of the savings groups, and over 75 percent of ROSCAs, were multi-functional to some degree. This finding supports the hypothesis that IFGs enjoy economies of scope.

Amount of Funds Mobilized

The most important output provided by IFGs are the joint financial services of borrowing and saving. Given the frequency of fund contributions and allocations, the average amount of funds mobilized over a one year period in an ROSCA is estimated to be Z 723 thousand or approximately Z 42 thousand per member (approximately 84 US\$). Savings groups mobilized on average about Z 261 thousand per year, or Z 4,681 per member (approximately 9 US\$). So the magnitude of funds mobilized per group during a one year period is substantial.

The average size of the funds mobilized per member for one cycle of the rotation in an ROSCA, or in a savings group per meeting, is Z 28,167 (approximately 56 US\$). This is an amount equivalent to about 15 percent of total gross household income (Cuevas et al).

Table 1: ACTIVITIES OF IFGS BY TYPE OF GROUP

Activities	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
Savings	14	23.0	0	0.0	14	16.0
Savings and Reciprocity	15	24.5	5	18.5	20	22.5
Savings and Emergency Loans	10	16.5	1	4.0	11	12.5
Savings, Reciprocity and Emergency Loans	9	15.0	3	11.0	12	13.5
Savings, Reciprocity and Social Interaction	12	19.5	10	37.0	22	25.0
Savings, Reciprocity, Emergency Loans and Social Interaction	0	0.0	3	11.0	3	3.5
Other	1	1.5	5	18.5	6	7.0
Total	61	100.0	27	100.0	88	100.0

Source: OSU/SEP Survey, 1989.

Table 2 presents a breakdown of the size of funds mobilized, per member, per cycle, by IFGs.

There is unquestionably a wide range of funds mobilized: nearly as many IFGs mobilize under Z ten thousand per member as mobilize over Z ten thousand (approximately 20 US\$).

Table 2: AMOUNT OF FUNDS MOBILIZED BY TYPE OF IFG

Size of Funds Mobilized	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
Less than Z5,000	12	22.5	7	30.5	19	25.0
Z5,000-Z10,000	12	22.5	8	35.0	20	26.5
Z10,001-Z20,000	14	26.5	1	4.5	15	19.5
Greater than Z20,000	15	28.5	7	30.5	22	29.0
Total	53	100.0	23	99.5	76	100.0

Source: OSU/SEP Survey, 1989.

Engenderment of Reciprocal Obligations

Over 75 percent of ROSCAs, and 23 out of 26 savings groups engender reciprocal obligations. The most common means of financing reciprocal obligations in ROSCAs and savings groups are through contributions made in addition to the member's regular contribution, or when the need arises. Reciprocal obligations are given in the form of money in over 40 percent of IFGs. It is interesting to note that a major difference between savings groups and ROSCAs is that reciprocal obligations more often take the form of service or in-kind in ROSCAs, and in cash in savings groups.

The engenderment of reciprocal obligations does not necessarily imply that this form of exchange is equally beneficial for all parties involved. This inequality reveals itself

through the term structure of the obligations associated with the retribution of reciprocity. This term structure is undefined and contingent upon a variety of factors such as variance in income, the ability to repay, and the probability that other members may need mutual aid.

Emergency Loans

Both ROSCAs and savings groups provide emergency loans. However, ROSCAs do so to a much lesser degree, 17 percent of ROSCAs against 36 percent of savings groups. The most common method of financing emergency loans in all IFGs is through additional contributions made by members. In 38 percent of the IFGs that provided emergency loans, members made payments at the beginning of their membership. Emergency loans benefited only members of an IFG in all but one group.

The average amount of an emergency loan in IFGs was Z 43,000. This figure was higher in savings groups (Z49,783) than in ROSCAs (Z 34,449), even though the range in loan size was similar for both types of IFGs.

The average interest charged on emergency loans in IFGs was 22.5 percent per month; this figure is significantly lower in ROSCAs (18.5 percent per month) than in savings groups (31 percent per month). It is important to note that no collateral is required on emergency loans.

The average repayment of emergency loans for all IFGs is a little over three months, with a range of between two weeks and nine months. In sharp contrast with the practices of other financial intermediaries, all of the emergency loans given by IFGs had a specified repayment term.

Loans

Only savings groups provide loans. Loans are given to members of savings groups in eighteen of the 27 savings groups surveyed. The average loan size was Z 21,567, with a range between Z 500 and Z 150,000. Member's contributions were the source of loans.

Interest was charged on loans in eight of the savings groups. The average interest charged was over 17 percent per month. No collateral was required in any of the loans.

The repayment term averaged a little over one month, ranging between one week and three months. There was a specified due date for loans given in all but one savings group.

Social Interaction

Social relations are important in IFGs. Important benefits accrue therefrom to the membership of an IFG: the potential, for instance, for political empowerment, the creation within the group of ties of friendship and loyalty--in short, a sense of community. In this research, social relations are treated as an output. However, there are limitations in the data to further explore this path of research, and any conclusions reached on this subject must be regarded as speculative.

Flexibility of Operating Procedures

In their operating procedures IFGs are adaptable and flexible. This is one of the reasons for their continued presence and popularity throughout the world. Flexible operating procedures allow an IFG to minimize transaction costs for its membership. By modifying its operational procedures, an IFG can adjust to changing economic conditions: fluctua-

tions in members' cash flows, the high rate of inflation that Zaire has experienced in recent years, and unexpected emergencies and needs.

Frequency of Contributions

The most important output provided by IFGs is the joint financial services of borrowing and saving. The method of financing the major service provided by IFGs is the members' contributions which are usually made at a predetermined time in all the IFGs (see Table 3).

Table 3: FREQUENCY OF CONTRIBUTION BY TYPE OF IFG

Frequency of Contribution	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
One Week	9	15.0	4	16.0	13	15.0
Two Weeks	17	28.0	8	32.0	25	29.0
One Month	30	49.0	8	32.0	38	44.5
Other	5	8.0	5	20.0	10	11.5
Total	61	100.0	25	100.0	86	100.0

Source: OSU/SEP Survey, 1989.

In over 80 percent of ROSCAs, funds are collected and distributed either every two weeks or every month. The larger groups tend to meet more often, every two weeks, while those with five members or fewer, generally meet every month. This is to be expected since under the economic conditions current in the late 1980's, inflation eroded the purchasing power of the funds mobilized.

In 80 percent of the savings groups, funds were collected monthly. Four of the savings groups met every week.

Fixed vs Variable Contributions

The size of contributions, and thus the size of funds mobilized, are fixed in 88 percent of ROSCAs, and in over 70 percent of savings groups, the contributions are fixed (see Table 4). Given the fluctuations in cash flows in rural areas of Zaire, economic conditions may warrant either fixed or flexible contributions.

Table 4: FIXED VS. VARIABLE CONTRIBUTIONS BY TYPE OF IFG

Type of Contribution	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
Fixed	50	87.5	18	72.0	68	83.0
Variable	7	12.5	7	28.0	14	17.0
Total	57	100.0	25	100.0	82	100.0

Source: OSU/SEP Survey, 1989.

Order of Rotation in ROSCAs

There are a variety of procedures to determine the order of receiving the funds mobilized in ROSCAs. The order of rotation was dependent upon need in 44 percent of the groups (see Table 5). This is evidence of the tightly knit social structure of an ROSCA. In over 40 percent of the ROSCAs the order of rotation is determined by either vote or

lottery. In the other cases the leader determines the order of rotation. Once rotation has been determined it generally cannot be changed. This represents an unusual degree of inflexibility in the ROSCA operational procedures and contradicts findings in other parts of the world.

Table 5: DETERMINATION OF THE ORDER OF ROTATION IN ROSCAS

Factors Determining the Order of Rotation	N	%
Lottery	8	19.5
Director's Choice	7	17.0
Vote of the Membership	8	19.5
Need of Members	18	44.0
Total	41	100.0

Source: OSU/SEP Survey, 1989.

Length of Rotation

The variety of the length of time it takes an ROSCA to complete one cycle of its rotation is further proof that IFGs are flexible and adaptable (see Table 6). One full cycle of the rotation averages a little over seven months. The length of the term structure ranges from three weeks to five and a half years.

ROSCAs allow members to accumulate the fund mobilized more quickly than they would have been able had they acted alone. Of course, the last recipient is the exception

Table 6: LENGTH OF TIME TO COMPLETE ONE ROTATION IN MOBILIZING FUNDS IN ROSCAS

Term Structure	N	%
Less Than 3 Months	19	33.3
4-6 Months	20	35.1
6-12 Months	11	19.3
Greater Than 1 Year	7	12.3
Total	57	100.0

Source: OSU/SEP Survey, 1989.

to this general rule. In addition, those members who receive the fund early in the rotation, and who are in essence borrowers, are able to repay their loans back through a series of installments (or contributions).

Risk Management

IFGs reduce transaction costs through risk management. Risk is managed by gathering information about the membership and through enforcement procedures. This contributes towards reducing the costs associated with moral hazard and adverse selection.

In this research, information is proxied by gender composition of the membership, occupational composition of the membership, geographical proximity of the membership and the number of years the IFG has been in existence. Homogeneity in membership with respect to gender, occupation, and geographical location implies greater availability of information. So too does the number of years an IFG has been in existence: the longer its

life, the greater the amount and accuracy of information. The greater the information set, the greater is the level of trust and confidence within the membership that all contracts will be honored, thus lowering the transaction costs associated with sorting out moral hazard and adverse selection.

The size of membership is a means of risk management. The smaller the membership of the IFG, the greater is the accuracy and reliability of information, in part because the ability to assimilate it is limited. A member may know only a few other members well. As membership grows, information on other members may be collected from members in the IFG not well known to any particular member. The use of this "secondary" information may eventually lead to a loss of trust and confidence in the IFG.

The value of information is higher in ROSCAs than in savings groups because of the contractual differences. ROSCAs require that each member trusts other members because the funds mobilized for each member depend upon other members fulfilling their obligations. In savings groups, members have an obligation to themselves to contribute to their own fund, at least with respect to the funds mobilized.

Size of Membership

Close to 60 percent of IFGs had a membership of ten members or fewer, ROSCAs being generally smaller in size than savings groups (see Table 7). In fact, 75 percent of ROSCAs are of this size. Furthermore, nearly 40 percent of all ROSCAs had five or fewer members. The average membership size for all ROSCAs was 12 members, with a range of between two and 650. Bouman states that the classic ROSCA consists of not more than approximately 30 members (1989). The data for Zaire supports this conclusion.

Table 7: SIZE OF MEMBERSHIP BY TYPE OF IFG

Size of Membership	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
0-5 Members	27	43.5	2	7.5	29	32.5
6-10 Members	19	30.5	4	15.0	23	26.0
11-20 Members	11	18.0	6	22.0	17	19.0
Greater than 20 Members	5	8.0	15	55.5	20	22.5
Total	62	100.0	27	100.0	89	100.0

Source: OSU/SEP Survey, 1989.

In contrast, 85 percent of all savings groups have more than ten members. Over half of all savings groups have a membership exceeding 20 members. The average membership size for all savings groups is 58 members, with a range between five and 152 members.

There are a number of reasons for the differences in membership size between ROSCAs and savings groups: the operational objectives of the IFG, transaction costs, different informational needs, and income levels of members of the IFGs.

Gender Composition of the Membership

Single gender IFGs comprise 54 percent of all IFGs (see Table 8). This is almost equally divided between all male or all female IFGs. Single gender ROSCAs comprise 61 percent of all ROSCAs. All-female ROSCAs account for 37 percent of all ROSCAs. IFGs

that are heterogeneous with respect to gender composition are generally male dominated. Over 60 percent of mixed gender IFGs have a male majority. More than 60 percent of savings groups are heterogeneous with respect to gender; for ROSCAs the equivalent figure is 41 percent. This suggests that there is a relationship between the type of IFG and its composition by gender.

Table 8: GENDER COMPOSITION OF THE MEMBERSHIP BY TYPE OF IFG

Gender Composition	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
All Female	23	37.0	2	7.6	25	28.5
All Male	15	24.0	8	30.8	23	26.0
Mixed, Majority Female	7	11.5	8	30.8	15	17.0
Mixed, Majority Male	17	27.5	8	30.8	25	28.5
Total	62	100.0	26	100.0	88	100.0

Source: OSU/SEP Survey, 1989.

In fact, in IFGs with a membership of 10 or less, 73 percent are either all men or all women, a finding that strongly suggests the existence of sharp differences between the sexes on the subject of money (see Table 9).

There are distinct differences in roles of men and women in the rural economy. For example, cassava production and sales are generally the domain of women as well as their major source of cash income; their contributions to IFGs depend heavily on this activity.

Table 9: GENDER COMPOSITION OF IFGS BY SIZE OF MEMBERSHIP

Gender	Size of Membership				Total
	0-5 Members	6-10 Members	11-20 Members	>20 Members	
All Female	14	6	1	4	25
All Male	11	8	2	2	23
Mixed, Majority Female	2	2	5	6	15
Mixed, Majority Male	2	7	9	7	25
Total	29	23	17	19	88

Source: OSU/SEP Survey, 1989.

In general, because cassava can be harvested at any time, women are thought to enjoy a steadier flow of income than do men. Another interesting finding is that two-thirds of IFGs with a male majority have a membership that is three-quarters male. In comparison, only 40 percent of IFGs with a female majority are at least 75 percent female.

This sharp separation by gender is also an indication that the degree of trustworthiness is stronger among individuals of the same sex. It can also be argued that this represents social boundaries in money matters.

Length of Existence¹

Sixty-four percent of all IFGs were formed after 1987 (see table 10). However, it is interesting to note the existence of IFGs prior to 1980. Over seventy percent of all ROSCAs were formed between 1988 and 1989 and one-half were formed during 1989. Savings groups appear more stable, one-half having been in existence since before 1988.

Table 10: NUMBER OF YEARS AN IFG HAS EXISTED BY TYPE OF IFG

Number of Years	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
One Year	31	51.5	5	18.5	36	41.5
Two Years	12	20.0	8	29.5	20	23.0
Three Years	6	10.0	1	3.5	7	8.0
Four-Five Years	3	5.0	4	15.0	7	8.0
> Five Years	8	13.5	9	33.5	17	19.5
Total	60	100.0	27	100.0	87	100.0

Source: OSU/SEP Survey, 1989.

The apparent instability of IFGs--65 percent of all IFGs were formed after 1987--is complicated by the finding that this apparent instability is primarily caused by the migration of members to other villages. There are only occasional cases of fraud or theft. Fraud and

¹The definition of a "new" IFG is rather subjective. There is the possibility of adding or losing members in ROSCAs after the completion of a rotation. Hence, the next rotation could be treated as a continuation of the previous ROSCA or as a "new" ROSCA.

theft do not occur in IFGs to the extent imagined by many people, including the people who are now members of IFGs. In Bandundu, only ten percent of members who had previously participated in IFGs have withdrawn because of fraud or theft. In Shaba, migration was found to be as important a reason for the withdrawal of members as fraud or theft.

Every member of an IFG joins the group with certain objectives in mind. The apparent instability of IFGs may be attributed to the major objectives of its membership. According to the leaders of IFGs, reciprocal obligations in the form of mutual aid is the benefit being sought most by members. As stated earlier, the engenderment of reciprocal obligations do not necessarily imply that all members will benefit equally at any particular time. It is logical to assume that reciprocal obligations become a longer lasting feature of relationships among the members than the main output provided by IFGs, though this assumption deserves further investigation. The very definition of reciprocal obligations implies that the relationship will in all likelihood be long lasting, beyond the lifespan of the IFG.

The length of time it takes to complete one rotation in an ROSCA is also important. With the average length of time to complete one rotation being approximately seven months, many ROSCAs may have completed at least three rotations in two years.

Geographical Proximity of the Membership

An important condition for membership in an IFG is residence in the village. In fact, the most commonly shared attribute of members, according to the leaders, is their place of residence (see Table 11). Only five of the 89 IFGs surveyed had members who

lived in villages other than those of the IFGs' location. Supporting this finding is the fact that a majority of the IFGs surveyed have been founded by indigenous members of the local area.

Table 11: COMMON BOND OF MEMBERSHIP BY TYPE OF IFG

Common Bond	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
Community	27	43.5	6	23.0	33	37.5
Occupation	18	29.0	7	27.0	25	28.4
Ethnicity	8	13.0	4	15.5	12	13.6
Gender	4	6.5	0	0.0	4	4.6
Religion	0	0.0	5	19.0	5	5.7
Other	5	8.0	4	15.5	9	10.2
Total	62	100.0	26	100.0	88	100.0

Source: OSU/SEP Survey, 1989.

Occupation of the Membership

An analysis of the occupations of members of IFGs reveals that IFGs are relatively homogenous with respect to occupation. IFGs have a membership that is homogenous in occupation in 43 of 76 groups. The percentage of ROSCAs whose members share the same occupation is similar to that in savings groups, 55 percent. In over three-quarters of all IFGs, at least 75 percent of the members have the same occupation. This suggests that there is a greater degree of trust and confidence among people of the same occupation.

In addition, the occupational homogeneity of the membership is of great benefit in making key organizational decisions. For example, different occupations impose different constraints on their members. Thus an IFG that is homogeneous by occupation will not have to deal with constraints that act against one another. Yet, the degree of occupational homogeneity also affects cash flows within the membership: when members are of the same occupation, they experience similar cash flows. Occupational homogeneity itself can be a constraint in times when the membership is faced with a similar hardship i.e. a drought for a membership comprised of farmers.

The vast majority of IFGs have members engaged in farming. A greater percentage of IFGs, 30 percent, are comprised of women as compared to male farmers, 21 percent. A possible explanation is that women farmers grow cassava, which, given the fact that it can be harvested throughout the year, allows a more regular flow of income. Men, on the other hand, engage in farming cash crops that do not provide a regular flow of income.

Record-Keeping

Two-thirds of the IFGs keep records. Of these, 82 percent maintain records in written form, while the rest keep an oral record. Record-keeping is even more common in savings groups than in ROSCAs (92 percent to 59 percent). Records are more often kept in savings groups because of the size of membership and its operational procedures. Savings groups collect contributions, but do not immediately disperse them. This makes it more imperative to maintain written records to ensure accuracy.

Collection and Distribution Methods

The funds mobilized and distributed in ROSCAs are given in the presence of the membership in 56 percent of the cases. This practice is followed by 68 percent of the saving groups. This compares to 68 percent in savings groups (see Table 12). Bouman states, "ROSCAs with no regular meetings and where the organizer collects the contributions for distribution, experience more trouble (Bouman 1979, p.262)". The findings above suggest that ROSCAs will experience difficulty with respect to fraud and embezzlement.

An alternative to Bouman's argument is to view the decision to collect and distribute funds mobilized via a collector as based on the information available, and on transaction costs. I believe that collectors will be engaged only when there is sufficient trust among the membership. The findings give some support to this view given the number of groups that employ a collector, and the low incidence of theft and fraud in IFGs. In addition, the cost in time of organizing and conducting the collection and distribution of funds mobilized must be considered. Meetings of the membership cost more in time than using a collector for the contributions.

Penalties for Infractions of Group Rules

When members miss a meeting, or are late for a meeting, there are no sanctions applied in 48 of 56 IFGs. The sanction applied in five cases was a bottle of palm wine, while a verbal warning was issued in two other cases.

When members are late with their contributions, no sanctions were imposed in a majority of the IFGs. A verbal warning is the most widely used sanction. The most severe penalty is the loss of creditworthiness which occurred in only one group. The other sanction

Table 12: METHOD OF COLLECTING FUNDS MOBILIZED BY TYPE OF IFG

Method of Col- lection	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
Meeting of the Membership	33	55.0	15	68.0	48	58.5
Collector	24	40.0	6	27.5	30	36.5
Other	3	5.0	1	4.5	4	5.0
Total	60	100.0	22	100.0	82	100.0

Source: OSU/SEP Survey, 1989.

that IFGs employ is charging an interest on late contributions. This occurred in only three of 64 IFGs. Failure to repay a loan results in expulsion from the group in only five IFGs.

The responses in many of the IFGs indicated that there were no established sanctions or penalties at the time of the survey. Infractions of group rules had not occurred, and action would only be considered when group rules were broken.

Sanctions and the Degree of Regulatory Activity

The number of IFGs with no explicit sanctions imposed upon violations of expected behavior is 20 percent of all IFGs (see Table 13). Among the IFGs who maintain sanctions for violations of group rules, the average number of sanctions is four.

It was unexpected to find savings groups imposing, on average, a higher number of explicit sanctions than ROSCAs for violation of expected behavior, four versus three.

Table 13: NUMBER OF SANCTIONS BY TYPE OF IFG

Number of Sanctions	Type of Group					
	ROSCA		Savings Group		Total	
	N	%	N	%	N	%
0	13	21.0	5	18.5	18	20.2
1	9	14.5	2	7.5	11	12.4
2	5	8.1	1	3.5	6	6.7
3	6	9.7	3	11.0	9	10.1
4	17	27.4	4	15.0	21	23.6
5	2	3.2	0	0.0	2	2.3
6	10	16.1	12	44.5	22	24.7
Total	62	100.0	27	100.0	89	100.0

Source: OSU/SEP Survey, 1989.

Likewise, the degree of regulatory activity, defined as the size of the membership times the number of explicit sanctions, is higher in savings groups than ROSCAs. One possible explanation is that there is a greater degree of trust and confidence required in ROSCAs because funds mobilized for and available to each member depend upon other members fulfilling their obligations. Information is a more valuable means of managing the risks associated with moral hazard and adverse selection than are explicit sanctions. On the other hand, the discipline required to mobilize funds is greater in savings groups because the member's obligation to save does not depend upon other members' contributions.

Concluding Remarks

This paper has shown that IFGs in Zaire are engaged in a variety of activities in addition to providing the joint financial services of borrowing and saving. They were found to provide loans and emergency loans, and were responsible as well for the engenderment of reciprocal obligations and social interaction. The multi-functionality of IFGs clearly suggest that they enjoy economies of scope.

IFGs are flexible and adaptable in their operating procedures (frequency of contribution, size of contribution, determination of the order of rotation, and the term structure of one rotation of a ROSCA), which reduces transaction costs to their membership. An IFG is able to adjust to changing economic conditions, i.e., unexpected emergencies or needs, or fluctuations in members' cash flows. A variety of operating procedures among IFGs implies a high degree of flexibility and adaptability.

By managing risk, IFGs reduce transaction costs associated with moral hazard and adverse selection. Risk is managed by gathering information about potential members, and through enforcement procedures. The composition of an IFG's membership, a proxy for information, is relatively homogeneous with respect to gender, occupation, and geographical location. This homogeneity implies a greater availability of information. The greater the information, the greater the level of trust and confidence within the membership that all contracts will be honored. The size of membership, and size of funds mobilized are also means of risk management. Lastly, enforcement procedures, namely, record-keeping, means of collection and distribution of funds mobilized, and sanctions for violations of expected behavior are employed by IFGs to varying degrees.

In summary, IFGs are multi-functional, and reduce transaction costs through flexible operating procedures and risk management. The ability to adapt in order to cope with changing economic conditions, and to customize the IFG to fit the distinctive attributes of its membership make each IFG a unique organizational form.

The findings reported here underscore the informational advantages that IFGs enjoy as compared to formal financial institutions. These informational advantages of IFGs manifest themselves as lower transaction costs, evidenced by the terms and conditions of outputs and services. There are, however, insurmountable difficulties in adapting the organizational forms of IFGs to formal financial intermediaries, given the institutional structure of the latter.

Formal financial intermediaries could partially benefit from the IFGs' informational advantages through establishing financial relationships with informal groups. This integration between formal financial intermediaries and IFGs can be achieved by developing deposit instruments that meet the needs of informal groups, and through the provision of credit services to these groups.

Access to the financial services offered by the formal financial intermediary should strengthen IFGs by increasing and improving the quality of their financial services, and by providing them with depository services. Lending to IFGs, on the other hand, may have the effect of lowering lending costs, and reducing the risk in the loan portfolios of formal financial institutions.

In any attempt to organize groups as ROSCAs, it is vitally important to foster group homogeneity in gender, occupation, and geographical proximity. In other words, special attention should be given to understanding what glues the group together.

Likewise, efforts to integrate existing IFGs with formal financial institutions will alter IFGs, and possibly threaten their integrity.

References

- Ardener, Shirley G. "A Comparative Study of Rotating Savings and Credit Associations." Journal of the Royal Anthropological Institute of Great Britain and Ireland, 94 (1964): 201-229.
- Bouman, F.J.A. "The ROSCA: Financial Technology of an Informal Savings and Credit Institution in Developing Economies." Savings and Development, 4 (1979): 253-276.
- Bouman, F.J.A. Small, Short and Unsecured. Oxford and New York: Oxford University Press, 1989.
- Cuevas, Carlos E., *et al.* "Financial Markets in Rural Zaire: An Assessment of the Bandundu and Shaba Regions." Report to USAID/Kinshasa, March 1991.
- Cuevas, Carlos E. "Informal Financial Markets in Africa: Main Issues and Selected Case Studies." Paper prepared for the Workshop on "The Role of Informal Institutions and Cooperatives in Rural Financial Markets," Abidjan, Côte d'Ivoire, December 11-16, 1989, The Ohio State University, 14 p.
- Garson, José, and Mutombo Sonsola. "Analyse générale du système d'intermediation financière au Zaïre." Kinshasa, Janvier 1987.
- Schrieder, Gertrud R. "Informal Financial Groups in Cameroon: Motivation, Organization and Linkages." M.S. thesis, The Ohio State University, 1989.
- Schrieder, Gertrud R., and Carlos E. Cuevas. "Informal Financial Groups in Cameroon." Informal Finance in Low Income Countries, ed. Dale W Adams and D. Fitchett. Boulder CO: Westview Press, forthcoming.