An Assessment of the Operations of Rotational Savings and Credit Association in the Kumasi Metropolis, Ghana

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Available online July 2013 Key Words: Rotational Savings Small and medium scale enterprises, Capital Expansion, Kumasi Metropolis	Small and medium scale enterprises (SMEs) play significant roles in socio economic development of every country in the world and serve as an important source of job creation and innovation. Despite their significant contributions to the economy, access to funding is a challenge to traders within the informal sector in Ghana. These challenges negatively affect the businesses within the informal sector of the economy. As a result, Rotational Savings and Credit Associations (ROSCA) becomes the most easiest and available alternative through which most of these traders raise funds to support their business operations. This study aims at examining the operations of ROSCA in the Kumasi Metropolis, Ghana. The study adopted survey strategy using a mix of quantitative and qualitative methods, although the focus was more on quantitative. Primary data was also used for the study. The study revealed that, Capital Expansion appears to be the major reason that influences individuals' decision to join the Rotational Savings and Credit Association. Information from the study also showed that on the average, ten (10) people constitute the membership of various Rotational Savings and Credit Association within the study setting. Balloting was found to be the major criteria used by Rotational Savings and Credit Associations to determine the turn of each member in terms of disbursing the accumulated funds to their membership.

1. INTRODUCTION

Small and medium scale enterprises (SMEs) play significant roles in the socio-economic development of every country in the world and serve as an important source of job creation and innovation. Despite such significant contributions made by the SMEs, they continually face funding constraints in the formal financial institutions (Schmidt and Kropp, 1989). There are specific characteristics of SMEs that make it difficult to access finance. Cobham (2000) found out that SMEs are risky, as evidenced by the high failure rates and therefore 50% of small businesses failed within their start up in UK and US and Ghana is not exampted.

In Ghana, Rotational Savings and credit Associations (ROSCAs), which is an alternative source of funding SMEs can play a meaningful role in the economic development of the country if the government creates the necessary environment and support the needs of the sector. This is because the Ghanaian economy is heavily dominated by small and medium scale enterprises, and therefore can develop the economy through the import substitution industrialization strategies. The import substitution industrialization strategies which has been characterized by the establishment of large scale enterprises, has failed to make the needed contributions to the economic development of Ghana (Aryeetey and Udry, 1997).

Rotational savings and credit association is mostly practiced by individuals who engage in petty trading. The group involved in rotational savings decides on the amount to contribute at regular intervals and the total amount collected is given to each member in turn. It is particular with the developing part of the world

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mostly African countries and areas which are under banked. The study aims at assessing how rotational savings and credit association is operated within the Kumasi Metropolis of Ghana.

2.0 Related Studies

2.1. Formal and informal financial institutions lending policies

Access to funding is a challenge to traders within the informal sector in Ghana. These challenges negatively affect the businesses within the informal sector of the economy. The challenges stem from the fact that the lending policies of various financial institutions do not favour these traders operating on small scale level. For example, requirements such as collateral security that the financial institutions demand from these traders and complicated application procedures put restrictions on the traders in accessing financial facilities (Schmidt and Kropp, 1989). As a result, Rotational Savings and Credit Associations becomes the available alternative through which most of these traders raise funds to support their businesses operations.

Rotational Savings and Credit Associations (ROSCAs) are group of individuals who agree to meet for a defined period of time in order to save and borrow together. Rotational savings and credit association is part of the informal financial sector where a financial activity takes place outside the ambit of institutional finance (Kimuyu,1999). For small and medium enterprises, reliable access to short term and small amounts of credit is more important and therefore a holistic approach is required in addressing the challenges associated with credit access in the informal sector.

It is further argued that the type of financial institutions and its policy often determines the access problem to the petty and the small scale traders. Because credit duration, terms of payment, required security and the provision of supplementary services do not fit the needs of the petty and the small scale traders, they mostly do not apply for credit. Even where some of the traders meet the policy requirements of these financial institutions, they deny them because of the perceived risk and the fact that the traders in this class do not form part of their targeted group (Schmidt and Kropp, 1989; Atrill and McLaney, 2006.).

Notable disadvantages of the formal financial institutions to the small scale traders are their restrictions of credit to specific activities, demand for securities, cumbersome application procedures and high interest rate, and therefore, there is a need for a broader concept of finance policy decision that will meet the needs of the small scale traders operating in the informal sector (Kimuyu, 1999).

2.2. Characteristics of Informal Finance

A large part of financial transactions in Africa occur outside the formal system. Various literatures on the credit markets indicate that the functioning of informal markets is characterized with incomplete markets and imperfect information which is largely relevant to the functioning of informal sector. Informal finance has been defined to refer to all transactions, loans and deposits occurring outside the regulation and control of monetary authority while the semi formal sector has the characteristics of both formal and informal sectors. In Africa it has been defined as the operation of savings and credit association, rotational savings and credit associations (ROSCA), professional money lenders and part-time money lenders like trader's grain millers, small holders' farmers, employers relatives and friends as well as co-operative societies (Aryeetey et al 1997 and Aryeetey and Udry, 1997).

Three types of informal units in Africa have been identified as:

- savings mobilization units with little or no lending,
- lending units that do not engage in any savings and
- those units that combine deposits mobilizations and lending (Aryeetey and Udry, 1997).

Institutions that combine both are relatively new however; they respond to the need for direct financial intermediation and mostly fall under self-help organizations. The types of informal financial units vary mainly because they are purpose oriented and mostly developed to meet the demand for specific financial services, responding to the demands of a distinct clientele defined by them using various socio-economic criteria (Chipeta and Mkandewire, 1994).

However, while informal financial units develop their market niches and have different reasons for selecting a particular segment of the market, they tend to have similar fundamental practices in the administration of credit, which allows for a uniform analysis. As these goals change, informal financial units change their operational structure. Studies on informal financial sector in Africa show that they will do well so long as financial supports for groups that cannot be reached by the formal financial institutions continue to increase. The emergence of demand for short term credit especially among the small scale traders, will most likely lead to the development of an informal unit to meet that demand (Chipeta and Mkandewire, 1994; Atrill and McLaney, 2006).

2.3 Empirical Findings of Rotational Savings and Credit Association (ROSCA)

ROSCA has always been popular in developing countries. ROSCAs have been present in Asia Latin America, Caribbean and Africa (Ardener and Bouman, 1995). Discussing the empirical importance of ROSCAs, the World Bank (1989) reported that in Bolivia, one third to one-half of all adults living in urban areas often participated in ROSCA which amounted, on the average, to about one sixth of their salaries. In rural Niger Republic, about 398 village households in 1986 indicated that informal credits, most especially ROSCAs accounted for 84% of total loans collected, represented 17% of their agricultural income.

Chamlee-wright, (2002) also observed that in Senegal ROSCA assisted in equitable distribution and utilizations of local resources most especially income and raw materials. Credit taken from ROSCA is used to finance income generating activity among the low income groups, thus reducing the level of poverty of the people. Saving facilities provided through ROSCA in Senegal are used for financing health care and education, thus increasing the peoples access to these social amenities.

Basley and Loury, (2001) found that 68% to 85% of Taiwanese population participates in ROSCA. Bouman (1995) stated that "Membership of ROSCAs in the Republic of Congo comprises about 50% of the adult population (male and female) and 50-59% in many rural areas in Liberia, Ivory Coast Togo, Nigeria and Cameroon". Similarly Kimuyu (1999) conducted survey in 115 households in central Kenya and reported that 45% of them were participating in ROSCA.

ROSCAs are not only found in areas where formal finance is less developed but prevalence is also documented in well developed finance markets. ROSCAs have been found among employees in Bolvia (Adams and Canavesi, 1989) and Ghana (Aryeetey and Udrey, 1997; Steel and Webster, 2000). Another study carried in urban Zimbabwe by chamlee-wright (2002) found that 76% of urban market traders participate in ROSCAs although 77% of these traders also have bank accounts. ROSCAs are also found in countries like Taiwan that has a well functioning credit market. A study in Indonesia shows that "even among household with steady access to microfinance services provided by Bank Rakyat Indonesia, roughly 40% also participate in ROSCAs" (Armedariz and Mordach, 2005). ROSCAs are also found among South Asian communities in Oxford in the United Kingdom (Srinivasan, 1995).

ROSCAs usually have particular local names such as "Tontine" in Cameroon, "Hui" in Taiwan, "Tanda" in Mexico, and "Polla" in Chile (Armendariz and Morduch, 2005). The rotational savings and credit association, as its name indicates, is not only a saving instrument but also has a lending function too. It is flexible with variations in the basic structure both across different countries and depending on the needs of its members. In its basic tradition form, ROSCA refers to a group of people who come together to form an association. Each member of the group commit to pay a certain amount that is determined at the start of the scheme. For example, if a group of 10 members agreed to pay \$1000, the contributed amount is given to one member who is selected through predetermined criteria.

The receiver of the collected money is excluded from future draws. However, the beneficiary has to pay contributions (\$100 in this case) through the entire cycle (Ambec and Treich, 2007). A cycle of a ROSCA is said to be completed when all members have received their payments. After that, the ROSCA is either dismantled or a new cycle is started. The benefit of the basic ROSCA is that all the members received finance earlier than if they had saved it themselves, except the last person. The academic literature suggests various rationales for the ROSCAs such as financing lumpy and durable goods (Basely, and Loury, 1993) and event insurance (Ambec and Triech, 2007, Calomiris and Rajarman, 1998).

2.4 Operations of the Rotational Savings and Credit Associations (ROSCAs)

Rotational Savings and Credit Association (ROSCA) are essentially a group of individuals who come together and make regular cyclical contribution to a common fund, which is then given as a lump sum to one member

in each cycle. Thus a member will lend money to other members through his regular monthly contributions. After one having received the lump sum amount, it becomes obligatory for him to contribute continuously until the rest of the members receive theirs. This explains the name rotational savings and credit association for such groups (Bouman, 1979). Depending on the cycle in which a member receives his or her lump sum, members alternate between being lenders and borrowers. That is, there is a mutual give and take involved in rotational savings and credit association. While the above description explains the principle behind a ROSCA, they however vary considerably in their functioning and organization. Typical variations include:

2.4.1 Membership

Members participating in a rotational savings and credit association are selected by the organizer based on ethnic lines or geographical limitations. ROSCAs are organized for members of the same ethnic background, same place of origin, same native language speaking persons and people working in the organization. It may also be organized on the basis of a street in settlement, or the settlement as a whole (Bouman, 1995).

2.4.2. Contribution

The amount to be contributed in each cycle, usually, is decided based on the number of participating members, the total wining amount that each member can get and other socio – economic factors. Contributors can also be in the form of shares thus allowing a member to have more than one share or contribution in a particular cycle thereby increasing his chances of winning the lump sum, and also increasing the regular contributions he has to make (Bouman, 1995).

2.4.3 Cycle Period

The frequency with which contributors has to be made in each cycle. This can be daily, Weekly, biweekly, monthly, and half yearly, depending on the amount to be contributed usually, the smaller the amount, the shorter the cycle (Bouman, 1995).

2.4.4. Mode of Selecting Winner

The basis of deciding the winner of the lump sum is decided in any one of the three ways:

- By consensus, where common agreement is made among members. The amount is usually given to a member who is in most need for finance (Bouman, 1995).
- By lots, where a lottery determines who gets the lump sum in a particular cycle. Members who have received the lump sum do not participate in subsequent lotteries, but continue to make their contributions and
- By bidding, where the lump sum amount is bid for by the members during each cycle. Thus the member who wins the bid will receive the lump sum minus the bid amount. Others members pay their contributions minus their share of the bid amount (Bouman, 1979).

Rotational Savings and Credit Associations can be seen in almost every society around the world and have been in existence for a considerable period of time. ROSCA is flexible and adapt itself easily to rural and urban peculiarities as well as existing community patterns of groupings and organizing. The flexibility is one reason for their worldwide popularity (Bouman, 1995; Arderner, 1995).

3. Methodology

The study adopted deductive approach with survey strategy using a mix of quantitative and qualitative methods, although the focus was more on quantitative. Primary data was used for the study. The population for the study consisted of members of Rotational Savings and Credit Associations within the Kumasi metropolis of Ghana. These were basically small and medium enterprises owners who are participants of rotational savings and credit associations. The SMEs were selected from across the various sectors mainly manufacturing, commerce, trading and service among others.

Thirty -five Rotational Savings and Credit Associations with membership of about five hundred and fifty (550) within the metropolis were identified. Out of the 550 population, two hundred and forty-five (245) were selected using quota and random sampling approach. Of the 245 respondents selected, 200 were returned, representing about 82% response rate.

Each Rotational Savings and Credit Associations identified was given a quota of seven (7) representatives. The seven representatives from the thirty-five groups were randomly selected. Primary data was collected through field survey using questionnaire and observation data collection instruments. The questionnaire used was closed questions with five point likert scale, ranging from 5= Strongly Agree, 4=Agree, 3= Neutral, 2=Disagree and 1= Strongly Disagree. Both self-administered and interviewer-administered questionnaires were used for the study.

Furthermore, field observation was made alongside the administration of the questionnaire to afford the researchers the first hand information regarding how rotational savings were operated within study area where the researchers played the observer- participant role. In the process of the observation, relevant information regarding the research objectives was noted.

The quantitative data collected was analyzed using descriptive statistics with simple averages and percentages with the aid of Statistical Packaging for Social Sciences (SPSS) and Microsoft Excel. The data gathered through observation was analyzed using deductions and inferences.

4. RESULTS AND DISCUSSION

Reasons for Joining ROSCA

Table: 4.1

Reasons	Numbers of respondents	Percentage (%)	
Capital for expansion	160	80	
Learning to save	10	5	
To help each other financially	30	15	
Total	200	100	

Source: field survey 2013.

It can be discerned from table 4.1 that, Capital Expansion appears to be the major reason that influences individuals to join the Rotational Savings and Credit Association. The results indicate that majority of the respondents 80 % (n=160) cited capital expansion as their motivation for joining the association whilst 15% (n= 30) and 5% (n= 10) cited financial support to members and cultivating saving culture respectively as the reasons that influenced their decision to join the associations. This finding confirms Aryeetey's (1994) assertion that, people join Rotational Savings and Credit associations (ROSCA) for capital expansion and savings.

Table: 4.2 Membership of ROSCA.

Maximum number	Frequency		
of members			
10	150		
15	35		
20	15		
Total	200		
0 0.11 0010			

Source: field survey 2013.

Respondents were asked to state the maximum number of members in their respective groups. The table 4.3 above gives the details. Information from the study showed that majority of the respondents 75% (n=150) have ten (10) members in their group as the maximum number. While 17.5% (n = 35) and 7.5% (n=15) which represent 15 and 20 members in a group respectively. According to the observations made it became evident that members are much comfortable with ten (10) members in a group.

An Assessment of the Operations of Rotational Savings and Credit Association J. Owusu, E. K. Anin, S. G. Zaato

Weeks	Number of members	Percent (%)	
One Week	110	55	
Two Weeks	29	14.5	
One Month	61	30.5	
Total	200	100	

Source: field survey 2013.

The periodical contributions by members of Rotational Savings and Credit Association were captured and classified. It is discernable from the results that contributions per member of most of the Rotational Savings and Credit Associations range between GHC20 to GHC 50 per period with few of the Associations contributing between GHC100 to GHC150 per period. Table 4.4 60% (n=120) respondents indicated that each member in their association contribute an amount of GHC20, this is because most of the SMEs are into petty trading whose working capital is very small and therefore contribute small amount in their rotational savings associations. 25% (n=50) respondents indicated that each members in their association contributes an amount GHC 50. 13.5% (n=27) and 1.5% (n=3) were respondents who indicated that members in their various groups contribute GHC100 and GHC 150 respectively. The Study revealed from the observations made that members who are able to contribute GHC100 and GHC 150 are owners of big shops in the market whose daily turnover are high.

Amount contributed by members (GHC)	Frequency	Percentage
GHC 20	120	60
GHC 50	50	25
GHC 100	27	13.5
GHC 150	3	1.5
Total	200	
1044	200	100

Table 4.4. Payment Intervals for Contribution

Source: field survey (2013)



Source: field survey (2013)

Table 4.4 and figure 4.1 show the intervals within which rotational savings and credit association contributions are paid by the members. It is evident from the results that for most of the Rotational Savings and Credit Associations, contributions are mostly made on weekly and monthly basis. The most frequent interval as shown in Table 4.. is one week interval which represents 55%, (n=110), followed by monthly payment which represents 30.5% (n=61). The least contribution interval among rotational savings associations is two weeks which represent 14.5% (n=29). Based on the Study, it was found out that, the dominance of the one week payment interval is due to the fact that the market days come just ones a week within a particular community. It was also revealed that the monthly contribution groups usually are the owners of big shops.

Criteria	Number of Members	Percent (%)	
Balloting	176	87.8	
Bidding	5	2.5	
Lottery	8	4.10	
Other reasons	11	5.5	
Total	200	100	

Source: field survey (2013).



Source: field survey (2013).

Table 4.5 and figure 4.2 give the criteria used for the disbursement of funds to members in turns. 87.5% (n=176) indicated that the major criteria for the disbursement of funds to members is through balloting, whiles 5.5% (n=11) indicated that other collection methods like as and when the member may need the money is used, meaning that there is no clear method for collection but members receive money when they are in need of it. 4% (n=8) indicated they use lottery whiles 2.5% (n=5) indicated that they use bidding as a method of collection. Based on the observations conducted, it was found out that most of the rotational savings and credit association use balloting as the major criteria to determine the turn of each member in terms of disbursing accumulated funds to their members.

5. Conclusion

The study was set up to evaluate how rotational savings and credit association is operated in Ghana. The study revealed that, Capital Expansion appears to be the major reason that influences individuals' decision to join the Rotational Savings and Credit Association. Information from the study also showed that on the average, ten (10) people constitute the membership of various Rotational Savings and Credit Association within the study setting.

It was further found out that the periodical contributions by members of Rotational Savings and Credit Association were captured and classified. It is discernable from the results that contributions per member of most of the Rotational Savings and Credit Associations range between GHC20 to GHC 50 per period with few of the Associations contributing between GHC100 to GHC150 per period.

In terms of contribution time, it is evident from the results that for most of the Rotational Savings and Credit Associations, contributions are mostly made on weekly and monthly basis. Balloting was found to be the major criteria used by Rotational Savings and Credit Associations to determine the turn of each member in terms of disbursing accumulated funds to their membership.

6. Recommendations

One important thing that is lacking in the operations of rotational savings and credit association is legal backing to protect the members or participants of the association. It is therefore recommended that the association must be strengthen by giving it a legal backing to protect the members or participants of rotational savings and credit associations. This would help the members to be protected as to the fact that no one can default in payment of their contributions without being sanctioned. This will go a long way to help small and medium scale enterprise owners to expand their businesses in order to employ more people to reduce the high rate of unemployment in the country.

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