Informal Saving Organizations in Pakistan

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Abstract
Pakistan is a developing country. The credit associations here are not well established. The means of saving still needs proper attention of authorities to improve it. That's why people are not attracted to formal organizations. They usually try to save in informal organizations. In the same way the present study also focuses to find the reasons how informal saving groups like ROSCA (Rotating Saving and Credit Associations) are much popular in the rural areas of Pakistan. Many researchers have done their valuable works inside and outside the Pakistan from different angles but this study attempts from another angle and provides new hypothesis to the readers. Cross sectional data has been collected through questionnaire from the people living in rural areas of Pakistan. Salaried class and self employed class are interviewed separately. The data has been analyzed by a simple linear regression model. The empirical results of the study show that ROSCA is much popular in both salaried and self employed classes. Variables taken enter the model statistically significant showing the reasons that how informal self help groups are popular in the study area.
Keywords: ROSCA, Savings, Self Employed, Informal Organizations, Credit

1: Introduction:

''The untaxed and unmeasured economic activity taking place in a country is called informal economy'' (Hanif, et al. 2010)*.* Every economic activity taking place beyond government regulations will be included in informal sector. The developing economies especially Asian and African countries have abundance of such activities. With reference to Pakistan the issue is not much different. Where, almost 60 % of the total population lives in rural areas in Pakistan. Agriculture is the main source of income in these areas. Very few of them are well educated and have attractive incomes. As compare to the other areas of Pakistan, rural people have low level of income and no formal saving structure. They have less or no access to the formal credit organizations like banks and saving houses. Agha khan Foundation Pakistan conducted a survey in 2012 and found that formal financial institutions are also not able to address the financial

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needs of poor people living in remote areas. Sparse population, low transaction sizes and inadequate facilities restricts formal credit institutions to access the most marginalized and poor people living in rural areas of Pakistan. Poor people need to reach small saving in order to bear predictable expanses and cope with future emergencies. A convenient approach to small saving can enable formers to defer pre-selling of crops and postpone it until prices are reasonable enough to formers. A stimulated cash flow enable them to make better choices around education, health and other expenses and to invest in income generated economic activities.

In developing economies, it is very hard to enforce the market contracts and people adopt non-market ways to save. This is the reason that non-market institutions like ROSCAs have comparative advantage over other formal credit organizations (Besley, 1995). This is one of the oldest and most acceptable financial self help groups of people where individuals (men and women) from nearby areas or family meet frequently after a regular time interval (daily, weekly or monthly) and contribute a fix amount of money to a kitty. Once every participant wins the kitty at each draw, the circle is completed (Gugerty, 2005). Baland (2002) found that 57.2% people participate in ROSCA to save in rural Kenya while Kimuyu (1999) reported 45% in central Kenya. 68% to 85% of Taiwanese population participates in ROSCA (Besley and Levenson, 1996). In the same way people in Republic of Congo 50%, 50-95% in rural Liberia, Ivory Coast and Togo save in ROSCA (Bouman, 1995).

There are normally three types of ROSCA practicing in the world. The first and most common type is basic or random ROSCA. In this type a fix amount of money is collected in a pot daily, weekly or monthly basis and then it is allocated to one of the member of group by lottery method. Once a member gets the cumulative sum, his name is omitted and the process continues till every member gets the money. The second one is bidding ROSCA, in which an auction is made upon every accumulative sum. A member wins the pot of money that has highest bid. The last type is not very common, decision ROSCA, and normally a governing body takes the decision to which the pot of money should be allocated. This is very common in bigger ROSCA.

People save in ROSCA to purchase durable goods (Besley, 1995). Bouman (1995) found that ROSCA is popular due to its unique qualities in Africa. First, it provides life time Insurance. Second, Economic help like loans, joint investment, social security etc and third, ASCRA (a bigger version of ROSCA) which comprises of more than hundreds members, like commercial banks which have a huge range of customers. While some people prefer it just because banks are far away from them and people cannot afford extra charges (Rim, et al 1999). Adams and Canavesi (1992) found that in Bolivia even the employees of formal organizations like banks also save in ROSCA. The main reason is that it has some distinguished characteristics which formal credit organizations don't have. The same result was also found by Ardener (1995) who argues that some IMF employees also save in ROSCA. And in Jamaica a commercial Bank started function to offer savings accounts which emulate ROSCA (Handa and Kirten, 1999) while in Nepal Himalayan Finance and Saving Company was first a ROSCA group (Seibel et al 1999). Smets, P (2000) found that ROSCA can play a significant role in house financing for urban people of India and it is easier to obtain ROSCA's finances as compare to other conventional

Indian housing finance. ROSCA operates beyond government regulations but in some parts of India it is also operated by monetary authorities as non-banking financial institutions in India.

Based on such qualities of these groups, it has attracted the attention of different economists to work on these groups. A lot of work has been done from many angles for different countries. Different studies show that how this informal savings group is much popular and what problems are faced by the participants of the fund while making this group. Specifically in Muslim countries people try to avoid interest "i" which is prohibited in Islam and they rush to informal saving groups like ROSCA. However, more work needs to be done with new perspectives and angles to explore as each society is different and consequently each ROSCA is different and unique in one way or the other. In developing nations of Asia and more specifically in Pakistan these groups are abundant. People meet on daily, weekly or monthly basis to contribute to accumulated sum with a fixed amount equally. But very few studies have been conducted to explore the popularity of this informal group. More and up to date work is needed to be done in this area in order to elaborate this group in front of the whole world.

In this regards the present study focuses to investigate that why informal saving groups like ROSCA are much popular in the in rural Pakistan (Malakand). To find the reasons due to which resident of rural areas of Pakistan do not prefer formal credit organizations. Are these groups popular only in poor illiterate (self employed) people or also in educated and salaried class too?

The study is aimed to contribute to the existing literature with different angles. As the study chooses the more backward and war affected area Malakand as case study and direct personal interviews method has been adopted so more accurate and precise results have been investigated. The study identifies more study areas which need to work upon it. This informal group can also be converted to a formal group as if the commercial banks adopt any method to open an extra ROSCA account which resembles the traditional one. In this way people will be attracted to save.

The empirical results of the study show that ROSCA is very much popular in the study area. The analysis has been done for two classes separately (salaried class[1] and self employed class[2]). The results show ROSCA is equally important for both the classes. Variables taken enter the model statistically significant showing the reasons that how informal self help groups are popular in the study area. As the rural areas of Pakistan are not well developed and have no proper transport and communications system. People face major problem in moving from one area to other. And this is one of the reason due to which people save in nearby informal saving groups. In the same way, people are more devoted to religion (Islam) and try to avoid any activity prohibited by religion. People are not attracted by banks due to the interest 'i' related factors. And the overall region is captured by poverty and people cannot pay extra charges for useless matters. We know that formal credit associations have transactions charges, so people are more attracted towards ROSCA. At last the education level is also not satisfactory in these areas. And people do not have proper knowledge about the value of saving and formal credit organizations operations.

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[1] This class consists of teachers from selected high schools in the study area.
[2] Include those who do not have job or permanent monthly income like, shopkeeper, farmers etc.

The next section of the study throws light on brief literature available in the same area. The model and methodology has been discussed in section 3 of the study. It includes the area and sample of the study, the model and variables taken under consideration. Section 4 consists of the empirical results and the last section 5 concludes.

2: Review of Literature:

Archarya, et al. (1990) conducted a study for Nepal in which they tried to link ROSCA with banks. They found that ROSCA is very much popular in the study area and proposed that ROSCA's contributions should be given a status of formal funds. By this the participants of ROSCA will be eligible to get loans at a market rate which would not only benefit the participants but also it will add to the total accumulative sum of money. This study was helpful in giving formal status to rotating savings.

Adams and Canavesi (1992) found that in Bolivia even the employees of formal organizations like banks also save in ROSCA. The main reason is that it has some distinguished characteristics which formal credit organizations don't have. The same result was also found by Ardener (1995) who argues that some IMF employees also save in ROSCA. And in Jamaica a commercial Bank started function to offer savings accounts which emulate ROSCA (Handa and Kirten, 1999).

Besley et al. (1993) conducted a study and tried to find out the economic role and performance ROSCA. They investigated that this type of informal self help organizations are very simple to organize and perform well than other formal institutions. Especially random ROSCA can have better results and high level of utility than a formal credit market.

Bouman (1995) studied for three African countries (Senegal, Nigeria and Cameroon) and he analyzed that informal financial self help groups have the ability to change the whole mechanism of saving in Africa. He stated three main functions of these self help groups in study area. First, it provides life time Insurance. Second, Economic help (like loans, joint investment, work on infrastructural development, social security etc) to the members of these groups who participate to save. Third, ASCRA (a bigger version of ROSCA) which comprises of more than hundreds members, like commercial banks which have a huge range of customers.

Brink and Chavas (1997) also studied for a village in Cameroon and found that ROSCA is more popular than other formal organizations in the study area. They suggested that if properly managed, this system is more effective than all other credit associations in this region.

Rim, et al (1999) highlighted in their study that when it is difficult for poor people to approach to formal organizations like banks and saving houses, ROSCA is the most efficient informal organization for them to gather and save. And this is the reason due to which people in the study area tends to save more in this type of informal organization. Another main reason which individuals responded is the cost of banks transaction. Hence people try to avoid transaction costs and save in ROSCA.

Seibel, et al. (1999) studied for a formal financial institution in Nepal named Himalaya Finance and Savings Company. They stated that it was first an informal ROSCA saving group and now it has turned into a formal organization. They found that initially in Nepal workers meet on monthly basis and pool their money and at the same time they withdraw randomly the name of any participant from the bowl and transfer the whole sum of money to the lucky person. Time

went on and this group turned into a formal shape and now it provides loans and insurance to the people.

Smets (2000) studied for India and found that ROSCA can play a significant role in house financing for poor people of rural and urban areas of India. He found that it is easier for people to obtain ROSCA's finances as compare to other conventional Indian housing finance. ROSCA operate normally in informal sector beyond government regulations. However in some parts of India it is also operated by monetary authorities as non-banking financial institutions.

Bawani and Shanmugam (2006) conducted a study for Malaysia. They concluded that ROSCA should be legalized and given a formal status in the country. They argued that legalizing ROSCA will benefit people more as compare to other formal organization. They recommended legalization of such type of informal self help groups.

Dagnelie and LeMay (2007) uses primary data and stated that ROSCA is the commitment among the participants of the saving group to save in a weekly or monthly basis. They termed saving as a local, wide spread and self controlled issue in the study area. So people gather locally and arrange a group for saving. Further they found that ROSCA creates a discipline of saving among the participants. This type of saving organizations can also be used as a substitute of formal credit associations to increase the motive of saving in the people of a country. And a bidding ROSCA can also be used as an insurance substitute.

3: Material and Methods:

This section provides a brief discussion about the data, variables and model developed to check the impact of independent variables on dependent variable.

3.1: Data Description:

As we know that ROSCA is an informal organization and hence no secondary or time series data available for it in Pakistan. Therefore primary or cross sectional data has been collected through questionnaire and direct personal interview from the people who are the part of this type of informal organizations. Simple random sampling technique has been adopted to collect data.

Pakistan is a developing country and most of the people living here are either poor or middle class people. They do not have much access to banks and formal saving organizations. And also people of the study area are very devoted to religion and do not prefer interest 'i' which is prohibited according to the teaching of Islam. So ROSCA is much popular in Pakistan. In this study, data has been collected from the people of protected area of District Malakand. The data has been divided into two parts: salaried class[3] and self employed class. 15 male government high schools were selected randomly and teachers who participate in ROSCA was interviewed (total 80 respondent). On the other hand self employed class includes those who do not have any job. In this class main focus were given to shopkeepers randomly found anywhere in district Malakand. A total of 76 self employed people were interviewed.

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[3] Adams and Canavesi (1992) stated that employees of formal organizations also save in ROSCA.

3.2: The Model:

A simple linear regression model has been developed to test that how ROSCA is much poplar in the study area. The model is then checked separately for salaried and self employed people. SPSS software has been used to estimate the model.

$$Y = \beta_0 + \beta_1 LR + \beta_2 LL + \beta_3 R + \beta_4 BC + u_i$$

Where,

Y = Saving in ROSCA
LR = Location of ROSCA
LL = Literacy level
R = Religious factors
BC = Bank's Charges
u_i = Random variable

As observed frequently that location of the organization matters a lot and this is one of the major reasons why people save in these informal organizations. The study area is counted in rural areas of Pakistan. It includes hills and small villages situated far away from each other and no formal organizations like banks available at door steps (also see Dagnelie and LeMay 2005). And if available, are very far from most of the people which need transportation and other costs (Rim, et al (1999), also stated the same reason). Hence poor status of the people restricts them to save in banks. While informal organizations can be formed anywhere and anytime easily (Besley et al. 1993).

As stated above that data has been collected from rural area so the literacy level in this area is very low. Most of the people are illiterate and even had never been to school. But this variable is applicable only for the self employed[4] people who practice their own businesses. These people do not know how to deal with formal organizations which needs registration and account opening etc. They are not familiar with how banks and formal organizations operate. That's why they adopt the simplest way and save in the nearby ROSCA group.

The third and most important reason is the religiousness of the people. All of the people of the study area are Muslims and consider interest '*i*' illegitimate. Everyone tries to avoid acts which are prohibited in religion. As rotating savings includes no interest so people prefer to save happily.

Banks charges and transaction costs also restrict people to save in it (Rim, et al 1999). The per capita income PCI of people in Pakistan is less than $1100 and much less in rural areas where people are mostly dependent on agriculture and own small shops and businesses. People do not have much money to afford these costs consist of account opening charges, cheque book, ATM fee and annual bank charges. On the other if they save in ROSCA, they save their transportation and banks charges.

4: Empirical Results:

The data collected are extracted, tabulated and analyzed for both the classes (salaried class and self employed) separately. A brief detail of results for both the classes are given below;

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[4] Those who are well educated are included in salaried class and interviewed separately.

4.1: Salaried class:

A simple linear regression model has been run for this class which includes three independent variables location, banks charges and religious factors. The estimated coefficients for each variable are given below;

$$Y = -1.58 - 0.088LR + 0.75R + 0.30BC$$

In the above model – 1.58 indicates the value of intercept[5]. Which can be interpreted as if the coefficient values all variables included are equal to zero then no one will decide to save in ROSCA. It shows that variables taken are of great importance.

The coefficient for the location of group is – 0.088[6]. It can be interpreted as longer the distance less people will save. This indirectly shows that people save in ROSCA just because banks are far away from them. And it is not feasible for them to go weekly or on monthly basis to save in banks. In the same the value for religion is very high (0.75) and is positive related to dependent variable. It can be interpreted as people of the study area try to avoid acts which are illegitimate in religion. So more the person devoted to religion higher will be his tendency to save in ROSCA. The coefficient of last variable which is bank charges (0.30) are also positively related to the dependent variable. This can be interpreted as that people living in rural area of Pakistan and especially in district Malakand are relatively poor and cannot afford bank charges. This is why they tend to save in ROSCA which includes no costs, no account opening and no monthly yearly charges.

The reliability of the model can be estimated through coefficient of determinant known as r-square or R^2. Higher the value of R^2 more the model will be reliable and maximum variation in the dependent variables will be explained by the independent variables included in the model. The value of R^2 for salaried class is 0.91. This shows that 91% variation in the decision to save in ROSCA is explained by variables included in the model and the model is more reliable.

4.2 Self Employed Class:

The same linear regression model has also been run through SPSS for this class. But in contrast this model includes four independent variables[7]. The estimated values of coefficients are given below;

$$Y = -1.55 - 0.77LR + 0.72R + 1.36BC - 0.20LL$$

The empirical results for self employed class also resembles with those of salaried class. The value of intercept (–1.55) is again negative. It shows that if there are no problems like distance, literacy or interest "*i*" etc, people would not save in ROSCA.

Just like the salaried class, location of the saving organization matters for self employed class too. The estimated coefficient (– 0.77) shows that longer the distance lower will be the flow of people to save in a group. This is the repetition that people of the rural areas try to save in an

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[5] This is the constant value for a dependent variable. If all variables in any model are equal to zero then intercept tells the direction of dependent variable.

[6] The –ve sign show the inverse relationship between dependent and independent variables.

[7] Those who do not has any job are normally illiterate and do not know how formal credit associations work.

organization which is nearer and feasible to them. As already mentioned, that people of study area are more devoted to religion and try to avoid those things which are prohibited in Islam. The value for religious factors is 0.72, this mean that people save in ROSCA just because the formal banks and credit associations are based upon interest rate. The positive sign shows that more the people are religious greater will be saving in ROSCA. In the same way, poor people of the study area are unable to pay the bank charges on every transaction. They prefer those saving groups which have less or zero cost of transactions. As obvious from the estimated coefficient (1.36), which is relatively higher than other variables included in the model. Majority of the respondents are poor and attracted towards informal groups because it has no cost of transaction. More and more people will save in ROSCA if formal organization's charges are high. The last and fourth variable included in this model literacy level of the people. Greater portion of self employed class consist of illiterate people. The value in the estimated model for this variable is (– 0.20). Education has inverse relation with saving in ROSCA. This value can be interpreted as people with higher education would not save in ROSCA or people of the study area save in this type of informal group just because they do have proper education and do not know how these formal credit associations work. They are unaware how to open banks accounts and how to deal with it. On the other hand local informal groups are very simple to deal with. It does not require any education or specific training. Conclusively we can say that lower the literacy level higher will be flow of people to save in informal credit organizations.

The coefficient of determinant or the value of R^2 for this class is 0.93 or 93%. This value can be interpreted as 93 percent of variation in dependent variable is explained by explanatory variables. The model is even more reliable than that for the salaried class.

5: Conclusive Remarks:

The study tried to investigate the informal savings organizations in Pakistan. As a case study of District Malakand the study shows that how informal credit organizations like ROSCA are much popular in the rural areas of Pakistan. As we know that saving plays a major role in economic development of the people. People with higher saving are more likely to protect their futures as compare to those who have smaller saving. More savings can give you the opportunity to invest more and hence greater productivity and greater income.

Pakistan is a developing country. The credit associations here are not well established. The means of saving still needs proper attention of authorities to improve it. That's why people are not attracted to formal organizations. They usually try to save in informal organizations. There are a lot of reasons behind this issue, a few of which were briefly explained and quantitatively analyzed in the study. Many researchers have done their valuable works inside and outside the Pakistan from different angles. But the present study attempted from another angle and provided new hypothesis to the readers.

The empirical results of the study showed that ROSCA is equally popular in both salaried and self employed classes. Variables taken enter the model statistically significant showing the reasons that how informal self help groups are popular in the study area. As the rural areas of Pakistan are not well developed and have no proper transport and communications system. People face major problem in moving from one area to other. And this is one of the reason that

why people save in nearby informal saving groups. In the same way, people are more devoted to religion (Islam) and try to avoid any activity prohibited by religion. People are not attracted by banks due to the interest '*i*' related factors. And the overall region is captured by poverty and people cannot pay extra charges for useless matters. We know that formal credit associations have transactions charges, so people are more attracted towards ROSCA. At last the education level is also not satisfactory in these areas. And people do not have proper knowledge about the value of saving and formal credit organizations operations.

On the basis of above major findings it is suggested that policy makers should focus on the popularity of this informal group. It is immensely suggested that if commercial banks thinks upon a new account which exhibits the properties of ROSCA and avoid the interest is expected to get more attention of people living in rural Pakistan. A formal procedure should be adopted to aware the participants and make them motivated.

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