Why do members join indigenous informal financial institutions - RoSCAs?

An empirical evidence from equbs in Ethiopia

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Abstract

Cooperation among human societies can be traced back to the ancient times when people started to live together. There are evidences showing that ancient civilizations had practiced cooperation among themselves from cooperative farming to establishing informal saving and loan associations (www, Umanitoba, 2011). Those informal financial institutions are still widely used in many low income countries and are channels by which substantial amount of economic and social activities are carried out. Scholars, however, are calling for the transformation of those informal institutions to formal ones. Suggestions had also given to the government to come up with a better policy to utilize as well as incorporate those institutions to the formal system. But before discussing and recommending policy improvements about the linkage, the reasons why the members join informal financial institutions should be studied. This will help to come up with the proper recommendation about how to utilize those institutions. The objective of this study was basically to investigate why members join *equb* while they can use other alternative. In addition the study was interested to look if the motive is different based on attributes like the size and location of *equbs*.

The study is conducted using an empirical data collected in Ethiopia on Ethiopian RoSCAs known as *Equb*. Transaction cost theory is used as a grand theory. Earlier suggestions given by previous researchers on the field (that could be considered as middle range theories) are also used as the theoretical bases to conduct the research. Based on the theories, hypotheisis has been drawn and tested using the empirical data collected.

Accordingly, the results revealed that the motive of members differ based on the size of the equb they are participating. The social motives owtweigh the financial motives for those individuas in small equbs, i.e small equb participants are more interested on the social life they enjoy form participation. To the contrary, the big equb members are financially motivated. The "durable good motive" have found appropriate for the medium size equb members. All those motives, however, can be satisfied using other institutions. Low transaction cost as well as high commitment feature in equbs is the reason why individuals join equbs instead of using other options. This is a different outcome as compared to previous studies conducted in the field where a generic proposition was forwarded irrespective of the different attributes that individuals and RoSCAs possess.

Future research areas could be the change on the *equb* structure and operation if there is any, the trends of the change and why, how much reduction in transaction cost in informal institutions could attract members of equb, and the possible impact of introducing developed and modern "saving side" and "withdrawal side" commitment mechanisms in formal banking system on attracing equb members.

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1 Introduction

This chapter deals with the general background of the research. It incorporates general overview about the topic, statement of the problem, objective, limitations, significance, and outline of the study.

1.1 Background of the study

Cooperation among human societies can be traced back to the ancient times when people started to work together to enhance their efficiency in hunting, gathering, shelter construction and other activities. Historians have discovered evidence indicating cooperation among people in ancient civilizations like Greece, Rome and Egypt (www, CDI, 2011). Anthropologists have also uncovered evidence suggesting that Babylonians had practiced cooperative farming, while informal saving and loan associations, had been practiced in ancient China (www, Umanitoba, 2011).

Those informal associations are still widely used in many low income countries. They are channels by which substantial amount of economic and social activities are carried out (Anderson *et al.*, 2003). Bouman (1994) classified the functions of informal institutions into three: provision of security or insurance, economic function, and socialization. Life cycle events, religious ceremonies, education and rites of passage fall under the first category. The economic function involves the provision of loans and safekeeping facilities, development works for the community as well as collective investment. Activities that facilitate the ground for togetherness like meeting, drinking and eating together, and group recreational activities fall under the socializing function. For Sandsör (2010), however, some informal institutions can serve more than one function at a time. Among them Rotating Saving and Credit Associations (RoSCAs) are the most important ones. RoSCAs could be considered as economic and social institutions (Sandsör, 2010; Bouman, 1995), or cultural institutions (Sandsör, 2010).

RoSCAs, one of the oldest saving institutions in the world (Gugerty, 2007), are associations formed by a group of people willing to make a regular contribution to a fund which will be given to each member in whole or part on rotation basis (Ardener, 1964). Despite the fact that RoSCAs differ from one place to the other in attributes like organizational structure (Anderson et al., 2003; Ardener, 1964), membership, contribution, and enforcing mechanisms (Ardener, 1964), they are more or less similar everywhere (Geertz, 1962; Anderson et al., 2003; Ardener, 1964).

In Ethiopia, a country where it is not uncommon to find cooperative activities among the people (Engdawork, 1995), informal self-help institutions have existed for a long period of time in their own version. Tirfe, (1999) divides those local institutions in the country into three groups: those associated with social functions (eg. *mahiber*), those associated with socio-economic welfare (eg. *debo, meredaja*), and those associated with traditional financial institutions (eg. *equb, idir*). His classification somehow is similar to the functions of informal institution given by Bouman (1995) and Sandsör (2010).

This research focuses on the traditional financial institutions, specifically equb, an Ethiopian version of Rotating Saving and Credit Associations (ROSCAs). *"Equb is an association whereby members meet regularly to collect contributions of equal amount from every member and to allocate the amount"* (Getaneh, 2005:8). It could be started within a group based on strong ties like friendship, business associates, school mates, or within the neighborhood. In

large equbs, individuals that do not have close relationship might become members though each member needs to be known by at least some other members in the group, and their moral standing should be known by the community (Mauri, 1987). The money in equb could be used for different purposes ranging from house building, startup of small business to cottage industries.

1.2 Statement of the problem

In spite of the differences in the justifications they give to the *raison d'être* of RoSCAs, researchers in economics (Besley *et al.,* 1993, 1994; Dejene, 1993), development studies (Bouman, 1994,1995; Tirfe, 1999) or anthropology (Ardener, 1964) agree on the huge role and potential that RoSCAs have in the daily life of the society practicing them.

Study results cited by Bouman (1995) reveal a RoSCA membership rate of 50% to 95% among adult population in Nigeria, Cameroon, Gambia, Liberia, Republic of Congo, Togo and Ivory Cost. It has also been estimated that an amount equivalent to half of the national saving in Cameroon, double amount of saving in organized sector in Kerala (India), and 8% to 10% of the GDP in Ethiopia was mobilized by RoSCAs. Anderson *et al.,* (2009) survey in a slum in Kenya and observe that 57.2% of households in the study have at least one individual participating in a RoSCA. In a recent study in Ethiopia, Temesgen (2008) has found that the annual turnover of four equbs he consider in Addis Ababa, the capital city, was equivalent to 0.15% of the net current deposit maintained by all commercial banks in the country by the end of August, 2007. This shows the significance of those institutions in Africa in general and in Ethiopia in particular.

Given all those contributions and roles they play in the economy, RoSCAs cannot escape criticisms. In fact some scholars call for their improvement. Mauri (1987) has argued that the presence of those informal financial institutions in the economy would create dualism in the financial market at the macro level which will in turn contribute to inefficient allocation of resources. He further argued that those informal institutions couldnot accommodate the needs of the people as the income and saving of the people increase, and hence, need to be transformed. Other researchers like Dejene (1993) and Tirfe (1999) have also written about the possibility of transforming informal institutions into formal ones.

Engdawork (1995) and Tirfe (1999) believe that many of the development projects in Ethiopia have not been successful mainly because they disregard and do not consider the expertise and knowhow the people have. This knowledge includes the operation of informal financial institutions. Dejene (1993) and Temesgen (2008) revealed the lack of proper policies in utilizing the institutions efficiently. But before discussing and recommending policy improvements about the linkage, the reasons why the members join informal financial institutions (for this case *equb*) should be studied. This will help to come up with a proper recommendation about how to utilize those institutions. However, so far only few studies have been undertaken in this regard.

Kedir *et al.,* (2011) discussed as to why people want to use both banks and equbs at the same time. The research was an econometric study using data from a panel survey of households conducted between 1994 and 2004 in urban Ethiopia. It was, hence totally focused on urban equbs. In another recent study, Temesgen (2008) discussed the potential of Equbs in Ethiopia. Even though he tried to assess the motives of equb participants to join, his four sample equbs were large equbs from the capital city implying that his focus was on the urban equbs. Thus this research will fill the gap by taking both the case of urban and rural Ethiopia. Cases will

also be taken from different size *equbs* which has not been done in previous researchs dealing with the motives of individuals to join. In addition, this research is fully devoted to exclusively investigate the reason why members join *equb*. Previous researches have been looking at the motives just as part of another study.

This study deals with the very motives of members who join *Equb* by taking samples from small, medium and large *equbs*. In addition, the samples will be selected from both urban areas of the country – where members of *equb* are believed to have better access to formal financial institution services than those who are in rural areas – and rural areas – where access to financial institutions is very limited.

1.3 Objective of the study

The aim of the research is to investigate what motivate members to join RoSCAs by taking an Ethiopian RoSCA, *equb*, as a case. It endeavors to address the following research questions:

- ✓ Why do members join *equb* while they can use other alternatives?
- ✓ Once they join *equb*s, why do they want to keep on their participation? Are they satisfied with the service they enjoy out of it?
- ✓ Do the motives of participants differ based on attributes like location of *equb* and size?
- ✓ What lessons can the formal financial institutions draw from the motives of *equb* participants?

To achieve those objectives and explore the reason why members join *equb*s, the researcher uses a hypothesis testing approach. This choice was made for two reasons. First, there are previous studies conducted in similar institutions in other countries that guide further research in the field. Thus, preceding hypothesis given by other researchers could be used as a guide to come up with new hypothesis for possible testing. Secondly, setting a hypothesis will make the questionnaire and response consistent, understandable as well as easy to summarize which will help to answer the research questions properly. The following four hypotheses are chosen to be tested in this research:

- ✓ *Hypothesis 1: The motives of members to join equb differ based on the equb size where they involve in.*
- ✓ *Hypothesis 2: The motive of members in urban and rural equbs is different.*
- ✓ *Hypothesis 3: The social motives outweigh the financial motives in small equbs.*
- ✓ *Hypothesis 4: individuals in big equbs are more financially motivated than medium and small size equbs*

1.4 Scope and Limitation of the Study

The study sample *equb*s are selected from the capital city and from a rural district situated in Amhara Regional State, North Wollo Administrative Zone, Meket Woreda. Although the researcher believed that there are other attributes that could be used to select samples like member composition and age of *equb*, the study only considers samples chosen based on two attributes – size (small, medium, large) and location (urban – rural) of *equbs*. The reason for limiting the samples is time and budget constraint as well as the complexity that will be faced in collecting and sorting out the data.

1.5 Significance of the study

As stated in the statement of the problem section, the reason why participants join *equb* is one of the under researched topics in the area. Thus, a study conducted in the topic will contribute to the academic knowledge in the field. In real world, different stakeholders will benefit from this study. First, the research outcomes will help policy makers to have a better understanding about what members are expecting from *equb*s when they join. This understanding will in turn help to develop a better policy towards *equb*s if the government or any Non-Governmental Organization (NGO) should strive for the betterment of those institutions. Second, it will help financial institutions (both formal and semi-formal) know what their "potential customers" need and add new products to their menu. Finally, it will help the members themselves to get a better service once the formal institutions develop service ranges based on their needs.

1.6 Outline

The first chapter gives the reader a brief introduction on the study topic. It covers the problem statement, objective of the study, the study significance and the limitations of the research. The literatures related to the topic are discussed in the second chapter. The third chapter focuses on the method used in conducting the research. The empirical data collected from field is systematically presented in the fourth chapter. In the fifth chapter, the empirical findings are analysed and discussed using the theoretical framework discussed in chapter two as well as in relation to previous similar studies in other settings. The sixth and last chapter provides concluding remarks for the study.

Introduction → Theoretical Background → Methods → Data Presentation → Analysis & Discussion → Conclusions
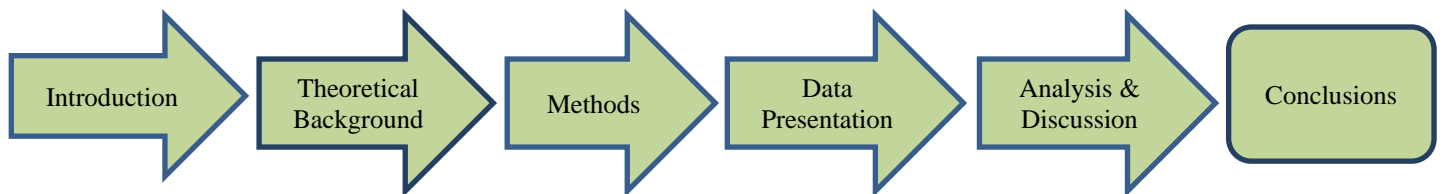
Figure 1: Illustration of the outline of the study

2 Theoretical Perspective and Literature Review

This chapter provides the theoretical views about the topic by going through selected literatures that can be related with RoSCAs in one way or the other.

2.1 RoSCA defined

Different scholars gave their own definition for RoSCAs. Geertz (1962), describe RoSCAs as mechanisms by which traditional social relations are mobilized to carry out nontraditional economic functions. It is an institution aimed at goal directed and planned savings yet fits into the pattern of the community (*ibid;* Gugerty, 2007). Geertz (1962) further stated that RoSCAs, like agricultural cooperatives, are intermediary institutions by which familiar motivations are mobilized and applied for unfamiliar purposes. It is just a product developed when a society start to shift to a fluid commercialization from traditional agrarianism.

Institutions established based on the motivation of members to provide good or service to themselves do have qualities and assets that cannot be claimed by other kinds of organizations. These include self-initiative of members, reduced need for public regulation (DeFourney, 1992 cited in Wickremarachchi, 2003; Bouman, 1994), and sensitivity of the services or products to the local needs (DeFourney, 1992 cited in Wickremarachchi, 2003).

2.2 Characteristics, structure, and types of RoSCA

From the definition of RoSCAs, it is possible to draw some attributes that could differ from one RoSCA to the other. The following are the major attributes of RoSCAs

Membership: The number of participants in a given cycle of RoSCA could range from handful to several hundred (Ardener, 1964). However, the number of members and incentives to participate are believed to have a negative correlation. This is because people may perceive that the monetary value of participation and the value of their individual voice will be insignificant as the number of members increase (Birchall and Simmons, 2004; Jones, *et al.*, 2009). Members could be selected based on age, ethnic affiliation, occupation, religion or educational background or any given social tie (Sandsör, 2010). Sometimes it is not strange to find RoSCAS established based on political affiliation (Ardener, 1964).

Contribution: The contribution of members, sometimes known as hands or shares, could be in the form of cash or kind or a combination (*ibid*). In some instances, for example in Japan (Embree, 1946, cited in Ardener, 1964), kind contributions are considered in the same way as cash.

Transferability: The funds in a given RoSCA could be or could not be transferable. The transferability depends on the agreement and consent of the RoSCA members at the time of establishment or in due course.

The fund: Despite the fact that all members contribute fixed and equal amount throughout the life of a given RoSCA cycle, the advantages that members enjoy are not equal. At some point in a given cycle, all members will switch from a position of net saving to net debtor except the one who collects the pot at the beginning of the cycle that will make him a net debtor in the whole life of the cycle (Callier cited in Dejene, 1993). In other words, "*all members but the last to receive the fund get interest free loans of decreasing magnitude for decreasing periods,*

and all but the first give interest free loans of increasing magnitude" (Ardener, 1964:211). This term pot is used in this research to refer this fund.

Enforcing mechanism: different enforcing mechanisms are being used depending on the base by which the RoSCA is established. If it is established based on kinship, acknowledged social relations among relatives could be used as default prevention mechanism (Fei, 1939 cited in Ardener, 1964). In Japan, to have an unpaid debt in RoSCA is very dishonorable among the community although there is no as such a dishonorable feeling in debt in general (Embree, 1946 cited in Ardener, 1964). This shows that the relationship between members of a given RoSCA and the social setting among members is a critical factor as an enforcing mechanism. Even if there is a possibility of excluding defecting members from future RoCSA cycles as a mechanism for enforcement, Anderson *et al.,* (2009) argue that RoSCAs could never be sustainable unless there is an external or social sanctioning mechanism.

Types of RoSCA

According to Anderson *et al.*, (2003) the organizational structure of RoSCAs or the allocation of pots among participants do have a relationship with welfare, sustainability as well as enforcing mechanisms used in the institution. They argue that the organizational structure of RoSCA itself can be designed so as to address enforcement issues. Based on the pot allocations system different authors have classified RoSCAs into bidding, random (Sandsör, 2010; Dagnelie and Lemay-Boucher, 2008; Besley *et al.,* 1994; Ambech and Treich, 2003); fixed or pre deterministic (Sandsör, 2010; Ambech and Treich, 2003); and decision RoSCA (Dagnelie and Lemay-Boucher, 2008).

The bidding RoSCA is characterized by the allocation of pots in a bid format. The winner of the pot at a given period of a life cycle is determined based on bid by which the one who offers the highest bid will win. Bids could be made at the beginning for the whole life of the cycle or at the beginning of each period in the cycle (Sandsör, 2010; Dagnelie and Lemay-Boucher, 2008). *"The individual who receives the pot in the present period does so by bidding the most in the form of a pledge of higher future contributions to the RoSCA or a onetime side payment to the other RoSCA members. The bidding process merely establishes a priority, everyone will take the pot only once"* (Besley *et al.,* 1994:702). The bid could take a premium or a discount format (Bouman, 1995). Bouman (1995) also discusses about a complex bidding RoSCA operating in West Africa, where a second fund with auxiliary credit is established with the money found from bidding. This will help to satisfy the demand of more than one participant at one period of a given cycle.

In a random RoSCA, members put a fixed amount of money into a pot periodically and then pots will be allocated randomly to one of the members (Besley *et al.,* 1994). A lottery could be drawn to choose the pot winner to stick with the norm of fairness in the institution (Sandsör, 2010). All participants will have equal opportunity of winning a pot at any time in the cycle of the pot. The next draw of the pot will exclude the winners of the previous pot/s (Besley *et al.,* 1994). If the life of the RoSCA continues with another cycle, then a new random set up will be arranged.

In the third type of RoSCA, fixed or pre-deterministic one, the organization as well as rotation system is the same as the random RoSCAs. The only difference in this case is that the pot allocation order will be the same as the first life cycle if the life of the RoSCA will be continued with the start of another cycle (Sandsör, 2010; Ambech and Treich, 2003).

The fourth type of RoSCA identified by Dagnelie and Lemay-Boucher (2008) is a decision RoSCA. In this arrangement the pot will be allocated based on the decision imposed by the administrative body.

Given all those choices, how should participants choose the best organizational structure for their group then? Sandsör (2010) suggests that groups that face enforcement problems may choose to establish the fixed RoSCA. On the other hand, as the concern for default reduces the more the chance to choose a random RoSCA. The incentive for default is higher in bidding RoSCAs and hence the members have to be more certain to prevent default using some sort of mechanism.

It might not be comprhensive to summarize and categorize RoSCAs merely into the four kinds identified so far. This is because, as Geertz (1962) notes, the structure and operation is changing from time to time with different tendencies in different place. For example, in Asia the leaning is towards the creation of complex methods to calculate the interest payments and the way those payments are going to be distributed among participants. In Africa, however, the change is towards the leadership pattern as well as internal organization leading to administrative cost increment.

2.3 Saving strategies reviewed

The importance of money is equal to those who have and who don't have it (Rutherford, n.d). If an individual spends all the money s/he has in a given period and still wants to purchase or consume something, s/he will face three options; to go without it until the next income, sell some asset and purchase what is needed, or find some way to tap into past or future income. Naturally, the third choice is preferable and it will be possible using financial services.

According to Rutherford (n.d), financial services exist to help individuals to manage their savings. The help could be in two forms. The first is by providing access to the past incomes stored in different saving forms. Secondly, financial institutions offer lending services against a saving an individual plan to make in the future. A saving strategy, thus, could take three forms.

i. ***Saving up strategy:*** is a strategy where an individual puts a sequence of savings and accumulate money into a large sum enough for serving some needed expenditure. Graphically, the saving is expressed as follows:
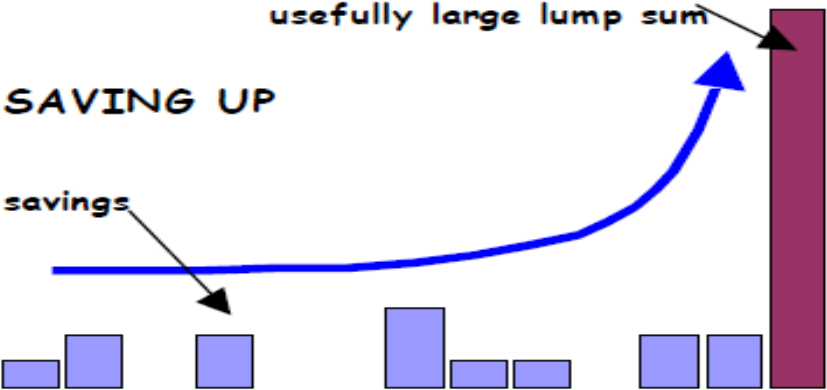
Figure 2: Saving up strategy (Rutherford, n.d: page 2.)

ii. **Saving down strategy:** this strategy is related to borrowing and repaying loan. The repaying capacity in saving down strategy is dependent on the act of saving just like the saving up strategy does. The basic difference in saving up and saving down strategy is that the availability of the lump sum money before the savings in the latter while it will be ready after in the former. *"The savings, of course, are used as repayments on the loan— either in intervals as income is realized or after a secondary process of saving up until enough has been accumulated to pay off the loan in a single balloon repayment"* (Rutherford, n.d: 2). Figure 3 presents the saving down strategy.
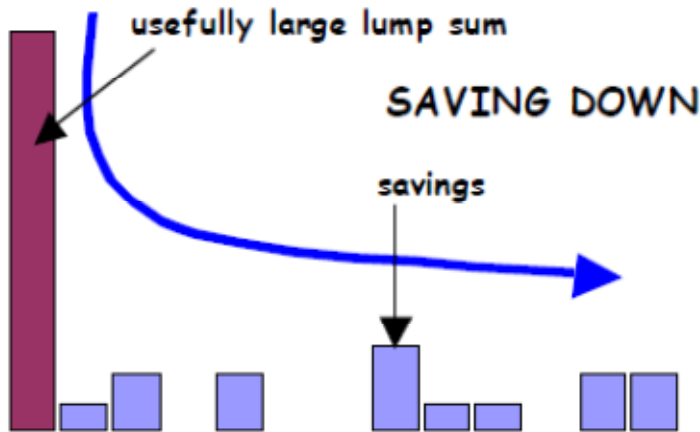
Figure 3: Saving down strategy (Rutherford, n.d: page 2.)

iii. **Saving through:** this strategy is a mix of the saving down and saving up strategies. The lump sum money becomes accessible at some point in a series of savings. Insurance coverages can be good examples of a saving through strategy. For example, in an insurance coverage for a car accident, saving is continuously performed in a series of payments and the lump sum will be available when the accident actually occurs. The strategy is presented diagrammatically in figure 4.
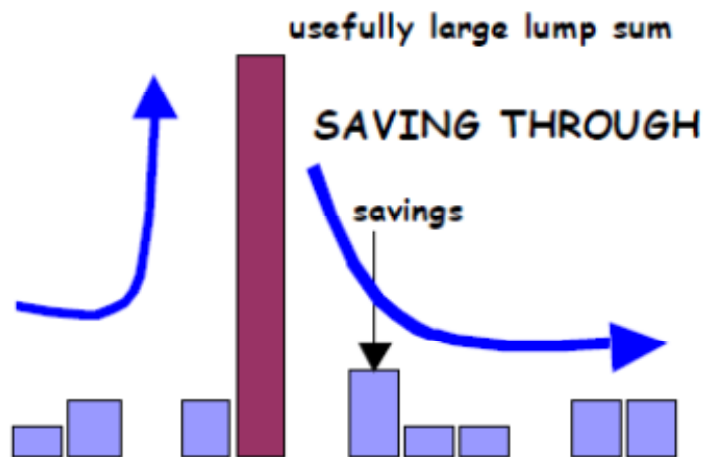
Figure 4: Saving through strategy (Rutherford, n.d: page 2.)

2.4 New Institutional Economics (NIE), Transaction Cost Theory and RoSCAs

The economic logic behind RoSCAs can be approached from two ways: the traditional one that analyses RoSCAs from the financial intermediation framework (the logic of the market) and the new one that looks from the collective action logic (Dejene, 1993).

In classical economics, Adam Smith explains that specialization determines the productivity of the economic system. Specialization could however be realized when there is an exchange which involves its own expense - a transaction cost (Coase, 1998). The lower the transaction cost the more specialization or division of labor and then productivity in the economy. But the transaction cost or the cost of exchange is dependent on the existing institutions including the legal, political, education as well as social systems. This is a point of departure for NIE – the performance of a given economy is governed by the institutions in the system *(ibid)*.

The concept of efficient markets in neoclassical economics works only when the transaction cost is zero. If there is a transaction cost, then institutions matter. That is why NIE argues that institutions really matter in the world where much of the national income goes to transaction costs. Thus, what the new institutional approach adds to the neo classical theory is that it incorporates institutions as critical constraint in the system and then analyses transaction cost as a connection between institutions (North, 1995).

The formation of institutions is underlined by the cost of transaction which in turn is determined by the level of information completeness and the limited capacity of human beings to process the information. To cite him, *"the costs of transacting arise because information is costly and asymmetrically held by the parties to exchange. The costs of measuring the multiple valuable dimensions of the goods or services exchanged or of the performance of agents, and the costs of enforcing agreements determine transaction costs"* (North, 1995:2). Therefore, human beings build institutions to reduce uncertainty in the exchange process.

The individuals and organizations with bargaining power as a result of the institutional framework have a crucial stake in perpetuating the system. In game theory, the probability of getting a cooperative solution will be higher when the players repeat the game many times which will help them get complete information about the performance of the other players. If the players do not repeat the game, then the gain form cooperation will be outweighed by the gain from defection *(ibid)*. Thus, it is this repetitive nature of RoSCAs that renders it a low default rate as well as low cost of exchange (Gugerty, 2007).

Institutions are composed of **"*formal rules, informal norms and the enforcement characteristics of both***"** (North, 1995). And it is the mix of these three that determines the economic performance *(Ibid)*. Sandsör (2010) argues that RoSCAs are characterized by low transaction costs including low traveling cost and distance as well as low bureaucratic procedures as compared to the formal financial sector.

Geertz (1962) has also stated that RoSCAs are institutions that are features of a society under transformation from agrarian to commercial one. Hence, they are institutions in the "*middle rung*" of development and they are institutions by which tensions in the transformation process are going to be resolved.

Ardener (1964) compares the advantage of joining RoSCAs than becoming a customer of banks or private money lenders. RoSCAs are able to provide small scale credits that banks are not interested in. For the banks, it is not easy to assess the reliability of new customers if s/he requests new loan. The RoSCA organizers are in a more favorable condition to do that which will make the transaction cost much less. This could be explained by the term *"information asymmetry"* in economics (Hansmann, 1999). In the case of money lenders, the interest rate is very high sometimes more than 100%. In the RoSCAs, however, it is very low in case it exists. The justification behind could be the low risk of default in RoSCAS since the social enforcement mechanisms are very strong which make participants hesitant for a long period before they raise their reputation in the community. This keeps the transaction cost very low.

Ownership can be used as a mechanism to mitigate some costs that could be incurred in the process of transactions if they were managed using simple market contracting. In the presence of market failures, especially, costs of market contracting will be very high. The market failures could be reflected by, for example, monopoly control in the market or information disparity among contracting parties, transaction cost of enforcing, monitoring and negotiating contracts (Coase, 1937 cited on Österloh *et al.*, 2002). The advantage of ownership is, thus, eliminating or at least reducing the conflict of interest between the contracting parties (Birchall and Simmons, 2004; Hansmann, 1999). Hence, in establishing a RoSAC, the members will own their own financial institution without the involvement of other parties. *"In simple terms, when you are on both sides of a transaction, you can always trust the other party"* (Hansmann: 1999: 390).

Mauri (1987) identified low transaction and administrative cost as one of the reasons why people prefer to join *equb* in Ethiopia. In the Ethiopian case, one of the reasons for the higher transaction costs of customers of formal financial institutions is the long distance they need to travel to get a service (Dejene, 1993). Bouman (1995), counter argues the suggestion to formalize RoSCAs by stressing that it is the informal nature of RoSCAs that holds the operating cost and the bureaucracy minimum. This will then keep the transaction cost low in RoSCAs and attracts participants to join.

2.5 Knowledge based approach and formation of RoSCA

The main difference between the knowledge based view and the transaction cost model is on the content of motivation.

The major theme in the knowledge based view is the process of generating dynamic capabilities in an organization since they are the most important intangible resources, which could also work for an institution like RoSCA. *"These are knowledge assets that are based on firm specificity, social complexity and causal ambiguity, which cannot be reduced to individual skills"* (Österloh *et al.*, 2002:66). Firms are assembled based on the will and individual knowledge of its members to achieve coordination and cooperation so that the respective individual skill will create a good dynamic capability for the institution they built. The drawback of this theory is that its disability to consider social dilemma as a problem for the success and even establishment of the institution *(ibid)*. Hence, for the knowledge based view, there is no conflict of interest among members over the institutions they establish. This assumption, however, is problematic. This is because some selfish individuals may want to take control and think themselves as the one who is the source of all the knowledge created in the institution and want to take a monopolistic position in the hierarchy *(ibid)*.

2.6 Extrinsic vs intrinsic motivation and the crowding effect

Extrinsic and intrinsic motivations are two concepts that we need to define here. With extrinsic motivation people satisfy their needs in a certain firm indirectly through compensation in monetary term. Thus, the coordination in the institution can be achieved by linking the monetary motive of participants with the goals of the institution. With intrinsic motivation, someone will undertake an activity for his or her immediate satisfaction and the motivation is self-sustained (Österloh *et al.,* 2002). Intrinsic motivation could be directed to a "*self-defined goal*", "*an activity flow*", or "*an obligation of personal and social norms for their own sake including benevolence, identity, norms of distributive fairness and procedural fairness*" *(ibid:64)*.

Classifying motivations into intrinsic and extrinsic does not mean that they are mutually exclusive. There could always be a relationship between the two and that is what is called *crowding effect*. A crowding effect could be either a crowd in or crowd out effect. Whenever there is a "crowd-in effect" the relationship between the intrinsic and the extrinsic motivation will be positive. In this case, any external stimulant, for example in monetary terms, will help strengthen the intrinsic motivation. The reverse will be true in the case of crowd-out effect. Crowd-out effect can be realized only when the intrinsic motivation is very high in the first place *(ibid)*.

Now the question is how it is possible to balance intrinsic and extrinsic motivation. Personal relationships are among the preconditions to establish psychological contracts that are based on emotional loyalties and are believed to raise the intrinsic motivation to cooperation. Firms or institutions can make intrinsic motivations to work better than the markets by using mechanisms that will promote personal relationships among participants. Thus, according to Österloh *et al.*, (2002) both transaction cost economics and knowledge based views have overlooked the management of motivation as a critical factor for the distinctive competence that an organization or institution can possess.

2.7 Contending hypothesis about what motivate people to join RoSCA

Researchers have conducted a study on RoSCAs to come up with possible suggestions as to why individuals join those institutions. Suggestions given so far by previous researchers are summarized in this section as follows.

2.7.1 RoSCA as a means to purchase durable goods

RoSCAs as an institution will help to create Pareto improvement in a society where the capital market is fragmented (Dejene, 1993). The reduction in waiting time to buy a bulky asset is one of the areas where the Pareto improvement is reflected. Anderson *et al.,* (2009) coin the term "*early pot motive*" as the motive of joining RoSCAs for the purchase of durable goods. This is because participants want to take the pot as early as possible if their need is to purchase an indivisible good so that they can use the durable good for long period. In their influential contribution, Besley *et al.,* (1993) have shown that, on average, RoSCAs allow participants to have the benefit of their saving earlier than they could enjoy it if they save alone. As a result, individuals can buy the good sooner by participating to the RoSCA rather than by accumulating private savings.

While arguing against the "*early pot motive*", Gugerty (2007) states that if the main motive of joining RoSCAs is saving for the purchase of indivisible goods, the person who will win the last pot will not be better off by joining RoSCA since he can save it at home. Thus, he will leave the RoSCA. Then, second to last person will become the last and he will decide the same thing since he will not be better off by taking the last pot. In such a way, no one will stay at the RoSCA at the end of the day. In addition, the study conducted by Gugerty (2007), shows that RoSCA participants favor divisible expenditures more than the indivisible ones. Thus, RoSCA could also be used as a consumption smoothing tool for participants (*ibid*; Ashraf *et al.*, 2003). In the case of Ethiopia, Abera and Zeller (2009) conduct a study in rural Ethiopia about food security. They found that the Ethiopian RoSCA (*equb*) membership do have a positive correlation with food security and hence is useful for consumption smoothing since participants use it for the purchase of divisible goods for consumption purpose.

2.7.2 RoSCA as insurance

The "insurance motive" is the contending suggestion for the "early pot motive" suggestion. This suggestion stresses that RoSCA members do not necessarily want to take the pot early since they also join RoSCAs as insurance scheme (Söndsor, 2010). Ambech and Treich (2003), while discussing about the *raison d'être* of RoSCAs, argued that RoSCAs are often presented as a substitute to insurance, particularly in developing countries where markets for insurance are underdeveloped. Yet, this interpretation applies for bidding RoSCAs, but not for random or deterministic RoSCAs, in which the allocation process does respond to some individual specific shocks (*Ibid*; Gugerty, 2007; Dagnelie and Lemay-Boucher, 2008; Söndsor, 2010). Moreover, people that group together in a given RoSCA generally belong to the same village and have similar occupations and revenues. This is not really compatible with risk-sharing activities (Ambech and Treich, 2003).

For Sandsör (2010), RoSCAs could be taken as insurance by members that do not receive the pot yet and suddenly need some money because of emergency. But this only works under a condition where other members are willing and the next pot winner is willing to switch the order. In addition, even if some aspect of insurance is found in RoSCAs, there is a very little chance of getting the insurance (in case there is any chance), once a person received the pot (Dagnelie and Lemay-Boucher, 2008).

Despite the fact that RoSCAs are unable to provide explicit insurance against idiosyncratic shocks, they can provide an implicit insurance by allowing delay or forgo payments for the participant in shock (Gugerty, 2007). The first way in which RoSCAs can offer implicit insurance is by allowing members to determine the pot allocation order based on their needs. In allocating the order based on negotiation, each participant gives his preferred turn to receive the pot with the justification behind and the group will decide the final order. The study conducted by Gugerty (2007) on Kenyan RoSCAs suggests that this kind of allocation mechanism is more common in more homogenous groups that are likely to have better information about each other. Ethnic homogeneity, blood relationship, and group size do have an impact on deciding allocation mechanism in the group while education status has a negative correlation with negotiated allocation mechanism. The second way of offering implicit insurance is provision of an option to exchange pot positions. This option, however, provides a limited insurance only for participants facing a shock before they receive the pot (Gugerty, 2007).

Thirdly, RoSCAs can offer implicit insurance by allowing participants to temporarily defer payments or even to forgo some payments when they suffer a shock. However, this will not

help participants to enjoy high level of insurance because of limited time period of forgiveness. In a situation where the group do not allow deferred payments and if a member do not pay one or more payments before s/he collects the pot, the group has two options (Gugerty, 2007): either not to give him his pot until he pay all the payments or to give him back up to the extent he pays – Gugerty calls it a "tit for tat" strategy. The second strategy *"economizes on the transaction costs of disciplining and sanctioning members and also avoids the unpleasant task of sanctioning a member who may be having difficulties at home"* (Gugerty, 2007:29). In case of default after collecting pot, it is only on the other coming round that the RoSCA can influence the member by using the tit for tat strategy. The other option is putting a social pressure and/or sending delegates or bringing him/her in front of the members so that s/he can justify the reasons for failure to pay periodic contributions.

The last way is side payments. The member who wins the pot at a given time may lend some money to another member outside the RoSCA – meaning without formal recognition of the other members in the institution.

2.7.3 RoSCA and socio-cultural relations

RoSCAs as social cohesion mechanism

Beyond the friendship gain from RoSCAs, members can build their reputation and network in the community in addition to the benefit of getting information and economic benefit (Sandsör, 2010). Geertz (1962:260) states that, *"RoSCA is a socializing mechanism, in that broad sense in which 'socialization' refers to not simply the process by which the child learn to be an adult, but the learning of any new patterns of behaviour which are of functional importance in a society, even by adults"*.

RoSCAs can also be used as a means to enhance social status (Aredner, 1964). The organizers sometimes use it as a means to gain status and to demonstrate their leadership power as well as their administrative ability. Participants, on the other hand, use it as a means to show their generosity by assisting the organizer. In the case of bidding RoSCAs, the person who wins the bid for a given pot may feel proud simply because he wins the other bidders for the same pot.

RoSCAS as a Tool to Cope Social Pressure

Ambec and Treich (2003), in their attempt to answer the question why people join RoSCAs given there is another option of financial agreement that "*pareto-dominate*" RoSCAs come up with the "*social pressure model*". In the model they assume that individuals are not able to resist the day to day pressure from the society and hence they use RoSCAs as device to escape from pressures. Interestingly, they challenge the "durable /indivisible goods" model in a way that participants may end up with the purchase of durable goods with the pot but they did it because the question of divisibility will not be raised among relatives. Hence, the durable good hypothesis will finally lead to the "social pressure" hypothesis.

Ambec and Treich (2003) continue by defining RoSCAs as stable financial agreements by which participants reduce their vulnerability to social pressure by reducing their future available income. They also argue that those financial agreements are best suited for an economy consisting of a society characterized by strong solidarity as well as redistribution norm. In the case of rural Ethiopia, Dejene (1993) states that *equb* is not merely a business oriented institution rather it is an institution where mutual assistance is reflected at the time of difficulties.

For Bouman (1995), RoSCAs do have an illiquidity function for participants. Participants in fear of greedy relatives want to become illiquid and hence prefer to deliberately join RoSCAs as an escaping mechanism. This could be labelled as "pressure from the bottom". From the other side, there are places where RoSCA contribution is recognized as obligatory by the society (Bouman, 1995). Since the pressure is from above we can say it is "a pressure from up".

Some individuals may join RoSCAs to get personal gains like economic benefits, social image, and reputation. Some others may get motivated to join simply because they want to contribute for the collective good without expecting any personal gain in return (Jones *et al.*, 2009). Such kind of participation could be motivated by the individual's feeling of belongingness to a certain group, perception of duty to participate, or a simple sense of community all related to the need for social security. If someone perceives that s/he does have a social obligation to participate in such organizations, then the pressure will be high in a place where the size of the community is smaller i.e size of community and pressure of perceived social obligation of an individual are inversely correlated. Study results cited by Jones *et al.,* (2009) have proved concern for community is among the motivating factors for individuals to join financial cooperatives.

2.7.4 RoSCA as a commitment device

Another reason why people might want to join RoSCA and tie themselves with some kind of saving pattern is their knowledge about their procrastinating nature – the feeling of "*I can start saving tomorrow, not today*" (Sandsör, 2010). Thus, they need some kind of commitment device to cope up the procrastination difficulties. Here is the point of departure for Gugerty (2007) to develop the commitment device model as an alternative explanation for the question why people join RoSCAs. For Gugerty (2007), RoSCAs is a commitment mechanism for those individuals that do not have access to good commitment technologies. In the western world, specifically in the US, some modern commitment devices are observed like over paying taxes to collect the lump sum at the end of the year, and choose to open saving accounts that charge customers per withdrawal (Ashraf *et al.,* 2003).

According to Dagnelie and Lemay-Boucher (2008), RoSCAs could be a commitment device to protect participants from two potential risk categories: internal threats, like present biased preferences; and external threats, like spouse pressure. The present biased effect is dependent on the personality of a given individual – whether s/he is a naive or sophisticated individual (O´Donoghue and Rabin, 1999). Naive individuals are highly affected by the present biased effect. A sophisticated individual is very pessimistic about his/her behavior in the future while a naive individual think that s/he will behave in a way that s/he wants in the future. In the middle, there are partially naive individuals who know that they may over consume but they underestimate their weakness (Bryan *et al.,* 2010).

For a sophisticated individual, doing things later is always less attractive. *"When costs are immediate, a person is always better off with sophisticated beliefs than with naive beliefs. Naiveté can lead you to repeatedly procrastinate an unpleasant activity under the incorrect belief that you will do it tomorrow, while sophistication means you know exactly how costly delay would be"* (O´Donoghue and Rabin, 1999:105). In a situation where the reward is immediate, a person could be better off if he do have a naive belief. In anyways, individuals who are "sophisticated" will have the ground to establish a RoSCA that will help them to become committed for saving (Gugerty, 2007).

Several mechanisms to encourage commitment presented by the literature of psychology could fall in two categories: intra-personal and extra-personal (*ibid*). Behavior such as confiscating the temptation from making personal rules with self-governing conducts is included in the intrapersonal mechanisms. The extra personal mechanisms are about imposing some kind of social or physical imposition on the available future choices.

Commitment mechanisms do have two important features: the deposit side features and the withdrawal side features (Ashraf *et al.,* 2003). The deposit side features help individuals to make a regular periodic deposit to their saving accounts while the features on the withdrawal side discourage or deter withdrawals by the individual.

Ashraf *et al.,* 2003 point out some **deposit side features** that encourage commitment in the modern case where there are formal financial institutions. These includes: **automatic transfers** - help individuals to transfer their money from one kind of account to the other and is common in the USA. However these are non-binding commitment devices since individuals can stop the transfer at any time they want; **Automatic reduction from paychecks** – the case here is similar with the automatic transfer except that the money will be deducted from the individual even before it is credited to his/her account; **Deadline for bonuses** – this is an arrangement by which financial institutions organize a lottery ticket if individuals can save a certain minimum amount in a given month. The deadline may force or encourage individuals to save at least the minimum amount set by the institution; **Automatic increase** – this is a commitment made by individuals who expect windfall income or increment in the future to save a certain percentage before the increment actually happen; **Deposit collectors** - are effective but costly way of saving. One can argue that deposit collectors exist because they reduce transaction cost. Indeed the transaction cost is lower as compared to saving in a bank but it is costly as compared to saving at home. The commitment factor should be considered here instead.

On the other hand there are devices used on the withdrawal side. These includes: **Delayed withdrawals** - a deliberate feature installed in the account of customers to delay the withdrawal process; **Withdrawal fee** – fixing a fee to withdrawal transactions only, customers might prefer to maintain the account without a transaction fee but self-motivated individuals who want a commitment device might use the service; **Lock box** – the individual deposit money in a box where the key of the box is under the custody of a bank and then either a bank staff will collect the money regularly from the box and deposit it to the saving account or the customer will take the box to the bank so that the assigned staff can open it and make the deposit to the customer account; **restricted timing of withdrawal** – time deposit is a classic example of commitment mechanisms to save money for a specific period of time. The interest rate offered by financial institutions is usually higher than the ordinary interest rate but can be considered as a commitment mechanism. It could take two formats, either saving a fixed amount for a specific period of time or opening a fixed time deposit account matured on a date when the deposit reaches a pre agreed amount; **Restricted use (or targeted savings)** – "*Perhaps the most common and straightforward commitment savings feature is the restriction on the use of funds. To the extent that individuals want to save for particular purposes but have difficulty doing so with their normal savings account, a specially labeled account for that purpose in fact has the necessary influence to inspire increased savings toward that purpose*" (Ashraf *et al.,* 2003:8); **Peer Monitoring** – is another mechanism that will create a peer control among group members in both saving and withdrawals which makes it both a deposit and withdrawal side commitment mechanism.

2.7.5 RoSCA as intra-household conflict solving mechanism

Anderson *et al.,* (2003; 2009), in what they call "*household conflict motive*" argued that some individuals want to join RoSCAs because of an intra-household conflict between saving the money to purchase durable or indivisible goods and the need for immediate consumption. According to them, the household maximizes its joint utility under some budget constraint. Hence, a conflict could occur in a household as far as the budget allocation is concerned. Unlike men, who only care about consumption in a household, women are believed to be careful about both having durable goods and consumption in a household. Thus, women usually use RoSCAs as a mechanism to solve this household conflict (*ibid*). Sometimes, they even join RoSCAs without their husbands' knowledge.

Dagnelie and Lemay-Boucher (2008), however, challenged the "*household conflict motive*" in their study in Benin. 40% of the sample groups in their study require spouse approval to become a member of the group. In addition, the majority of the groups that share the financial leftovers organize feasts and celebrations at the end of each cycle with the involvement of friends, relatives and neighbours of the participants. Gugerty (2007) strengthens this argument by mentioning the issue of secrecy in RoSCAs. Based on the organizational structure of many RoSCAs, Gugerty concludes that the primary objective of women members is not to hide money from their spouses. In addition, the spouses of participants will be aware of the involvement of their spouses' participants since the monthly meetings will be held in the house of the pot receiver. Anderson *et al.,* (2009), replied that it is ok if the husband knows the involvement of his spouse once she started to participate in RoSCA since he will spend it on indivisible item when she received the pot. Gugerty (2007) then continued with the argument and said if that is the case, the husband is using the participation of his wife as a commitment device. Many empirical evidences have also explained cases where husbands support the participations of their spouses in RoSCA. Thus, participation in RoSCA is a household strategy not a mechanism used to hide some funds away from husbands. Ashraf *et al.,* (2003) have also stated that intra-household conflicts and allocation dilemmas may lead to the demand for some kind of commitment device.

3 Methods

This chapter gives a summary of the methods used in the study including; the research purpose and approach, research design, data collection and analysis, sample selection and description, as well as validity of the study.

3.1 Purpose and approach

The purpose of this study falls under the explanatory category, where the purpose is to give an explanation about a phenomenon. The study also explains the situation in a form of causal relationship – what is the cause for member participation in *equb*s?

3.2 Research design

"*Research design relates to the criteria that are employed when evaluating social research. It provides a framework for the collection and analysis of data*" (Bryman, 2008:31). A research design could be classified into five: experimental, cross sectional or survey, longitudinal, case study, and comparative design. This study employs cross sectional (survey) research design.

For Saunders *et al.,* (2007) survey design allows a researcher to collect a large data (quantitative data that could be analyzed quantitatively by using inferential statistics) from considerable population in a short period of time simultaneously and economically. The enablement to collect data from the samples simultaneously will help to make comparisons and examine relationships between variables and will impede the researcher from manipulating the variables under consideration. The survey design also gives a researcher the power to control the research process. Those recommendations fit for this study since the data collected is quantifiable, and the research approach is deductive involving a hypothesis testing.

While all the above reasons reflect a growing body of evidence to support the efficacy of survey design, the approach is not without its critics. For example, Bryman (2008) mentions that it is difficult to be certain about the presence of causal relationship even if one discovers a relationship between variables. What one can say is the variables are related. In addition, the researcher should ensure the internal validity of the research since the abovementioned reason reduces the internal validity of cross sectional design.

3.3 Data collection and analysis

Data related to the reason why members join *equb*s was collected using a questionnaire and interviews. Questionnaires were distributed to ordinary members while interview was conducted with the organizers. In order to identify respondents, the researcher attended the meeting of most of the selected *equb*s. When the researcher was not able to attend the meeting, questionnaire was given to the officials so that they can distribute it to the members randomly. The *equb*s as a group had been chosen through the researcher's social network based on their location, size and relevance to get the necessary information that the researcher intended to collect at the beginning.

The questionnaire (see appendix II) has four parts. The first part includes questions related to demographic information of the respondent. Questions related to member's preference of *equb* type, pot assignment as well as *equb* structure are embraced in the second part. The third

section entails questions regarding member's attitude towards formal financial sector. Finally, affirmative questions asserting consistency of respondent's answer as well as questions used to summarize the whole questionnaire are asked. Individuals who are literate filled the questionnaire by themselves. However, the researcher collects information using self-filled questionnaires from illiterate respondents. The questions asked in the questionnaire generally cover the following areas:

- The reason/s why members join *equb*s
- The reason/s why members prefer *equb*s to other options available
- What substitutes *equb* if they have to stop taking part in one

Individual respondents and the interviewed *equb* organizers or officials had been assured about the anonymity of their responses in the research as suggested by Flick *et al.,* (2002). Based on his consent, however, the name of the interviewed microfinance official is mentioned in the research report.

The Analysis consists of three existing flows of activity: data reduction, data display and conclusion drawing/verification (Miles & Huberman, 1994). The data collected using questionnaire is quantifiable. This quantifiable data was organized systematically and analyzed statistically with a statistical software SPSS (Statistical Package for the Social Sciences).

3.4 Sample selection and description

In order to ensure the replicablity of this research, the procedures that the researcher follows in collecting as well as analyzing the data is described as follows.

As one of the objectives of this study is to investigate if there is a difference in motive of members of *equb* based on the location of the *equb*s (urban – rural dichotomy) the samples are taken from both urban and rural areas in Ethiopia. *Equb*s in Addis Ababa, the capital city, have been selected to get urban *equb* samples. Addis Ababa is selected because the city hosts different big markets like Mercato (the biggest open market in East Africa), Shiromeda and Shola which will help to get the largest *equb*s. The city also represents different group of people based on wealth, ethnicity, or social status which will help to get the real urban setting that could represent other urban areas of the country.

The rural samples are taken in Amhara Regional State, North Wollo Administrative Zone, Meket Woreda where the researcher comes from and has a better knowledge about. He has also the language skill that helped him to communicate easily with the participants in the research. The researcher has also benefited from the social network he has in the area which facilitated access to find right persons that could provide the relevant information.

In order to get the relevant information to achieve the other objective of the research (investigate if there is a motive difference based on the size of the *equb*), three categories of *equb* are identified in both rural and urban areas based on their size as large, medium and small. The larger *equb*s are *equb*s where the pot is collected weekly and the minimum contribution per person to the pot is 1,000 Ethiopian Birr (ETB). Those *equb*s are usually dominated by traders. One member can contribute more than one full contribution which will enable him to win the pot as much as the number of full contributions he made.

In medium size *equb*s the pot is collected and distributed to the winner every month. A full monthly contribution per person to the pot is between 500 ETB to 1000 ETB. Mostly,

medium *equib*s are organized by civil servants or individuals with monthly regular income. Like the big *equib*s, one member can contribute more than one full contribution. The small *equib*s are *equib*s where the contribution per month per member is less than 500 ETB. The pot could either be allocated on monthly or weekly basis. Those small *equib*s are usually organized by those individuals, unlike the civil servants or the traders, who do not have a regular income on monthly or weekly basis. The members of the small *equib*s in this research consists of farmers, weavers, house wives, local beer (known as tela) sellers and small scale retailers.

The following are the selected *equib*s.

Urban equbs in Addis Ababa

- ➢ Big *equib*s

  - *Traders' equb in Shiromeda area* – this *equb* is found in a market locally known as *shiromeda*. The market is a center for traditional clothes, ornaments and gift items. This *equb*, established in 1994, operates with a written agreement (see appendix IV). It consists of 62 members and the pot is collected every week. If an individual contributes a full pot, s/he must pay 2500 ETB per week. Thus, a winner in a given week gains a total of 155,000 ETB. In addition to the weekly contribution, every member pays 10 ETB to cover the entertainment expenses during the weekly meeting. The pot is assigned based on lottery and sale. For the first ten weeks, contribution from every member will be deposited and not distributed to any member. At the tenth week, 5 lotteries will be drawn and 5 of the pots will be sold at a pre-determined price. Then, lottery will be drawn for pots every other week and the other pots will be assigned based on sale. The revenue from the sale will be deposited and will finally be distributed back to the members at the end of the *equb* cycle.

    Whenever a new cycle begins, every member is expected to sign on a new agreement approved by all members. Selling a pot to another member is possible based on the consent of the buyer and the seller. The *equb* officials are responsible for the preparation and application of the agreement. For this duty, they get one pot for every cycle as compensation. 8 questionnaires have been distributed for members randomly and 5 of them has been filled out and returned.

  - *Traders' equb in Ehil Berenda area* – this *equb* is found in Mercato. The place, *ehil berenda* (literally mean cereal corner), is a center for cereal trade. The *equb* selected for this research was established in 2006 with a written agreement. The current cycle consists of 98 members. The contribution and assignment of pot is on weekly basis and the contribution is 2,000 ETB. Thus, the winner earns 196,000 ETB at a time. The pot assignment in this *equb* is similar to the Shiromeda traders' *equb*. Unlike the *Shiromeda equb*, however, the organizers in *ehil berenda equb* do not get compensated in cash. But they can take the first pots without a need to get into a lottery draw. 8 questionnaires have been distributed to the members randomly and 4 of them have been returned filled.

  - *Traders' equb in piassa area:* this *equb* was established in 2003. The current cycle, which will run up to the end of June 2012, consists of 67 members. The pot is drawn every week and the minimum weekly contribution by a single member is

1,000 ETB. Like the other two big *equb*s, 8 questionnaires have been distributed and 5 of them returned filled.

➢ Medium *equb*s

- *Nile insurance main branch staffs equb*: This *equb* is organized by the head office staffs of one of the insurance companies in Ethiopia – Nile Insurance. The *equb* is active since its establishment in 2007. The current cycle, expected to be completed in 6 months during the data was collected, has 10 members. The monthly contribution by each member is 500 ETB. Unlike the big *equb*s, there is no written agreement in this one. Five sample individuals have been chosen randomly to fill a questionnaire and all of the distributed questionnaires are returned. Samples from bank and insurance staff are consideeed purposely because those employees enjoy a credit scheme (both interest free and with interest) offered by their employer. But they still keep on joining *equbs*.

- *United bank Itegue Taytu branch staffs equb:* every member in this *equb* is expected to contribute 500 ETB per month. The pot is assigned on monthly basis. The *equb* is operating since 2008. Currently, the number of participants is 8 and there is no written agreement to guide the day to day operation of the *equb*. Five questionnaires have been distributed for randomly selected members and all of them were returned filled.

- *Arat killo area computer typing and photocopy shop equb*: the members of this *equb*, unlike the other medium size *equb*s selected for this study, are not employees in the same company. However, their working place is the same - *Arat kilo area*. The members are providing photocopy and computer type writing service for the students from Science Faculty of Addis Ababa University located on the other side of the road. The number of members in the current cycle is 13 with a weekly contribution of 150 ETB but the pot is assigned on monthly basis. Eight randomly selected members were asked to fill a questionnaire. Six of them returned the questionnaire. From the returned six questionnaires, one of them was not filled properly and hence discarded.

- *Kebele 05 equb (Janmeda area)*: This *equb* has been established 30 years ago. Currently, the *equb* has 31 active members. The weekly contribution in this *equb* is 250 ETB. The pot is, however, assigned biweekly. Thus, a winner of a given pot will earn 15,500 ETB. The winner is assigned based on a lottery and auction basis for every other pot respectively. Unlike the other medium size *equb*s considered in this study, this *equb* has a written agreement. Four questionnaires have been distributed in this *equb*, and three of them have filled properly and returned.

➢ Small *equb*s

- *Ferensay legasion tela sellers' equb*: this is an *equb* established by local beer *(known as tela)* brewers and sellers residing behind the French embassy in Addis Ababa. Members in this specific *equb* contribute 100 ETB monthly. Some of the members are also members of another *equb* where the pot assignment is on weekly basis. The current members are 12 and they don't have a written agreement. 4 members have been chosen randomly and fill the questionnaire. Since the members

that the researcher choses were illiterate, the questionnaires were self-filled by interviewing them.

- *Ferensay legasion tej bet equb:* this is an *equb* collected in *Tej Bet* (a bar where another locally brewed alcohol known as *Tej* is being sold). Every member contributes to the pot 25 ETB weekly. In the current cycle of the *equb* 35 members are participating that will help the winner of the pot to earn 875 ETB. There is no written agreement to guide the operation of the *equb*. Like the samples form *tella* sellers' *equb,* the questionnaires for this *equb* are self-filled since the respondents were illiterate. 3 samples have been selected from this *equb*.

- *Womens equb in 05 kebele of Ferensay legasion:* Established by women residing around 05 kebele of Ferensay Legasion in Addis Ababa, this *equb* does not involve a written agreement. Each member is expected to contribute 100 ETB per month. The pot is assigned based on the demand of members. If there is no demand, a lottery will be drawn. Unlike the above two small *equb*s considered, most of the members here are literate. Six questionnaires have been distributed to the members and three returned filled.

- *Ferensay legasion film rental house equb:* the last group of small urban *equb*s has been chosen from this *equb*. The *equb* is contributed weekly whereby every member should contribute 100 ETB. Currently, there are 13 active members. 5 questionnaires have been distributed to randomly chosen members where 3 of them has returned filled.

Rural equbs in Meket

➢ Big *equb*s

- *Filakit traders' equb:* this *equb* is operating in the area for over a decade. Since its establishment, the *equb* basically works on a written agreement. The *equb* is also registered in the woreda administrative office. By the time the questionnaires were distributed to the randomly selected members in the *equb*, the cycle was left with the last three pots. When the researcher visits them again to collect the last filled questionnaire, they were celebrating the completion of the cycle with a get together. The number of participants were 54 where by each member contributes at least 1000 ETB for every pot assigned weekly. The pot is assigned in a lottery format. The winner of the next pot is revealed one week earlier. In addition to the weekly 1,200 ETB contribution, every member should put 350 ETB weekly to the capital of the *equb*. The collected capital will be loaned out to members in need of loan with an interest rate of 3%. The winners of the last three pots will earn an interest in order to be compensated for the time they wait to get the pot. The last winner will get the higher interest payment. The *equb* capital will increase by the net amount from the monthly contribution, the interest earned from loan and the payment for the last three winners. A member who wants to cease his/her participation is eligible to take the capital he contributes and the interest earned proportionally. A total of 15 questionnaires were distributed to randomly selected members and 12 of them returned filled.

- *Geregera traders equb*: This *equb* is more or less similar with the Filakit traders' *equb* except the number of participants here is six lower than its Filakit counterpart. Six questionnaires have been distributed and all returned filled.

➤ Medium *equb*s

- *Meket Woreda Agricultural Office staffs equb:* Established by employees of the Woreda Agricultural office without a written agreement, this *equb* has been active since 2008. There is no practice of selling pots though there is a possibility of changing pots if the winner and the other member in need can agree on changing pots. Currently there are 9 members participating in the *equb* each contributing 500 ETB every month. If s/he wants, a member can pay two or more contributions to the pot and won as frequent as his/her contribution in the cycle. Eight questionnaires have been distributed in the *equb* and 5 of them were returned filled.

- *Meket Woreda Finance Office staffs equb:* the operation of this *equb* is almost similar to the Agricultural office staffs' *equb* except that there is a written agreement here. There are 11 active members here each contributing 500 ETB per month. 7 questionnaires have been distributed and 5 of them return filled.

- *Meket Woreda Education Bureau equb:* the operation of this *equb* exactly resembles with the Agricultural office staffs' *equb*. Out of five selected samples for the study, 3 questionnaires were filled out and returned.

➤ Small *equb*s

- *St. Micheal equb:* this is an *equb* established a decade ago. This *equb* is more religious focused. Currently the group consists of 39 members. The minimum weekly contribution by a member is 100 ETB. Given some members can made more than one contribution to the pot at a time, the average value of the pot is 5,000 ETB. The pot is assigned based on lottery and auction (auction for every third pot). The income from the pot sales will be used to cover the entertainment expenses during the meeting of the group every week. At the beginning of each cycle, every member contributes 3 ETB in addition to the weekly contribution. This 3 ETB will be saved by the *equb* and be borrowed for a member in case of any emergency or needed for any other reason. An interest of 3% is calculated on the borrowed money and the money is expected to be returned at the end of the *equb* cycle with the interest accrued. The saved capital as well as the interest income, however, is not going to be re-distributed to members. Instead, they will give it St. Michael Church – located in the *equb* area. The *equb* involves a written agreement of four articles where the religious aspect of the *equb* is clearly articulated. Eight questionnaires were distributed and returned filled.

- *Farmers' equb in Maserut:* this *equb* is established by farmers residing in Maserut kebele of Meket Woreda Administration. Each member contributes 25 ETB weekly. Currently, the group has 18 active members. Thus, the winner of a given pot will get 450 ETB. Six questionnaires were distributed in this equb. Since most of the members in this *equb* are illiterate the data is collected from the samples using self-filled questionnaire.

In addition to the data collected via questionnaire from members, an interview has been conducted with organizers of the considered *equb*s. To get additional information regarding

the motive of *equb* members, the researcher has also conducted an interview with the CEO of a microfinance institution (MFI) operating around the area. The institution is called Meket Microfinance Institutions. It has been established and operating in the area since 1998.

3.5 Validity

One of the most important criterions of research is its validity. Validity is concerned with the veracity of the conclusions that will be drawn from a piece of research. Validity could be seen from either externally or internally. External validity is about the generalizability of results of a given study beyond a specific research context (Frankfort-Nachmias and Nachmias, 1996). For a study to have internal validity the researcher has to be sure that what is being measured is what the researcher thinks they are observing.

The two most important issues in assuring the external validity of a research are sample representativeness and *"reactive arrangements in the research procedure"* (*ibid*: 113). For Bryman (2008), the external validity in cross-sectional or survey design is typically strong when samples are collected randomly while the internal validity is weak in survey design. In order to make the study valid both internally and externally for this research, first representative *equb* groups were systematically chosen by considering the location, number of members, the age of the *equb* after classifying them based on their size. Once the sample *equb* group is chosen, respondents have been chosen randomly which will make the external validity strong.

To strengthen the internal validity, different authors recommend the use of triangulation - the use of different data collection methods for the same study (Whittemore *et al.,* 2001; Merriam, 1995). For this study, information is collected from respondents via questionnaire and interview with organizers of *equb*s. In addition to the information gained from the equb, an interview has been made with the CEO of a microfinance institution working in the area where sample *equb*s were taken to increase the validity of the results.

4 Data Presentation

In this chapter, the empirical data collected will be presented. The chapter begins by describing the demographic composition of sample respondents. Then after the cross tabulation results from SPSS are exhibited.

4.1 Demographic characteristics of samples

A total of 121 questionnaires have been distributed. 91 (75.21%) have been returned filled while 1 (0.8%) questionnaire has been discarded since it was not filled properly by the respondent. 45(49.45%) of the returned questionnaires were filled by respondents from urban *equb*s whereas rural samples filled and return the rest 46 (50.55%) questionnaires.

As far as gender is concerned, 70% (64) of respondents were males while the rest 30% (27) were females. 30 (33%), 30 (33%), 22 (24.2%), and 9 (9.9%) of the respondents are aged 20-29, 30-39, 40-49, and above 50 years old respectively. The occupation of the respondents is represented in the pie chart as follows.
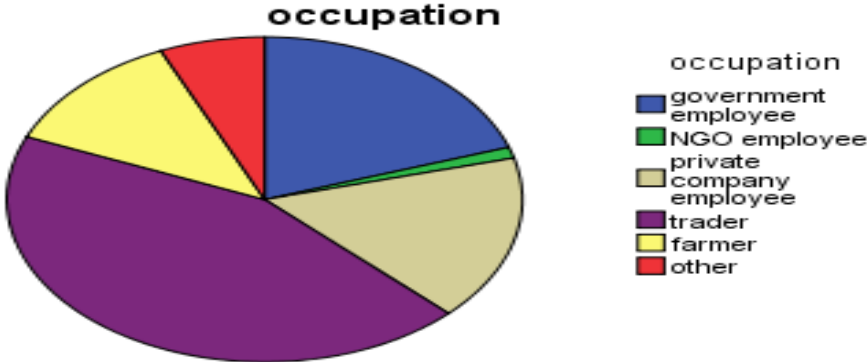
Figure 5: Respondents' composition by occupation

For the respondents in this research, their monthly *equb* contribution systematically increases in accordance with the income they earn. All of the respondents whose monthly income is below 1,000 ETB contribute less than 500 ETB per month for the *equb* they are part of. At the other end, most of the participants with an income more than 10,000 ETB contribute more than 4,000 ETB every month. These shows that *equb*s can be established by different individuals irrespective of their income as well as members can join the *equb* that fits their financial status.

4.2 Cross tabulation results

The data collected via questionnaire has been analyzed using the software SPSS. The outputs found are presented systematically as follows.

4.2.1 Reasonable number of members in *equb* and length of a single cycle

The number of members in a given *equb* at a given cycle is decided by the organizers and the members themselves. Depending on the number of members and their choice on the frequency of contribution, the duration of a given cycle is decided. The duration obviously will affect the time by which the late pot winners will get their money back. As the cycle duration gets longer, the chance for the money to be affected by inflation or time value of money will increase. Most of the medium size *equb* members (30 or 94%) prefer the number

of participants in a single cycle to be less than 20. The same is true for small size *equb* members. Those in the urban-small *equb*s prefer the number of members to be below 20 (85%). In the rural-small *equb*s, all of the members want the *equb* cycle length to be below 30. On the other hand, 27(85%) of the big *equb* members prefers to have more than 30 members in the *equb* they are part of. The justification given by the big *equb* members for their preference is that the money collected in the pot will be higher when the number of participants is large. For the small and medium *equb* members, on the other hand, large number of participants means administrative problem as well as long cycle time.

The preference for *equb* length by members is related with the number of participants they want to have in the group. The urban-big *equb* members prefer an *equb* cycle length between 1 and 2 years. The rural-small *equb*s, to the contrary, prefers a cycle length not more than 6 months. The medium size *equb* members (both urban and rural) mostly prefer a time span between 6 months and 1 year. This is reflected by the choice of 23 (72%) of the respondents from medium size *equb*s.

4.2.2 Time preference to take the pot

The first question asked to respondents in relation to their *equb* participation was about their time preference to take the pot. Accordingly, 23 (72%) of the 32 respondents from big *equb*s want to take the pot at the beginning of the cycle. It is only one (3%) of them who stated that they want to take the pot at the end. The justification given by the respondents to take the money early is that they want to work with the collected money (the pot) with small interest or buying expense, if any. According to them they can repay the *equb* contribution after they won the pot by utilizing the money. To the contrary, most of the respondents (85%) from small size urban *equb*s want to take the pot at the end of the cycle. This is because, according to the respondents, they want to save the money. For the medium size *equb*s (both in urban and rural areas), the response is fairly distributed between the choices. 11 (34.4%) wants to take the pot in the middle, 7 (21.8%) want to win the pot at the end, 6(18.8%) prefers to win the pot at the beginning, while the rest 8 (25%) do not care about when they are going to win the pot. The response is summarized in table 1.

Table 1: Members time preference to take a pot in *equb*

Equb type	time preference to take								Total
	at the beginning		in the middle		at the end		i dont care		
	frequency	%age	frequency	%age	frequency	%age	frequency	%age	
Urban - big	10	71.4	4	28.6	0	0.0	0	0.0	14
Urban - medium	3	16.7	5	27.8	5	27.8	5	27.8	18
Urban - Small	1	7.7	1	7.7	11	84.6	0	0.0	13
Rural - big	13	72.2	3	16.7	1	5.6	1	5.6	18
Rural - medium	3	21.4	6	42.9	2	14.3	3	21.4	14
Rural - small	7	50.0	4	28.6	2	14.3	1	7.1	14
Total	**37**	**40.7**	**23**	**25.3**	**21**	**23.1**	**10**	**11.0**	**91**

4.2.3 Preference to organize a new or join an established *equb*

Despite the fact that *equb*s are established by the willingness of all members, some individuals should take the initiative for the establishment. In some *equb*s – especially the big ones – the organizers get a financial benefit for the initiative and the control of the established

equb. But 74% of the respondents simply want to join an established *equb* in spite of the benefit they may get by becoming an organizer. *Equb*s could be established based on a written agreement or without a written agreement. From the total 17 sample *equb*s chosen for the survey, all of the big *equb*s, 2 of the medium size *equb*s and 1 of the small size *equb*s operates under a written agreement whereas the rest do not involve a written agreement. This shows that most of the medium and small size *equb*s does not have a written agreement. However, most of the respondents prefer to organize (26.4%) or join (51.6%) *equb* based on a written agreement.

4.2.4 What kind of pot assignment do members need?

*Equb*s could be assigned based on lottery, based on periodic preference of members to take or on auction basis. In most of the *equb*s covered in this research, the pot is assigned in a lottery format. From the total 91 respondents, 49 (54%) want to have the lottery kind of assignment in their *equb*. In small *equb*s (both in urban and rural), 16 (60%) respondents want the pot assignment to be based on the need of the members i.e the pot should be given to a member who want the money urgently during the pot assignment time. From table 2 we can infer that choice of pot assignment method is different depending on the *equb* size irrespective of the location – urban or rural.

Table 2: Members' preference of assignment method

Equb Type	Which assignment method do you prefer			Total
	assignment on lottery basis	assignment based on members preference	i dont care	
Urban - big	11	3	0	14
Urban - medium	11	7	0	18
Urban - small	4	6	3	13
Rural - big	11	6	1	18
Rural - medium	8	5	1	14
Rural - small	4	10	0	14
Total	49	37	5	91

Once the pot assignment method is agreed between members, then the next task is to decide whether all the pots should be assigned once at the beginning of every cycle or every single pot should be assigned periodically. Many of the respondents in small *equb*s (70.4%) prefer the pot to be assigned periodically and only 2 (7%) of them want the whole pot to be assigned at the beginning of every cycle. In the big size *equb*s, however, half of the respondents want it to be assigned at the beginning and the rest want it to be assigned periodically.

4.2.5 Time value of money and interest calculation in *equb*

One of the most important points raised on the operation of *equb*s is the issue of time value of money and interest calculation. 23 (85%) of the respondents in small *equb*s have never thought about the time value of money they contribute to *equb*. On the other hand, members in the big *equb*s covered in this study are somehow concerned with the time value of money. 19 (60%) of them stated that they think about the value of their money during the given cycle of *equb* they are part of. When it comes to the medium size *equb*s, almost half of the respondents (15 or 47%) have never thought about the time value of money. In total, 51 (56%) of the respondents have never thought about time value of money in *equb* while the

rest 40 (44%) think about it. The following graph shows the response given by the respondents for the question "have you ever thought about time value of money while joining *equb*?"
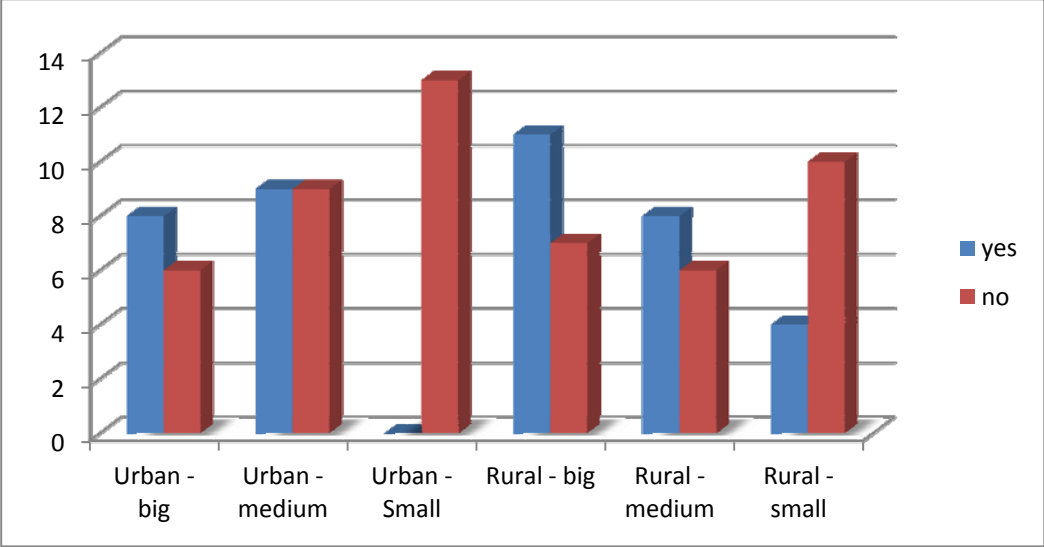
Figure 6: Have members' ever thought about time value of money in *equb* or not?

Interestingly, among the 40 respondents who had thought about time value of money in *equb*, 22 (55%) do not want the introduction of interest calculation in their *equb*. Even in the urban-large *equb*s where large amount of money is mobilized, it is only 3 (21%) of the respondents who want interest to be calculated for the money circulated in their *equb*. The largest number of respondents who agree with the activation of interest in an *equb* are from the rural-big *equb*s where 16 (89%) of the samples supports the idea. 84% and 70% of the medium and small size *equb* members respectively do not support the introduction of interest to their *equb*.

The reason given by those who do not support the introduction of interest includes: *equb* is just an institution based on friendship and cooperation since no need of having interest (20 or 38%); 13 (22%) said if interest is calculated it will look like *"Arata" (Arata is a term used to describe a loan offered by individuals who charge a very high interest rate for the loan they disburse*); 10 of them said interest should not be calculated since there is no money deposited in the *equb* it will instead circulate or rotate among members; 4 of them stated that members may leave if interest is going to be fixed; and two of them said it is not allowed in religion. We don't know the procedure, it will make the process complex, the money we contribute is not huge, *equb* money is a simple saving – not fair to calculate interest, and it will bring administrative cost and corruption in *equb*, are other reasons justified by one respondent each. The following pie chart summarizes the justification given by members for challenging the introduction of interest on the money circulated in *equb*.

Why dont you want the introduction of interest in your equb?

- equb is just about friendship and cooperation
- the process will look like "arata"
- there is no deposit involved in equb (money will rotate)
- the sense of friendship will be lost
- members may leave equb
- becuase of religious reasons
- it will be complicated
- administrative cost & corruption will increase
- equb is just a saving - not fair to claculate interest
- the money is not huge
- we dont know the procedure

Figure 7: Justification given for challenging the introduction of interest in *equb*

Those who support the idea of calculating interest in *equb* on the other hand mention that calculating interest in *equb* will make everyone in the group better off. They stated that late winners will be compensated for the inflation and their contribution to early winners. Some of them (7 or 22%) have also said it would help to increase the capital and develop the *equb* one step further. One respondent mentioned the risk involved in *equb* and indicated that interest should be calculated to cover the risk a member assumed because of the other.

4.2.6 Discussion with spouse before joining *equb*

This question is raised to see if *equb* members use the institution as a means to hide money or asset from their spouse. Of the 60 married respondents 56 (93%) said that they discuss with their spouse when they join *equb*. From the 4 respondents who does not actually discuss with their spouses, 3 of them were from small *equb*s. In relation to their gender composition, 3 of them were male and 1 was female.

The reason given by 3 of those respondents who said no was that the money they contribute to *equb* is very small amount. Therefore, according to them, there is no need of discussing with their spouse. The other reason given by one respondent, and of course supported by the other 3 as well, is that they will bring it back when they win a pot. Thus, it will be spend for the consumption of the household. Even if they don't discuss it with their spouse, their spouses will informally know when they purchase something for the household. One respondent from urban-small *equb* said that:

> "I do not tell or discuss to my husband formally when I want to join equb. However, he knows that I am participating in equb in one way or another. I am not going to use the pot money for my personal consumption; it is for the household at the end. He even may have a chance to listen when my neighbors in the equb and I talk about the pot and the turn".

4.2.7 Member selection criteria

*Equb*s could be established based on different criteria depending on the aim that members want to achieve. In order to know the preference of members regarding members' composition in the group they are part of, a question has been raised by the researcher.

Accordingly the respondents replied as follows: 29 (32%) prefers the other members should be found at the same income level and/or occupation; 12 said members should reside in the same area; 7 said they should be followers of the same religion; and 18 stated that they don't care. 13 respondents said that they prefer other members to be from the same level of income/occupation and at the same time reside in the same area.

Interestingly, the selection criteria differ from one *equb* to the other based on their size. From the 18 persons who don't actually care about members' composition, 10 of them are from big *equb*s. While justifying their position of not caring about the membership composition, they said that what matters is the level of worthiness to be member which is assessed by the *equb* officials. If the officials believe in the "trustworthiness" and if s/he is able to bring two guarantors from the *equb* when s/he took the pot money, then there is no worry about where s/he came from, what s/he do, or where s/he reside.

When it comes to the middle size *equb*s, 14 (45%) prefers other *equb* members to be on the same income level and/or occupation. 5 (16%) other respondents from the same group prefers other members to be found at the same income level/occupation and reside in the same area. Access to information in relation to the day to day activities of other group members which will help to control the risk in the *equb* is the reason behind their selection criteria.

On the other hand, 6 of the 7 respondents who mention religion as preferred criteria for other members are from small *equb*s (of which 5 of them are from rural-small *equb*s). Here it is worth to mention the response from one rural-small *equb* regarding why he prefers other members to be from the same religious background:

> *"...we have a meeting every week where we drink tela (local beer). At the end of every cycle, there is a feast and get together where we roast an ox and drink alcohols. Every equb member also contributes money to be given to the nearest church (St. Michael). Thus, if the member is going to be for example a Muslim how is he going to eat and drink with us? He will not be interested to contribute for the church as well..."*

4.2.8 Willingness to change pot order, and perception towards "*equb* as a social obligation"

According to previous studies conducted on RoSCAs, the institutions could be used as a mechanism to serve an individual's social obligation in the community beyond his or her financial interest. The questions "have you ever thought participation in *equb* as a social obligation?" and "are you willing to change the order of the pot that you won to someone?" were asked to respondents in order to get the members attitude towards social obligation. Among the total respondents, 60 (66%) respond that they don't really perceive *equb* participation as a social obligation. From the 31 respondents who perceive *equb* participation as a social obligation, 15 (48%) are from small size *equb*s. 12(86%) from rural-small *equb*s perceive it as a social obligation. If we consider the rural-urban dichotomy, 21(68%) of the respondents perceiving *equb* participation as a social obligation are from rural *equb*s.

As far as members willingness to change the order of a pot (to change the pot they win to another member) is concerned, 80 (88%) said they were willing to do so while 9 (10%) said they were not. The justification they give for their willingness or unwillingness, however, differs from one kind of *equb* to the other. The following table summarizes the reason given by respondents.

Table 3: Justifications given by members to change or not to change a pot order they won

Response	Justifications given	Equb type and frequency					
		Urban-big	Urban-medium	Urban-small	Rural-big	Rural-medium	Rural-small
Yes	*Equb* is just a cooperation	2	--	--	1	1	2
	I will change but with a commission (charge)	3	--	--	8	--	--
	If others have worst problem than me	2	16	9	7	7	6
	I want to be committed (take the money at the end)	--	2	1	--	--	--
	If I don't have a program with the money	--	--	--	--	6	6
No	I always want to use the money	7	--	--	1	--	--
	I could have an arranged program	--	--	1	1	--	--
Neither	We allocate pots based on need in our *equb*	--	--	2	--	--	--

As we can see from table 3 above, most of the respondents who said yes 47(59%) are willing to change if the person who requests to change have worst problem than them. But, the composition of the respondents differs based on the size of the *equb*. From the 47 respondents, only 9 of them are from big size *equb*s. In the urban-big *equb*, 7 members are not willing to change from the beginning and 3 persons are willing to change but with a commission or charge (which in other words means sales). It is only 4 of them who are willing to change for free (2 of them set a requirement that the other members who request change have to have urgent problem than they have).

In the rural big *equb*s, 16 (89%) of the 18 respondents are willing to change but half of them want a commission from the other member who want to change the pot. In the rural small *equb*s, to the contrary, all the samples taken are willing to change the order for free given that they don't have a program and other members have worst problem than they have. The same is true for medium size *equb*s in both urban and rural areas.

4.2.9 Collateral requirement in *equb*, what could replace *equb*

In order to get a loan from formal institutions like banks and micro finance institutions, a physical asset is required as a guarantee or collateral. In all of the *equb*s considered for this study, physical collateral is not basically required to be a member or while taking the pot. However, in all the big *equb*s considered, a member should be able to bring two other members of the *equb* as a guarantee when s/he won a pot and going to take it. If the indivdiual is not able to bring "human collateral", s/he will write a postdated bank cheque to the *equb* so that the *equb* can claim from his account in the bank in case s/he fails to pay his periodic contribution after s/he collect his/her pot. If s/he cannot do that either, then s/he will be asked to show a physical collateral.

In all the medium and small size *equb*s considered, except one urban-medium and one rural-small *equb*s, there is no need of showing either human or physical collateral. The *equb*s totally operate based on trust among each other. From the total 91 respondents, 9 of them had a chance to participate in *equb*s that requires physical collateral for members when they win a pot in the *equb*. But all of them said that they are not happy with that structure and finally left those *equb*s to join the *equb*s that they are part of now.

"Let us assume that *equb*s cease to exist because of some reason. Then what else will substitute the institution for you?" was the next question asked to respondents. This question is asked to members because their choice of substitute institution could be an indicator for why they join *equb*s. Accordingly, 23 (25.3%) and 26 (28.6%) of the respondents said banks and microfinance institutions respectively. 36 (39.5%) of the respondents, on the other hand,

believed that nothing else can substitute *equb*s. *Iddir* and *mahiber* are considered as substitutes for *equb* by the rest 6 respondents. The composition of the responses varies based on the size of the *equb*s.

If we consider the big *equb*s, 25 (78%) of the 32 respondents from big *equb*s said that they would consider banks and MFIs as a substitute for *equb*. The medium size *equb* samples also shares the idea of the big *equb* samples – 22(69%) choose banks and MFIs as a substitute. When it comes to the small *equb*s, nevertheless, it is only 7(26%) who think like their medium and big size *equb* counter parts. 18 (67%) of the members in small size *equb*s said that no institution could substitute *equb*s. The response about the possible substitute of *equb* for members is summarized in the following table.

Table 4: Members' choice of a substitute institution for *equb*

| Equb type | What will substitute equb for you? | | | | | | | | | | Total |
| | Bank | | MFI | | Iddir | | Mahiber | | Nothing else | | |
	freq.	%age	freq.	%age	freq.	%age	freq.	%age	freq.	%age	
Urban-big	6	42.9	5	35.7	0	0.0	0	0.0	3	21.4	14
Urban-medium	5	27.8	7	38.9	0	0.0	1	5.6	5	27.8	18
Urban-small	3	23.1	1	7.7	1	7.7	0	0.0	8	61.5	13
Rural-big	7	38.9	7	38.9	1	5.6	0	0.0	3	16.7	18
Rural-medium	1	7.1	4	28.6	0	0.0	2	14.3	7	50.0	14
Rural-small	1	7.1	2	14.3	0	0.0	1	7.1	10	71.4	14
Total	23	25.3	26	28.6	2	2.2	4	4.40	36	39.6	91

While the researcher was interviewing one of the organizers in the rural-small *equb*s, he said as follows:

> *"…no institution can substitute equb for us. Of course, as we have said earlier, the religious dimension outweighs other motives in our equb. Most of us are here to meet every week and contribute to the St. Michael church. The income from sales of the equb as well as the interest earned will totally be given to the church. Last year we gave more than 18,000 ETB to the church and this year the deposited money to the church reached 9,000 ETB. We will give it to the church again when the current cycle ends…"*

And then the researcher asked him why they don't change their *equb* into *mahiber* (which is totally a religious institution) instead if the religious motive outweighs in their *equb*. He replied:

> *"It is a good question. If it is going to be a mahiber, every member will not be as committed as s/he is for the equb. In addition there are some members who want to be part of the religious activity and at the same time want the money since they are traders. Thus, in order to incorporate those members to the equb and to commit the other members we prefer equb than mahiber."*

4.2.10 Why do members choose to join *equb* while they can use formal institutions?

The next question respondents have been asked was about why they keep on participating in *equb* while they can use formal institutions. For big urban *equb* members, using formal institutions is expensive and the procedure is long or uncomfortable for them. Except two of the 14 respondents the rest said that they use *equb*s because either it is expensive to get the service from formal institutions, or the procedure is too long, or they are not comfortable with the procedures, or there is no freedom to spend the money at the business they want to work on. Of the two respondents who justify out of the above listed reasons, one said that he keep on participating in *equb* because he have a good experience with *equb*s. The other one said that a bank loan will make him worry while *equb* money does not feel him so. In an interview conducted with big *equb* organizers one of the organizer stated that:

> *"...let alone the expensive interest rate charged by banks and microfinance institutions, the procedure is lengthy. As business men we don't want that. In addition, banks require physical collateral. Most of us do have a bank account but not a loan. The worst situation in equb is similar with the banking service for us which is saving the money until the last period. If a lottery is not drawn for you and you need the money urgently, you can buy from other members without any procedure and time wastage. If you cannot get it in either way, then you will finally get your money at the end which is similar to saving it into the bank..."*

For the small *equb* members, the major reason that keeps them on participating in *equb*s having the chance to be a customer of a formal institution is their good experience with *equb*s. 16 of the 27 respondents confirmed that they kept on participating in *equb* because of their experience. 4 members said that it was expensive to use formal institutions. The rest said that it was not easy to get a loan from a formal institution while it was timely and easy to access fund from *equb*. Here it is worth to mention the words of the chairman of one of the smallest *equb*s considered for this study. He said that:

> *"I am a customer of MFI, but at the same time I keep on participating in equb. In the MFI every activity is planned and there is a deadline for the repayment and if you fail to do so in the deadline, they will not compromise or wait you until you get money. They will take it to the court. Thus, I use my equb money as a backup for the repayment in case I fail to stick with the repayment deadline for MFI loan using my other income. I can even get a loan from an individual using my equb pot as a guarantee or collateral. Thus, I will never stop participating equb in spite of my involvement in deposit or credit transactions with MFIs."*

The medium size *equb* members, on the other hand, mention that they will not be committed if they will deposit their money in formal institutions and the procedure is long as well. 6 members stated that it is expensive to use formal institutions and 5 of the respondents said that they like the freedom of spending the *equb* money to whatever they want which they could not enjoy if they take a loan from formal institutions. The chairperson of a medium size *equb* explained in an interview conducted with her that:

> *"...I am a government office staff. I receive my salary in cash and whenever I need to go to the formal institutions and perform a long process for a transaction, I should use my office time since they will be closed when I left my office at the end of my working hour. I cannot use my office time because I may clash with my boss. Thus, I*

and my colleagues here prefer to establish equb. In addition it is also expensive to borrow from microfinance institutions and it is totally unthinkable to borrow small amount of money from banks. The equb will also make us committed to save"

In order to see the view from the other side, the researcher conducted an interview with the CEO of a MFI operating in the area for the last ten years. According to him, his customers are sensitive to the processing time from the day of application to the date of disbursement even more than they are sensitive to the interest rates. *"…when I discuss with the customers, they usually tell me that they prefer our institution because the processing time and the procedures are shorter in our company than our competitor"* said the CEO, Mr Fantaye Moges.

Mr. Fantaye has also stated that his company approached some *equb*s so that the members could become customers. However, most of them do not like the process in formal institutions.

4.2.11 Discussion to transform *equb* into a formal institution

The next question asked to respondents was regarding their intention about transforming their *equb* to a formal institution. Surprisingly, no respondent from the urban *equb*s mentioned that they had a discussion in their *equb* to transform their institution into a formal one. In the urban-small size *equb*s the reason for not considering the idea of transforming is lack of knowledge about how and to what to convert the institution having a very small amount of circulating money in the *equb*. To the urban-big and urban-medium *equb*s, nonetheless, the reason is different. In an interview with the organizers, one of the medium size *equb* organizers stated that:

> *"…we don't need the interference from other parties like the government in our equb in the day to day operation. If we are going to make it formal, we have to report the activities of the equb which we don't want. In addition we will incur an administrative cost and set up a procedure like what the other formal institutions have. This will make equb costly…"*

An organizer of a big *equb* has also said:

> *"….transforming to formal institution? Is it not easy to be a customer of an established bank than transforming our equb to a new formal institution like cooperative? Have you consider the establishment cost? What about the administrative cost? The money will be stacked somewhere for nothing if it is going to be formal. The operation is not going to be faster like equb. That is why we establish equb from the beginning."*

In the rural *equb*s, however, members have made discussions with their colleagues on the possibility of transforming their *equb* into a formal one. This is supported by a confirmation from 22 respondents (14 from big, 3 from medium and 5 from small size *equb*s). In one of the rural-big *equb*s, members contribute 350 ETB every week in addition to their regular *equb* contribution. This money will be used to establish the *equb* capital and capacity of meeting the loan demand from its members. They have also a plan to form a share company where the owners are the *equb* members. One of the rural-small *equb* members has also started a discussion with the responsible *Woreda* officials about forming a saving and credit cooperative. But, interestingly, in both *equb*s, their interest is to operate the *equb* and the formal institution in parallel. Transforming for them doesn't mean totally replacing/changing the *equb* into some other institution. Rather, it means, creating/forming another independent

big organization that can supplement/complement the *equb* by members, while maintaining the operation of the *equb*.

4.3 Testing possible reasons to join *equb*

At the final section of the questionnaire, reasons that could be justified for joining *equb*s were listed and respondents were asked to choose from options of agree, disagree, and indifferent for every question (see the questionnaire in the appendix). Their reply is summarized as follows.

4.3.1 Lack of access to formal institutions and expensive to use them

The first reason listed by the researcher as a cause for joining *equb*s was lack of access to formal financial institutions. From the 91 respondents, only 17 (18.7%) agreed that lack of access to formal financial institution could be a reason for them to join *equb*s. The majority of the respondents, 65 (71%), however, did not agree that lack of access to formal institutions is a cause for joining *equb*. The rest 9 individuals remained indifferent.

Table 5: Respondents reply regarding access to formal institutions and expensive to use them as a reason to join

Possible reason to join	Option	equb type						Total
		Urban big	Urban medium	Urban small	Rural big	Rural medium	rural small	
Lack of access to formal institution	Agree	3	1	4	3	1	5	17
	Indifferent	0	2	4	1	0	2	9
	disagree	11	15	5	14	13	7	65
	Total	**14**	**18**	**13**	**18**	**14**	**14**	**91**
Expensive to use formal institutions	agree	11	6	7	12	5	4	45
	Indifferent	0	1	2	3	0	1	7
	disagree	3	11	4	3	9	9	39
	Total	**14**	**18**	**13**	**18**	**14**	**14**	**91**

As it is depicted in table 5 above, most of the respondents disagree that lack of access to formal institution is a reason to join *equb*. Given 1 represents agreement, 2 represents indifference, and 3 represents disagreement, the mean for this variable is 2.53 which indicate that most of the responses are inclined towards disagreement. If we see the distribution of responses in different size *equb*s, 9 (53%) of the 17 respondents who agreed are from small size *equb*s. It is only 4 of the respondents from big *equb*s and 2 respondents from small size *equb*s who actually agreed with the first possible reason. The disagreed respondents are fairly distributed among the different *equb* types (size).

When we look at the second possible reason to join *equb*, expensive to use formal institution, 45 (49.5%), 7 (7.7%), and 39 (42.8%) of the respondents expressed their agreement, indifference and disagreement respectively. Even though it looks like that the number of agreed and disagreed respondents is almost proportional, the composition of respondents to each option is different. 23 (72%) of the 32 respondents from big *equb*s stated that it was expensive to use formal institutions and this was among their reasons to join *equb*s. Most of the members in medium size *equb*s, to the contrary, do not think that it is expensive to use formal institutions. This is supported by the disagreement of 20 (62.5%) of the respondents from middle size *equb*s. It is almost a half-half situation for the small size *equb*s.

4.3.2 Ashamed to use formal institution having small money to save or borrow

From the total 91 respondents it is only 9 of them who said that they feel ashamed to go for formal institutions having small money to save or borrow. 78 (86%) of the respondents, however, disagreed that this could be a cause for joining *equb*s.

4.3.3 Purchase of durable good

According to some scholars like Gugerty (2007), the major reason for members to join RoSCAs is the need to purchase durable good. In order to taste this, the researcher raised this question to respondents. The response is summarized on the table below.

Table 6: members' response for the need to purchase durable good as a reason to join *equb*

Equb Type	I joined equb because I want to purchase durable good			Total
	agree	indifferent	disagree	
Urban - big	3	2	9	14
Urban - medium	16	0	2	18
Urban - Small	13	0	0	13
Rural - big	5	1	12	18
Rural - medium	10	1	3	14
Rural - small	4	1	9	14
Total	51	5	35	91

From the above table one can infer that most of the medium size *equb* members, (26 or 81.3% of the total respondents) agreed that the need to purchase durable goods is among their motive to join *equb*s. To the big *equb*s, on the other hand, it looks like that this does not work. It is only 8 of the 32 respondents from big *equb*s who agreed that it could be the reason for their participation in *equb*. When it comes to the case of small *equb*s, 17 of the total 27 respondents agreed that one of their motives to join *equb* was emanated from the need to purchase durable good. This is especially true for the urban-small *equb*s where all of the 13 respondents confirmed it.

4.3.4 "I consider it as insurance"

The next question for the respondents is about whether they consider "*equb* as an insurance or not". It is found that most of the respondents in rural *equb*s consider it as insurance but not the urban ones. Of the total 46 members considered in rural areas, 29 (63%) consider it as an insurance scheme while only 11 (24%) of the 45 respondents in urban areas do so. If we look at based on the size of *equb*s, it can be said that almost half of the respondents from each size agree and the rest half do not agree that *equb* could be considered as insurance. The following graph will help to compare the responses based on *equb* size and location.
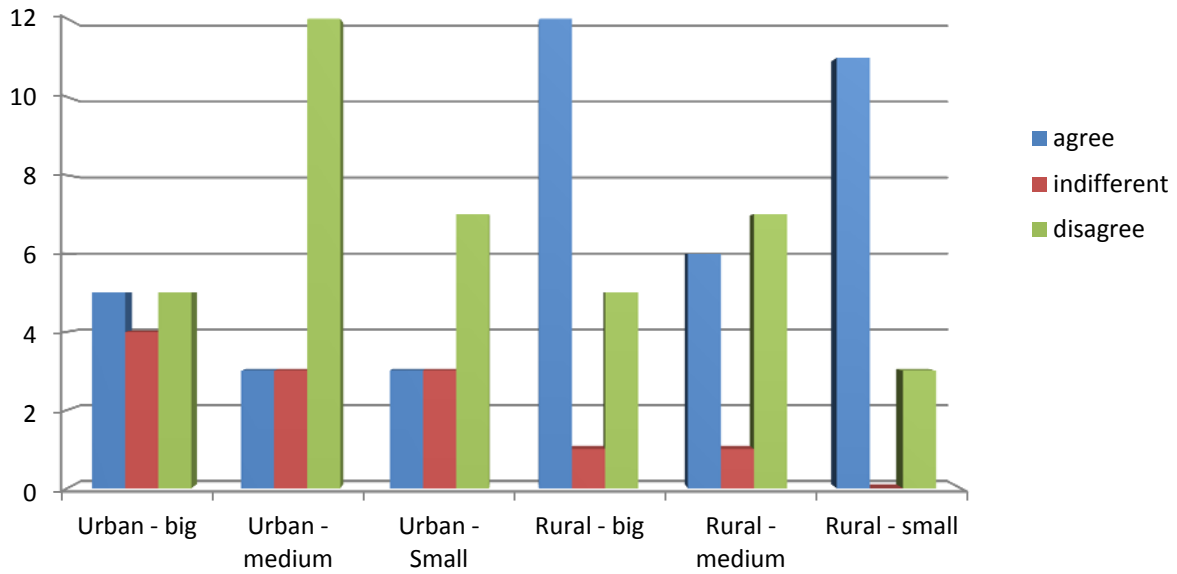
Figure 8: Members' perception of *equb* as insurance

4.3.5 Considering *equb* as a social obligation, and fear of discrimination from *equb* organizers

In spite of the involvement of money in the day to day operation of RoSCAs, some people may join the group simply because they feel that it is their social obligation to do so. In order to test this in *equb*s, the researcher includes a question about whether they consider social obligation as a motive to join.

Table 7: Members' perception of *equb* as a social obligation

Type of equb	*I consider participation as a social obligation*			*total*
	Agree	*indifferent*	*diagree*	
Urban *equb*s	16	8	21	45
Rural *equb*s	25	2	19	46
Total	**41**	**10**	**40**	**91**

More than half of the respondents from the rural *equb*s believe that participation in *equb* is a social obligation for them. But those in the urban *equb*s, especially in the big ones do not perceive equb participation as a social obligation like their rural counterparts. If we look at the composition of the 16 urban respondents who consider participation in *equb* as a social obligation, only 3 of them are from big *equb*s. Of the 25 rural respondents who agreed, 14 are from small size *equb*s which represents all samples in the group.

When we see the response from size perspective, 20 (74%) of the 27 small size samples agreed that they perceive participation in *equb* as a social obligation. It is 10 of 32 respondents from medium size as well as 10 of 32 respondents from big size *equb*s who ponder *equb* participation as a social obligation.

Beyond the feeling that participation in *equb* is a social obligation, sometimes members may join a group simply because they afraid discrimination if they refuse to participate in an *equb*

organized by someone who they know. Respondents have been asked about whether they agree with this and it was only 6 of the 91 respondents who agreed. This shows that there is a less probability that members will join *equb* by being afraid of the discrimination to come from equb organizers in other activities in the future.

4.3.5 *Equb* as a commitment mechanism

In order to taste this, three questions has been included in the fourth section of the questionnaire (see annex II). "I cannot get the *equb* money unless it is my turn", "cannot save money alone (I will spend it to purchase unnecessary items)", and "cannot save money alone (I will spend it for family consumption)" were the three questions that respondents express their agreement and/or disagreement for.

Of the total 27 samples from small size *equb*s, 23 (85%) agreed that they considered joining *equb* because they were not going to get the money they contributed in *equb* unless it was their turn to take the pot. In the big size *equb*s, to the contrary, the majority of the respondents (75%) disagreed. 15 (49%) and 11 (34%) respondents from medium size *equb*s agreed and disagreed respectively making it not possible to generalize for the medium size *equb*s in this regard.

When the option "I joined *equb* because I cannot save alone at home since I will spend it to purchase unnecessary items" is raised, the majority (63%) of the medium size *equb* samples agreed with the reason so did 70% of the small size *equb* members. However, the majority of big size *equb* members (69%) disagreed unlike their small and medium size *equb* counterparts.

The majority of medium and small size *equb* members, 56% from each, have also agreed that they cannot save alone at home since they may use it for family consumption. Nevertheless, 69% of the big *equb* samples disagree when they asked that they joined *equb* because they cannot save alone at home since they may spend it for family consumption purpose.

Most of the big *equb* members (53%), especially the big- rural *equb* members, stated that it is not because they cannot save money out of *equb* that they join the group rather it is to get strength by looking others members doing something using the pot money. This is also supported by medium and small size *equb*s as well (50% and 52% respectively).

4.3.6 *Equb* as a habit

For most of the small size *equb* members joining *equb* is a habit. Out of the total 27 respondents, 15 (56%) agreed that it is a habit for them. This totally does not work for the big size *equb*s. 81% or 26 big size *equb* members do not agree that joining *equb* is a habit for them. The same is true for the medium size *equb*s where 72% do not agree that *equb* participation is a habit for them.

4.3.7 *Equb* as a mechanism to escape from pressures of relatives

One of the recently developed model by Ambec and Treich (2003) argued that people uses RoSCA as a means to escape from social pressure. In order to taste this to the *equb*s under study, members have been asked about their perception regarding *equb*s as a means to escape from pressure of relatives. Out of the total 91 respondents, it was only 10 (11%) who agreed with the idea. Of the 10 respondents who agreed, it was only two of them who were members

of urban *equb*s. If we look at the composition based on size of *equb*, it is only 2, 1, and 7 respondents from big, medium, and small size *equb*s respectively who agreed that pressure or fear from relatives will make them to join *equb*s. The following graph shows the responses in relation to the type of *equb*.
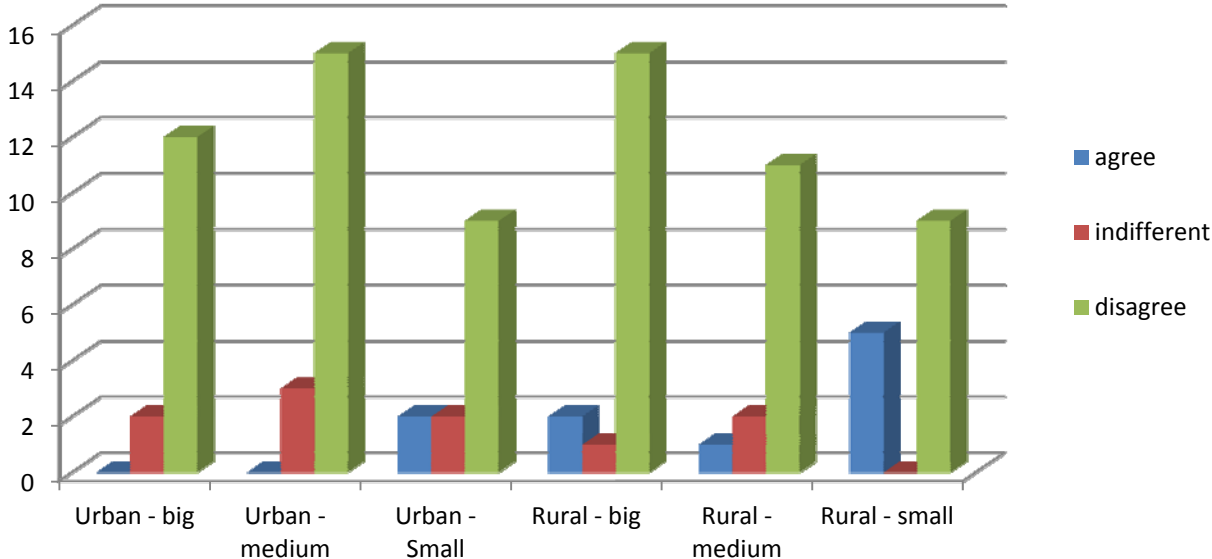
Figure 9: Members' perception towards fear of pressure from relatives as a reason to join *equb*

In addition to the response from members regarding *equb* as a means to escape from relatives' pressure, the *equb* organizers believed that *equb* could not be a means to escape from pressure. One of the interviewed *equb* organizers said that:

> *"...I think equb could not serve that need of members. At some point in the equb cycle, the person will get the money. You can say I don't have money for the time being since I have a payment for equb. But your relatives will come when they know that you won a pot and they may even need a large amount of money assuming that you won equb..."*

5 Analysis and Discussion

In this chapter the empirical evidence presented in the previous chapter will be analyzed. The word equb and RoSCA are used interchangeably in this chapter being the first used to refer an institution found in Ethiopia, and the second to similar institutions all over the world.

5.1 Evaluating financial benefits or losses of joining *equb*s

A participant in *equb* is expected to contribute a fixed periodic contribution from the beginning to the end of the *equb* cycle. Assuming that the individual will win the last pot (which is actually what the individual can be 100% sure about), s/he will end up with a saving equal to what s/he will contribute. This individual, however, have another risk free and easy option to put or save money. That is depositing it into a bank periodically. By doing so, he will also be able to get an interest income throughout the time that he keep the money in the bank. If he decided to contribute to *equb*, the benefit will be calculated depending on what he will do with the pot money he won from the *equb*. But, obviously, a purely financially motivated individual should calculate and compute the net amount of money that he can earn from both options and will decide either to join or not to join.

The decision could be different for those who consider *equb* as a saving mechanism and those who consider it as a credit mechanism. In both cases, the individual should know the point at which he will be indifferent so that he can decide among the options that he has. Calculating the financial aspect here will help to understand the empirical findings better.

5.1.1 *Equb* as a saving mechanism

In this case the individual have two options that will help to generate income on the money while he is saving at the same time: either he will use bank or he will join *equb*.

i. *No involvement in equb, save it in a bank periodically*

This scenario is considered as a standard to compare the benefits or loses incurred by joining *equb* instead of using bank. This option is a risk free option as long as the individual keep on depositing the periodic payments. In this case, the total money that an individual will have at the end of the nth period can be calculated using the future value of annuity formula.

$$\textbf{FVoa = PMT } [((1 + i)^n - 1) / i]$$

$\quad$ **Where,** FVoa is the future value of annuity

$\qquad$ PMT is value of the periodic payment

$\qquad$ i is the periodic interest rate (annual interest / number of periods)

$\qquad$ n is the number of periods for annuity contribution

For our case we assume that the individual will save 2,000 ETB every week for 52 weeks or a year for all scenarios demonstrated below. Given a 5% annual interest rate (the prevailing bank saving interest rate in Ethiopia), the weekly interest rate will be calculated as 5%/52. Thus the Fv of money accumulated at the end of the 52nd week will be:

$$= \textbf{2000 } [((1 + (5\%/52))^{52} - 1) / (5\%/52)]$$
$$= \textbf{106,591.35 ETB}$$

Of this value 104,000 (calculated as 52 * 2000) is the principal, making the interest income 2,591.35 ETB. The formula can be modified to find only the interest income as follows:

Interest income from annuity = {PMT [((1 + i)^n - 1) / i]} – (PMT*n)

The periodically accumulated interest is depicted in the following graph.
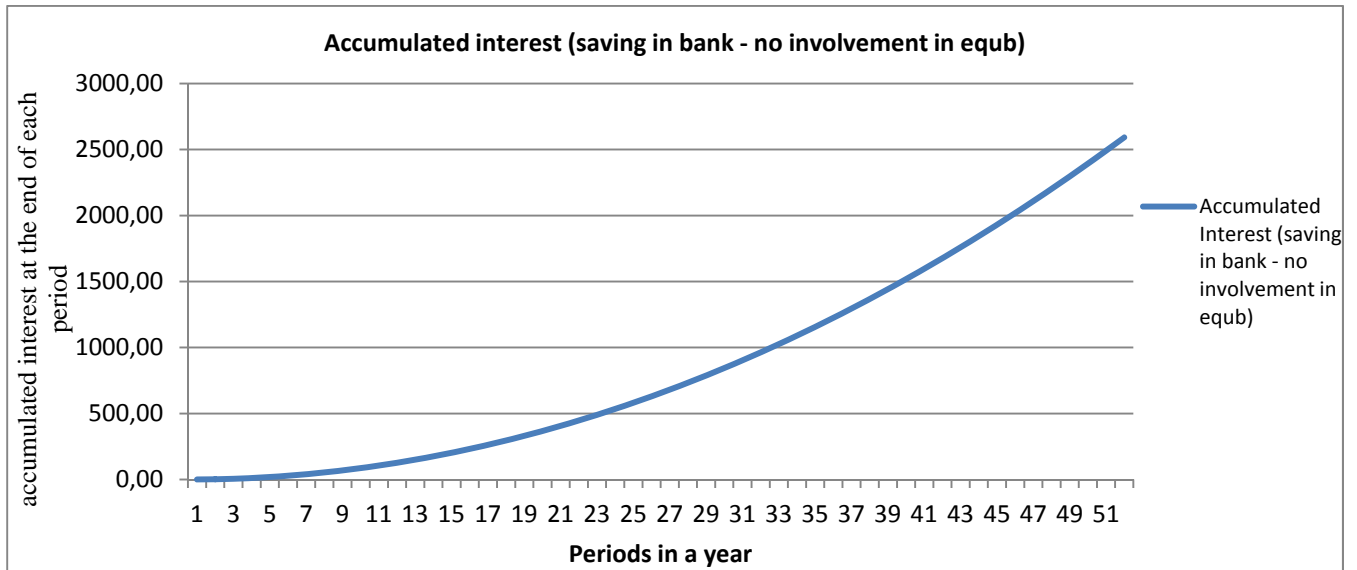
Figure 10: Interest to be gained under ordinary annuity saving in a bank for 52 weeks

As it is shown in the graph, the accumulated interest will rise at a lower rate at the beginning and rises at higher rate later as the principal as well as compounded interest increases. The accumulated interest income will stand at 2,591.35 ETB at the end of the 52nd period.

ii. Involvement in equb

The same person can also join *equb* having the same amount of money to contribute. The person joins *equb* as if he will get the last pot since that is the point where he can be 100% sure about getting the pot (assuming there is no default by members). Thus, logically he can keep on contributing the 2,000 ETB periodic contributions irrespective of when he will actually get the pot. However, he may get the pot at the first period but he will contribute the periodic payment without touching the pot money he won. Now the question is what will he do with the pot money? The individual has two options:

a) Deposit it in a bank immediately after he get the pot money at the bank interest rate – in our case 5%

b) Or invest it somewhere for which he can get a return above the average bank saving interest rate.

a) Deposit it in a bank immediately after getting the pot:

Here the individual uses both *equb* and bank. S/He will bring the pot money to deposit in a bank. The interest rate is the bank deposit interest rate. Once the individual deposited the money it is assumed that he will not withdraw it until the end of the *equb* cycle. For example, let us assume that the *equb* has 52 members where contribution is made weekly. If the individual get the pot at the third period, he will deposit it immediately and will not withdraw it until the end of the 52nd week while keep on paying the contribution to the *equb*.

This individual joins *equb* instead of saving by his own in a bank. If we should calculate the financial benefit that the individual enjoys by joining *equb*, we should know the period that he will get the pot money. The financial benefit (interest income) he enjoyed differs

based on the period he gets the pot since the interest is dependent on the time that the money will stay in the bank. At the beginning of the cycle, however, the individual do not know when he will get it. Therefore, we should calculate the interest income for every possible period. At 5% interest rate compounded weekly, the individual's interest income at the end of the 52nd period given the period where he get the pot money is depicted in the following graph.

If he win the pot and deposit it into a bank account
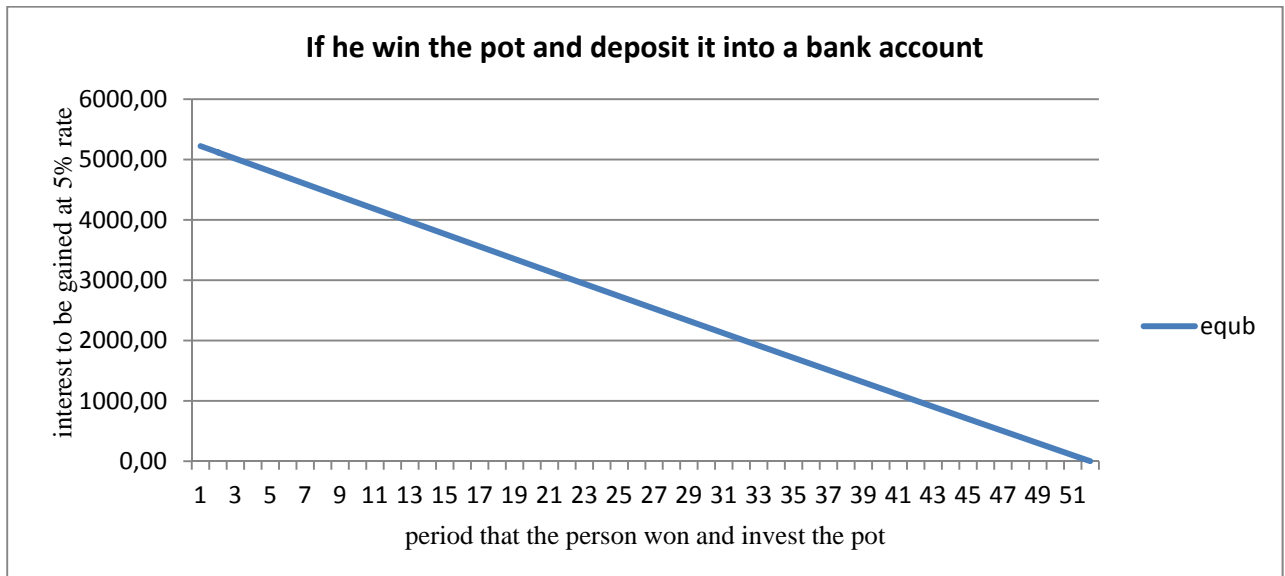
Figure 11: Interest income earned if the individual won in different periods and deposit it immediately in bank

As it can be seen clearly from figure 11, the individual gain will be high if s/he wins and deposits the pot money in a bank in early period. If s/he wins the 1st pot and deposits it immediately, the interest income will be 5,224.54 ETB while s/he will not have an interest if s/he wins the last pot. Now we can compute when the individual will be better off financially if he joins *equb* instead of using the bank. What we should note here is that the gain from the bank if he don't involve in *equb* is constant since his deposit is not affected by other parties involved.
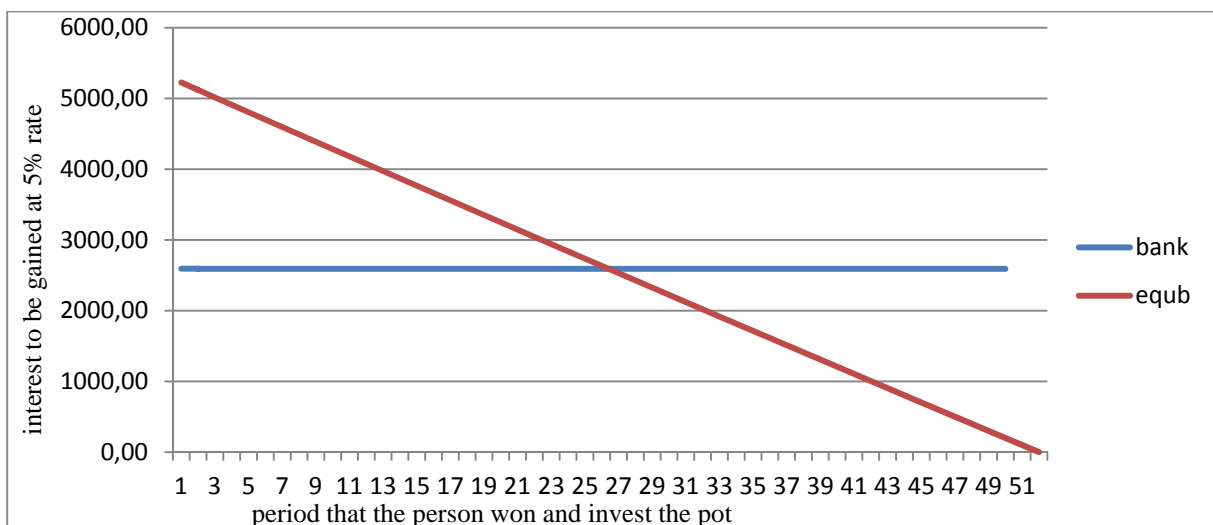
Figure 12: Point where the income from ordinary annuity and income from saving the pot money become equal

From the above graph one can infer that a given *equb* participant will be financially better off if and only if he can win the pot at and before the middle period of the cycle. A chance

of getting the pot money at any period after the mid-point of the cycle will not make the individual financially better off as compared to saving in a bank.

b) Invest the pot money somewhere else

An individual always takes a risk when investing on a certain business. It is of course because of the risk taken that s/he expects a return rate more than the average bank saving interest rate. When it comes to managing pot money collected from *equb*, the individual has the option to invest it somewhere instead of saving it in a bank. In this case the expected income from investment will be higher than the expected income from an ordinary saving in a bank. The problem is the individual does not have a guarantee as to when he will get the pot. Therefore, we should calculate the expected financial benefits if the individual wins the pot at different stages of the equb cycle assuming a certain investment return rate. The financial gains are calculated below. By doing so we can easily see winning when will make the individual financially better off by joining equb than making an ordinary saving in a bank.

➢ *Assuming a return rate of 5%:* the expected income in this case will be the same as the scenario in (a). But here we should also assume the interest will be paid on weekly basis. If not, the person will enjoy the interest at the end of the nth period in our case at the 52nd period. The incomes are represented in the following graphs.
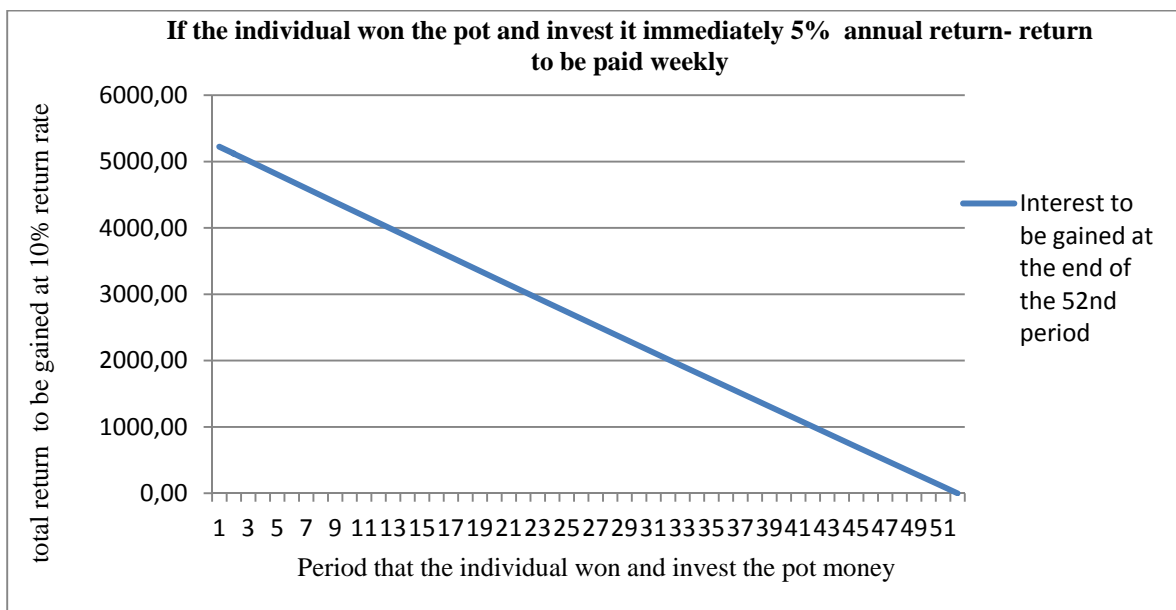
Figure 13: Interest to be gained by investing the pot money at 5% return rate (interest to be paid every week)

As it can be seen from the graph, the individual will invest the pot money immediately after he received it and the investment will start generating return immediately. Assuming the interest will be paid weekly, the total gain at the end of the 52nd week at 5% return rate is equal to the return to be gained by saving the pot money at 5% bank saving interest rate. The amount of interest to be gained would be a bit different had the investment return been paid only once a year (at the end of the year). The figure will be different, obviously, because of the compounding effect. However, it will not affect the equilibrium period that much where the gain from ordinary periodic saving in a bank (the case in *i*) and the gain from depositing the pot money will become equal. The following graph shows the case where the return from investment is paid once a year.
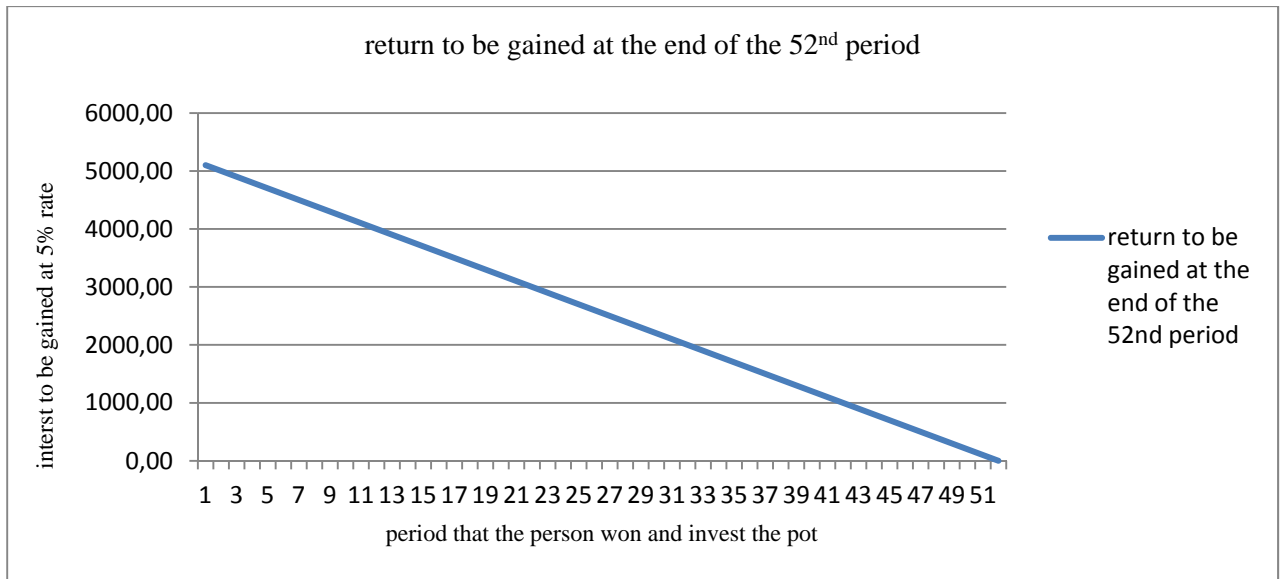
Figure 14: Interest to be gained by investing the pot money at 5% return rate (interest to be paid once a year)

In all cases (whether the investment return is paid weekly or once a year), the individual will be financially better off by joining *equb* if and only if he can get the pot at and before the mid-period of the *equb* cycle. It is exactly the same like making an ordinary saving because we take a return rate similar with the risk-free rate.

➢ *Assuming a 10% return from investment:* In basic finance, an individual will not invest his money and take risk had he not been expecting a higher interest rate than the risk-free rate (bank saving interest rate). Thus, in our case where the bank saving interest rate is 5%, the investor should always expect a rate of return higher than 5%.

Given: 10% annual return; return paid weekly; the return from the investment will not be withdrawn; and the individual gets the first pot as well as invests it immediately, the expected income at the end of the year will be 10,706.15 ETB. The income systematically decreases as the period when the individual won and invest the pot money become far from the first period of the equb cycle. Figure 15 shows the interest to be gained at the end of the *equb* cycle if the individual gets the pot at different periods in the cycle assuming that the return will be paid weekly.
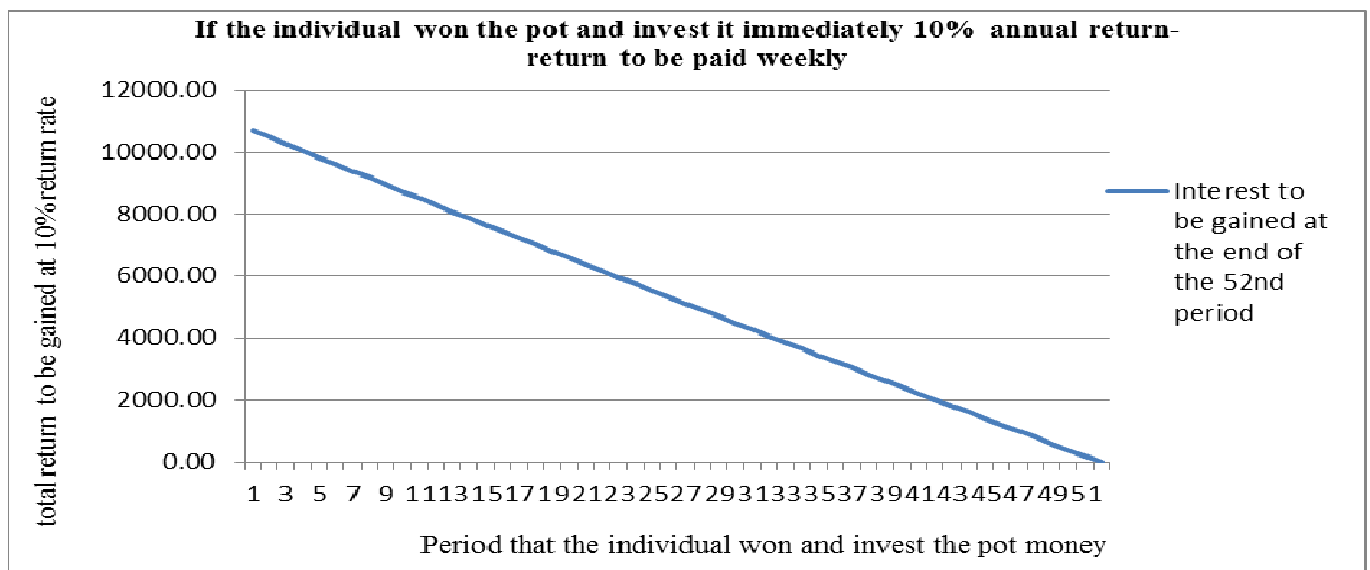
Figure 15: Interest to be gained by investing the pot money at 10% return rate (interest to be paid weekly)

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If the interest is going to be paid at the end of the year or at the 52nd period in our case, the figure will be a little bit different. For example if the individual win the pot at the first period as well as invests it immediately at 10% annual return paid once at the end of the 52nd week, the net gain will be 10,200 ETB instead of 10,706.15 ETB when the interest is paid every week. The following graph shows the slightly different amount of interest when it is paid once at the end of the year.
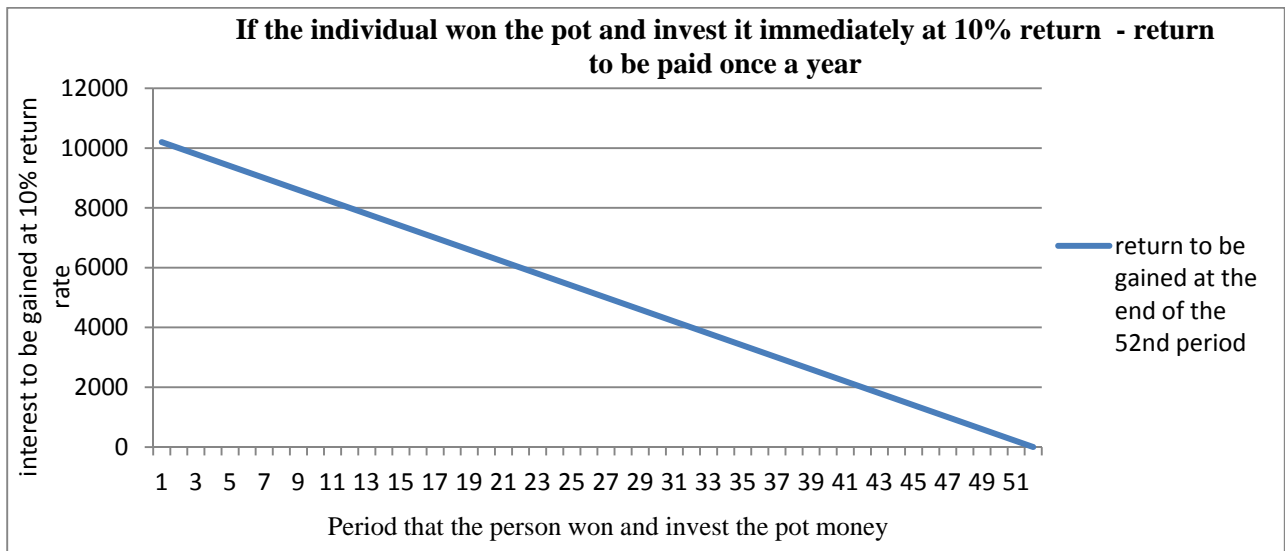
Figure 16: Interest to be gained by investing the pot money at 10% return rate (interest to be paid once a year)

Once we calculate the gain from investing the pot money at 10% rate, we can compare the results with the risk free gain that we calculate in scenario (*i*). As compared to the return earned at 5% return rate, the income at 10% return rate is a little more than double. In this case the breakeven period where the net gain from the ordinary bank saving scenario in (*i*) and the net gain from investment using the pot money in *equb* will be far to the right from the center. At 10% return, the period where the individual will be indifferent is period 39. Therefore, if the individual gets the pot at and before the 39th period he will be financially better off than making an ordinary saving in a bank. Figure 17 shows the financial benefit from making an ordinary saving and joining *equb* to invest the pot at 10% annual return rate where the interest is paid weekly.
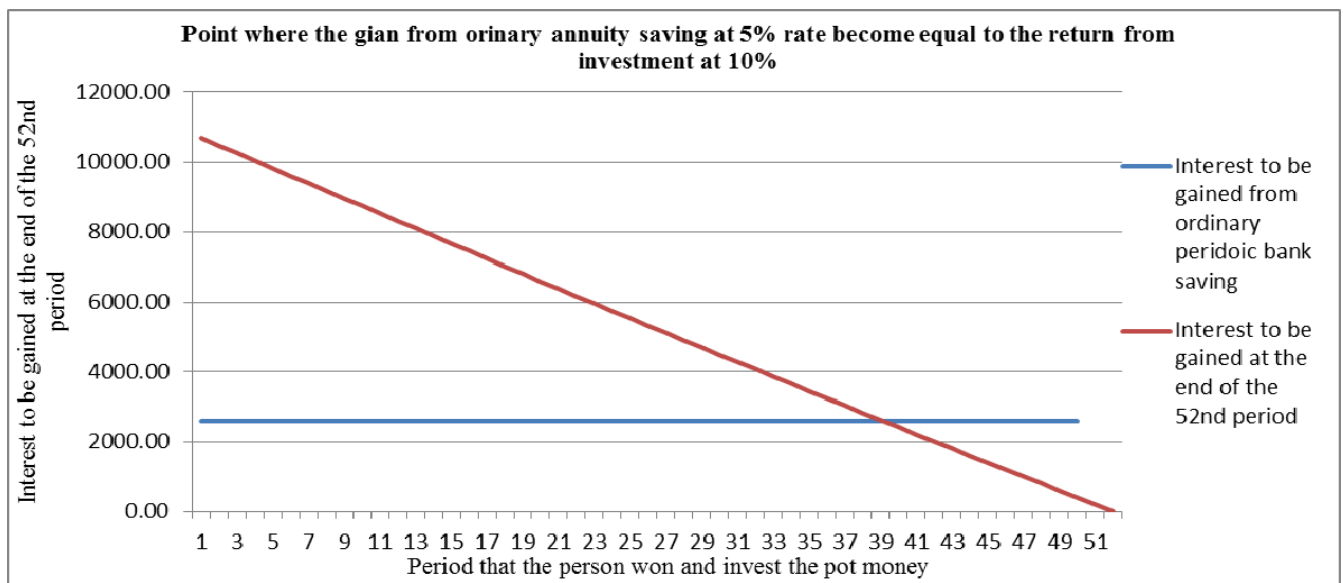
Figure 17: Point where the income from ordinary saving and the return from investment of the pot money meets

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As the investment return rate increases, the breakeven period will approach to the end of the cycle. This implies that, if an individual expects to invest the pot money at a business where the return rate is higher than the risk free rate, he will be better off by joining *equb* even if he wins the pot at the later stages of the *equb* cycle. As the interest rate increases, the equilibrium point will go far to the right and vice versa, *citrus paribus*.

By looking at all the above graphs, it can be reached at the following generic formula. The formula is applicable for an individual who want to choose from making an ordinary annuity saving or joining *equb* to finally invest the pot money at an interest rate of i compounded n times (where n indicates the number of periods in a year).

First, find the net financial gain (interest income) form risk free investment (making an ordinary annuity saving) using the ordinary annuity formula – this is used as a standard to compare the financial gains from *equb* participation.

$$\textit{Net financial gain (interest income)} = \textbf{PMT } [((1 + i)^n – 1) / i] – [PMT * n] \ldots\ldots.. (1)$$

Second, in order to get the net financial gain from investing the pot money it is possible to use the future value of money formula with little modification. The future value of a fixed amount of money can be calculated using:

$$\textbf{Future Value = PV } [1 + i]^n \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..(2)$$
$$\textbf{Where}, \textit{PV - is the present value of the fixed amount to be invested (deposited)}$$

If an individual wants to calculate the period when s/he will be indifferent from saving his/her money in an ordinary annuity way or joining *equb* to save/invest the pot money somewhere it can be done using the following steps:

Step 1: calculate the interest to be gained by making an ordinary annuity saving in a bank – calculated using formula (1).

Step 2: substitute the net gain value found in step 1 to the modified version of formula 2 to find the value of X **-1** using the formula:

$$\textit{Net gain = \{PV } [1 + i]^{x-1}\} \textit{ - PV}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.(3)$$

$$\textbf{Where, } \textit{x-1 - is the period where the benefit of joining equb will equal to net gain}$$

In order to use the above formula, one should know the financial gain from the risk free scenario. Once that is found, the value of x-1 can be found by substituting the values in formula 3. But one needs to take care while interpreting the value of x-1. The value indicates the remaining number of periods where the individual will be worse off if he wins the pot. For example, if the value of x-1 is 7, then this means the individual will be better off if and only if he can win the pot **on and before** the 7th period **from the last period of the equb cycle**. Assuming the total number of 52 participants in *equb* and the value of x-1 as 13, this means that the individual will be better off if s/he can win on or before the 39th period of the *equb* cycle. Thus for all *equb*s where there are N participants, the individual will be financially better off by joining *equb* if he can win before the **N - (x-1)** period.

5.1.2 *Equb* as a credit mechanism

In the examples above we consider a situation where the individual considers *equb* as a saving mechanism. But an individual could also use the institution as a credit mechanism.

> ➤ *Scenario one*: *individuals use equb as a credit mechanism and they consider interest rate as a factor to choose from equb and formal institution*

Let us assume that an individual applies and gets a credit facility of 312,000 ETB due in 2 years. According to Access Capital (www, access capital, 2011), the average lending interest rate in Ethiopia as of April 2011 stood at 10.3%. Assuming a quarterly repayment schedule, the total interest can be calculated using the formula:

$$c = \frac{r}{1 - (1 + r)^{-N}} P_0$$

Where: - C is the periodic payment amount
P_0 is the principal,
r is the annual interest rate,
N is the number of payments

By applying the formula, the total interest that the individual is going to pay in two years will be 37,224.56 ETB where he is expected to make a quarterly repayment of 43,653.08 ETB. If the repayment is going to be on monthly basis, the total interest to be paid will be 34,466.62 ETB. Then, let us assume the same individual joins an *equb* with a weekly contribution of 3,000 ETB where the number of participants is 104 by which he can win a same lump sum amount like the bank loan he request i.e. 312,000 ETB. When he won the pot money, obviously will avoid the interest that he had to pay had the money been a bank loan. This will be a pure financial benefit that the individual will earn. If the individual cannot win the pot in an early period of the cycle, then he will be indifferent with a bank loan if he buys the pot from the *equb* or another individual up to the cost of 37,224.56 ETB. At this point he will be indifferent and will start to look at other factors like the timing of the money, the processing cost and the like if the buying cost of the pot is going to be higher than 37,224.56.

The same scenario could be taken to the medium and small size *equb*s. Unlike the big *equb*s where we consider bank as an option, we will consider the case of MFI for small and medium size *equb*s. This is because banks usually are not expected to offer credit of small size. The borrowing interest rate in MFIs is even much higher than the bank interest rate. According to the data found from Meket Microfinance Institution, the annual interest rate in MFIs range from 15% to 20% putting the average interest rate at 17.5%. In order to get a glimpse about the financial benefit for small and medium size *equb* members, we should calculate the interest that an individual is going to pay in the same way as we do for the big *equb*s. If we assume the individual will take a loan of 12,000 ETB from an MFI with a monthly repayment scheme to be paid in a year with an interest rate of 17.5%, the total interest that s/he will pay will be 1,167.72 ETB. If the same individual is going to join *equb* with 12 members where the contribution is on monthly basis, he can get a lump sum amount of 12,000 ETB. By doing so, he avoids an interest expense of 1,167 ETB. Of course this could be true if the individual is able to get the pot money as early as he can get the loan from the MFI.

> ✓ *Scenario two:* *individuals use equb as a credit mechanism and consider both interest rate and transaction cost as a factor to choose from equb and formal institution*

In the first scenario we consider interest rate as a critical factor for choice made by an individual from formal financial institution and *equb*. But interest rate may not be the only factor for some individuals. They might be much concerned about the timeliness instead. Thus the individual will consider the time that the finance will be ready for use, the processing fee, the bureaucracy to be followed to secure the finance and other variables that will make the transaction cost higher. The transaction cost cannot be generalized for every

individual. It is dependent on the situation where the individual is at including his/her income, the amount s/he demands, the distance to formal financial institutions, etc. The transaction costs will be added on the interest expense of borrowing and will give the final figure indicating the total cost of borrowing from bank or the total cost of getting pot money from *equb*. Thus, we can be sure that the cost of borrowing from banks will be higher than the interest income to the extent of the transaction cost.

Concluding the financial analysis:

The following concluding remarks are drawn from the points discussed above

I.   If the individual is going to deposit the pot money s/he win in a bank at the average bank saving interest rate, the breakeven point is always in the middle. Even if we make the interest rate 100%, it merely moves one period back! Thus if the individual win before half of the *equb* cycle, s/he will be better off than making an ordinary annuity saving in a bank.

II. If the individual is going to invest the pot money at a higher return rate than the risk free rate, then the breakeven point will move to the right i.e the individual will be better off by joining *equb* instead of making an ordinary saving in a bank though he win pot money in late periods.

Implications:

➢ For those who join *equb* to be committed or for some other reason and want to take the last pot, the *equb* is costing them a value equal to the interest they could have enjoyed by making an ordinary saving in a bank. Net payment to the service they intended to get from *equb*, however is equal to:

= (the interest they forgo + the transaction cost they incur in *equb* - the transaction cost had they use the bank)

Usually the transaction cost in formal institutions is higher than the informal and hence the net loss after calculating transaction cost will be lower than the interest they forgo!

➢ For those who use the *equb* as a credit mechanism and use the ordinary bank saving as a standard, the net gain they enjoy by joining *equb* will be:

= the gain from the investment + the transaction cost in bank - transaction cost in *equb*

By the same effect of the transaction cost, the net gain from joining *equb* will be higher that the gain from investment.

➢ For those who use the *equb* as a credit mechanism and use bank lending rate as a standard, the net gain they enjoy by joining *equb* will be:

= the interest expense they avoid + transaction cost in bank - transaction cost in *equb*

By the same effect of the transaction cost, the net gain from joining *equb* will be higher that the interest expense avoided.

5.2 Analyzing the empirical findings

5.2.1 Reasonable number of members

The number of participants in a given cycle of an *equb* is decided by the members themselves and sometimes the *equb* organizers. The empirical evidence collected for this research shows that members in big *equb*s want the number of participants to be large while the medium and small size *equb* members want the number of members to be small. The reason for the big *equb* members is their need to win a large sum of money in one cycle. Large money collected from *equb* is usually used to finance working capital of an established business or to expand an already running business or even to establish a new business which will otherwise be impossible or when it is possible a bit costly. The medium and small size *equb* members on the other hand want to have small number of members in the group. This is because their need is only to save and commit themselves probably to purchase some durable good or spend it on some holiday. As the number of participants gets larger, the time that the cycle will be completed will get longer. Members in big *equb*s prefer an average cycle length between 1 and 2 years, while the medium and small size *equb*s prefers the cycle to be completed in less than a year time. In the big *equb*s, a cycle can accommodate more individuals than the medium and small *equb*s since the contribution frequency is usually on weekly basis. The contribution frequency also matches with the income generation capacity of the members in the group. The medium size *equb*s, where members usually earn a regular monthly income, the contribution is on monthly basis while it is weekly for the traders.

5.2.2 Time preference to take the pot, pot assignment mechanism and willingness to change the pot order

As it was presented in the previous chapter, the empirical finding shows that most of the members in big *equb*s preferred to win the pot money at the beginning. This is because they are financially motivated to join *equb*s. They always want to work using the money. Thus, it is possible to view the *equb* as a credit mechanism for big *equb* members since they reflect a desire to take the funds as early as possible. This motive is also reflected in their choice regarding the pot assignment mechanism. The lottery way of pot assignment is preferred among big *equb* members. This is because most of them need the money as early as possible and hence the only way to fairly distributing it will be to use lottery. The bid kind of pot assignment is also practiced in big *equb*s which shows the need of members to take early even by paying a charge for the money. When they are asked about their willingness to change the pot order to another member, most of them are not willing to do so since they always need the money. Even those who are willing to change the order said they will not do that for free. They want a commission or in other words they want to sale to those who need. This is another indicator that members in big *equb*s are mostly financially motivated when they join *equb*s.

The time preference trend in the medium and small size *equb*s is different from the big ones. Most of the members do not want to win the pot at the beginning. Most of the small size *equb* members instead want to take the pot money at the end which is a typical characteristic of an individual who wants to commit him/her self to saving. In small *equb*s, members want the pot to be assigned based on need which is an expression of solidarity in the group – members are willing to give the pot to a member who needs it badly. This is a perfect contrary practice to the big *equb*s. In the medium size *equb*s, the preference to take the pot is distributed among periods. Some of them want to take at the beginning, some need it in the middle and some other needs at the end. Based on the empirical finding, this could be because most of the

members in middle size *equb*s have a plan to purchase some durable good when they join *equb* and hence they are indifferent about the timing to win the pot. Members in small and medium size *equb*s are also willing to change the pot order for free if another member has an urgent need of money than the person who actually wins the pot. This shows that the middle and small size members' motive to join *equb* is not totally financial.

5.2.3 *Equb* structure and member selection criteria

*Equb*s could operate with a written agreement or without. The empirical finding shows that all of the big *equb*s operates their day to day activity based on a written agreement. The small and medium size *equb*s, on the other hand, usually do not have a written agreement. In an *equb*, usually there is someone who will facilitate activities starting from its establishment to the end. In the big ones, the organizers will be compensated in cash from the contribution of the other members but not in small and medium size *equb*s. The organizers in small and medium *equb*s are either individuals who want to take the first pot or someone who is a volunteer.

As far as the member selection criterion is concerned, the researcher has found that member selection criteria, *equb* size and the motive to join have a relationship. Accordingly, members in big *equb*s do not worry about the composition of members in the *equb* they are participating. Since the big *equb*s are more organized and every member will sign on the agreement (see *appendix VI* for sample written agreement) every member do not need to know each other. The *equb* organizers are usually responsible for a payment default by a member and they will actually get paid for the risk they assume and the role they play for the smooth functioning of the *equb*. Thus, the rest of the members do not really worry as long as the default rate is kept low and they can get their money back. Their motive is just financial! Transaction made in big *equb*s then involves some cost for the members since the organizers should be compensated. In most cases, every member will make one extra contribution which will be paid as remuneration for the organizers. The members have accepted this as normal. Despite the fact that organizers will get compensated for the service, most of the members do not want to be part of the organizers team; they just want to be ordinary members even if they are aware that they will pay for the service offered by the organizers. This will lead to a question - if being a participant in an *equb* costs them financially, then why do they prefer *equb* than formal institutions or individual lenders? There could only be one answer here. It is because the cost in *equb* is lower than the other alternatives of financing.

When it comes to the medium size *equb*s, members need other members to be in the same working place, or residence area. This, according to them, will help to control the activities of other members. The group as a whole is liable for any default by a single member. Members do not want to have paid organizers instead they use a volunteer member to do the job. That volunteer individual could be someone who needs to take the first pot. This could be because the number of participants is manageable as compared to large size *equb*s and assignment of organizers will bring its own costs like compensating the organizer for the duty s/he performs. What all the members want is the commitment and they don't want to either incur a cost by paying for the organizers or to get compensated by becoming an organizer. This also works for the small size *equb* participants. The only difference between the small and the medium size *equb*s is that members in small size *equb*s prefer other members to stand in the same social strata like religion. This is probably because there is a social aspect of *equb* participation in small size *equb*s. According to the empirical data collected small *equb* members join *equb* for social reasons. They perefer *equb* than other associations fully dedicated to social activities because they want to embrace individuals who want to enjoy the

social and financial benefits at the same time. In addition, in *equb*, the members will be more committed not only for the finance but also for the social activities too.

5.2.4 Time value of money and interest calculation

An individual who is financially motivated while joining RoSCA is expected to calculate the financial benefit that he is going to enjoy by becoming a member. As expected most of the big *equb* members think about the time value of their money in *equb* and that is why they always want to take the money early. Most of the small size *equb* members to the contrary do not think about the time value of money in *equb*. This is because their very motive is not to multiply the money or getting profit out of it. The social values and the sense of solidarity are high in small size *equb*s. More than half of the big *equb* members (60%) prefer the introduction of interest calculation into *equb* money. This clearly indicates their financial motive to join *equb*. Most of the medium and small size *equb* members do not want the installation of interest to *equb* money because they think that it will basically be against the concept of friendship and solidarity. In addition they stated that it would look like a loan from an individual (what they call *"Arata"* in Ethiopia). This clearly shows that the medium and small size *equb* members value friendship and other social factors beyond the financial motive.

5.2.5 What could replace *equb* if it ceases to exist*?*

The empirical findings shows that, for most of the big size *equb* members, banks and MFIs can substitute the service they are currently enjoying from *equb*. This shows that big *equb* members are enjoying the financial services of *equb*s. For most of the small *equb* members, to the contrary, nothing else can substitute the service they are enjoying from *equb*. The medium *equb* members are in the middle where half of them said they can substitute the service of *equb* by using formal institutions and the rest said either *iddir*, or *mahiber* or nothing else can do so. The perception towards a product as a substitute for another could be an indicator for why the individual really need the products. Accordingly, from the response of the *equb* members we can see that the financial motive outweighs the other motives for the big *equb*s while this is not true for the small and medium size *equb*s.

5.3 Assessing earlier suggestions based on the empirical findings

Suggestions developed so far in the field indicates that participants join RoSCAs to purchased durable goods (Dejene, 1993; Besley, *et al.,* 1993), or to provide insurance (Söndsor, 2010), or to reduce social pressure from different directions (Ambech and Treich, 2003), or to commit himself in the presence of time inconsistent preferences (Gugerty, 2007). Those suggestions will be tested using the empirical data collected from *equb*s in Ethiopia in the following sections. Based on the empirics and the critics of those suggestions, the researcher will come up with his own findings.

5.3.1 *Equb* as a means to purchase of durable good

In an early attempt to answer the economic rationale for the establishment of RoSCAs, economists like Besley *et al.,* (1993) and Dejene (1993) proposed a theory arguing that individuals join RoSCAs when they want to purchase durable good. The finding of this research also supports the theory but only for the medium size *equb*s. Individuals in middle size *equb*s agreed that one of the reasons behind their participation in *equb* is the need to purchase durable good. This theory may also work to some extent for individuals rural-small

*equb*s. Yet, individuals in big and urban-small *equb*s did not agree that the need to purchase durable good was their reason to join *equb*. Thus, based on the results of this study, it is not possible to generalize the applicability of the suggestion for all sizes of *equb*s instead we can say it fits for individuals in medium size *equb*s.

A question can be raised here to challenge the suggestion developed by those scholars who advocate the "durable good" motive. Individuals can use the money they get from RoSCAs for too many reasons including purchasing consumer goods like food or cloth, spending on special ceremonies like weeding or graduation party or even in constructing house. Using the pot money to purchase durable good/s is among the many possible spending options that an individual has. Even if we assume that individuals join RoSCAs to purchase durable goods, is joining RoSCA the only mechanism to get the money should an individual purchase a durable good? Why don't RoSCA participants use other available options to buy a durable good like saving at home and/or borrowing from banks or MFIs? Can we say it (RoSCA) is the best option? If we say yes, why it is? The question regarding why individuals join RoSCAs should answer why they don't use other alternatives that will enable them to do the same as they are doing with the pot money. The "durable good" theory, however, failed to answer this question.

5.3.2 *Equb* as insurance

The other contending hypothesis is the insurance motive to join RoSCAs. Based on the empirical data collected for this research, individuals who are from rural *equb*s agreed that they consider *equb* as an insurance. Individuals in the urban *equb*s, however, do not agree with their rural counterparts. Thus, the insurance motive suggestion works for individuals participating in *equb* but with discretion based on where the *equb* is actually located since it is not true for the urban *equb*s.

Insurance is when an individual is aware of risks in relation to something anticipated. Despite the fact that members of big *equb*s perceive it as insurance it is contradictory with their motive of taking the money early. Because once an individual takes the pot money there is no way that he can consider the pot as insurance money anymore! S/He should keep on returning in spite of any trouble s/he faces after taking the pot. Of course the other members can cancel the debt s/he owes to them but this is not the reality in big *equb*s where everyone is financially motivated and in need of money at early stage.

Scholars subscribe for the "insurance motive" suggestion argue that exchanging order of the pot could be considered as insurance. However, based on the empirical findings, the researcher notes that this justification has its own drawbacks. First, in order to say that *equb* is insurance for members, members should be explicitly motivated to cover themselve against somekind of risk when they join *equb*. Second, the exchange of pot is totally dependent on the will of other members and hence it is better if this case is considered as an indication of solidarity and cooperation in *equb*.

In addition, the insurance motive does not describe why RoSCA members do not actually use formal insurance institutions instead. Probably, formal insurance institutions cannot provide an insurance coverage for any loss going to happen in a household. Instead, a person should buy a specific insurance coverage for his car, house, health, life or some other specific risk. In RoSCAs, however, the pot can be taken (if not taken earlier) when something unforeseen occurred on an individual no matter what it is. But, above all, the transaction concept of transaction cost is missed in the "insurance motive" suggestion.

5.3.3 *Equb* as a mechanism to cope up social pressure and intra-household conflict

In their model, Ambech and Treich (2003) argued that individuals join RoSCAs to escape from social pressure. For the *equb* in Ethiopia, nevertheless, this does not look like working. Almost all respondents, irrespective of the *equb* size, stated that they don't actually use *equb* for the purpose of escaping from social pressure.

The findings lead the researcher to propose a counter argument for this theory. An individual might for the time being say that s/he is contributing an *equb* and escape from relatives who request money. But those relatives may know when the individual is going to win the pot and hence they will come back with the same request but with probably a higher amount of money. This will happen because those relatives will assume that the individual gets a good sum of money and will then request for a higher amount than their previous request. It is even possible to argue that participating in *equb* may bring additional pressure from relatives during the time that the individual won the pot. As the participants in *equb* said, an individual cannot escape from the pressure of relatives by participating *equb* since the money contributed to *equb* will be back sooner or later. One could say that access to information might hamper relatives from asking money at the right time from an individual who won *equb* money. However, as the researcher understood from respondents for this research, it is possible to get information about who win when in *equb* after they actually receive the pot.

In rural areas, the information regarding big *equb*s could be accessed easily given the social cohesion available in the community as well as recognition that participants in the big *equb*s have in the community. Members in big *equb*s are usually traders and when they are not traders the individuals have the capacity to contribute as much as those traders are contributing, hence have recognition and status in the community. This facilitates the smooth flow of information about the *equb* of those individuals. When it comes to the small *equb*s, members are not going to be under the same pressure like those who are in the big ones given their small income and *equb* contribution. But if someone is interested to get information, it is easy to access since *equb* meeting is usually held in public places like local beer sales houses. To conclude, the suggestion given by Ambech and Treich does not actually work for *equb*s in Ethiopia.

The other suggestion, RoSCA as a mechanism to solve intra-household conflict, is also disproved in this research. All married respondents except 4 stated that they always discussed with their spouse about their participation in *equb*. They also stated that the probability that their spouse will hear about their participation in *equb* is high, even if they tried to hide. Hence, it they prefer to discuss with spouses. Women participants are usually believed to be the major group of people who use RoSCA as an intra-household conflict solving mechanism, according to the model. However, 93% of the female respondents who are married said that they discuss with their spouse before they join *equb*. If they discuss with their spouse, there is no way that they can use it as a mechanism to hide money from their spouse or solve intra-household conflict. There is even a case where women participants receive money from their spouse to contribute to *equb* when they run out of cash let alone they hide from their spouse. Thus, this model failed to explain the motive of members to join Ethiopian RoSCAs (*equb*s).

5.3.4 *Equb* as a commitment device

After looking at the above suggestions on the rationale for the existence of RoSCAs, Gugerty (2007) come up with another suggestion arguing RoSCAs are used as a commitment device

for participants. According to the suggestion, there are people who do have a time inconsistent preference and lacks alternative commitment technologies. Those individuals will commit themselves by joining RoSCAs.

The "commitment device" argument is proved using the empirical data collected for this research for two sizes of *equb*s: the middle and the urban-small *equb*s. It, however, does not work for big *equb*s and rural-small *equb*s. This is confirmed using the responses of *equb* members for three questions. One of the questions is regarding individual's time preference to win the pot. Most of the respondents from medium and small size *equb*s do not want to take the pot at the beginning of the cycle. More than 72% of the members in big *equb*s on the other hand need to win the pot at the beginning. Theoretically, those individuals who want to commit themselves with saving do not want to win the pot at the beginning. Hence, we can say medium and small size *equb*s join *equb*s for the sake of commitment while members in big *equb*s are using *equb* as a credit mechanism.

To further taste members' perception of *equb* as a means of committing oneself, another question has been asked to respondents. When they asked about why they prefer to join or keep participating in *equb* than using formal financial institutions, most of the medium size *equb* participants stated that they either cannot be committed to save money alone or they don't like the procedure and process in the formal institutions (which will be discussed later in detail). In the section where respondents have been asked to choose whether they agree or not, the medium and small size *equb*s has stated their agreement on *equb*s role as a commitment device.

The committing feature of *equb* could be seen from both the saving and withdrawal side. From the saving side, every member is expected to contribute every period until the end of the cycle once they joined the group. From the withdrawal side, no member can withdraw the money whenever they want unless it is their turn to take the pot. The formal financial institutions in Ethiopia do not have yet started to provide services with special commitment mechanism practiced in the developed banking services like those who discussed by Ashraf *et al.,* (2003). Hence, based on the empirical finding we can say that middle and small size *equb* participants join *equb* because they want to enjoy those *"saving side"* and *"withdrawal side"* commitment features of *equb* which they couldnot otherwise find in formal institutions. The "commitment device" logic, therefore, works for the small size and medium size *equb* participants but not to big *equb* members.

In spite of all the above facts, the researcher argued that there is still a gap that the "commitment device" suggestion does not actually fill in understanding the discipline fully. The "commitment device" suggestion has covered only one side of the story. As explained by Rutherford (n.d), saving can be transformed into large and useful sum of money in three patterns: *"saving up", "saving down"* and *"saving through"*. The issue of commitment will take the stage when we discuss about a saving up strategy. If an individual wants to save fixed regular money at home or in a bank, he may suffer from time inconsistent preferences and may not be able to achieve his saving goals easily. But what will happen for an individual who want to use the saving down strategy?

The findings of this research revealed that individuals in big *equb*s want to take the pot at the beginning and hence are not interested in saving and committing themselves. They instead want to work using the money. If an individual takes the pot at the beginning and pays it back for the rest of the cycle, then it can be considered as a saving down pattern. Of course the committing feature of RoSCAs could be enjoyed when an individual uses the saving down

strategy and when s/he takes the money at early periods. But formal institutions can also do the same. If a person takes a loan from a formal institution and repays it in some time, s/he will be bounded by a contract and will be committed to repay on time. Then, this will bring forward the same question raised earlier - why do individuals who follow saving down strategy actually choose RoSCAs while they have other options? Unavailability of formal institutions cannot work since the big *equb*s considered in this study use the bank as a medium to deposit and withdraw money collected via the *equb*.

Gugerty (2007) has also said that "participation in these RoSCAs is costly - in terms of both time and inflexibility" - and argued that the benefits of commitment make these costs worthwhile to participants. But the researcher of this study has found that flexibility and timeliness are among the most important features of RoSCAs not features that members sacrificed to enjoy the committing feature. Members have many possibilities of getting the pot money during the time they really need. This can be seen from members' willingness to change a pot order. Except those who are in big *equb*s, members are willing to change the pot order if one member faces an urgent problem than the one who actually won the pot at a given time. Even in the big *equb*s, a member can either buy a pot from the *equb* during the period where the pot is assigned based on auction. To the worst scenario, an individual who really needs the money can buy the pot from the person who won the pot since most of the members are willing to change with a commission or in other words are willing to sale the pot. This shows how *equb*s can be used at a time of real need and a participant have many options to get the money even if it is not their turn to take the pot.

In the big ones, members devise a means to cope up the inflexibility that Gugerty (2007) argues for. The pot is assigned in a mixed way where a pot will be assigned based on auction every other week which will give those who need the money urgently the chance to get it on time. But the issue of risk could be the major concern instead. Based on their size, *equb*s deploy their own mechanism to cope up the risk. In the big ones, it is the organizers who are responsible for the selection and screening of members. In addition, members have to have someone in the *equb* who can sign as a guarantor, or they should provide a signed cheque with no date written on it or if they cannot do both they will provide a physical collateral immediately before they take the pot money. In the medium and small size *equb*s, however, the social collateral is the dominant way of reducing potential risk against those members who will stop to contribute once they take the pot. This is also additional evidence showing the flexibility of the service offered by RoSCAs for its members.

Participation in *equb* for the sake of commitment is costly in terms of the opportunity cost that the individual forgo while joining *equb*. This is clearly shown in the section 5.1. If the individual was using the bank to save his money, he would enjoy the interest income. This is the cost of getting the commitment service from *equb*. The figure is not the same as the interest income, however. The net transaction cost reduced by using *equb* will be deducted from the interest income forgo if it is positive and will be added if it is negative.

5.4 An alternative suggestion and justification

RoSCA as a mechanism to reduce transaction costs and to enjoy financial service without or at least with very small cost

Unlike the other questions where the answers of respondents differ based on the size of the *equb* that they belongs to, members' response regarding why they prefer to use *equb* instead of other financial service providers like formal institutions can be generalized regardless of

size. Most of the respondents have stated that it is expensive to use formal institutions. Based on the response, the first reason for the big *equb*s is high interest rate in formal financial institutions while they can enjoy credit at lower cost, if any, from the *equb*. Secondly, the cost of making transaction with formal institutions is very high according to respondents. The third reason, which is somehow related to the low transaction cost, is the flexible nature of *equb* as institution.

According to the respondents, the procedure and the processing time to get a loan from a formal institution is very long, the procedure followed is tedious, and the financing cost is high. Those respondents who are already using both formal institutions and *equb* are even sensitive about the processing time and the length of the procedure while choosing among formal institutions. Since most of the big *equb* members are traders, they need the money as soon as possible so that they can use it immediately and hence are sensitive about the disbursement time. The medium and small size *equb* members are also sensitive to the processing time and the procedure while using the saving up strategy in formal institutions. They should visit the offices of the institutions everytime they want to make a transaction. The cost is even much higher if they choose a saving down strategy with formal institutions.

The first and the most important one in determining cost of a transaction is access to information about background and status of parties involved in the transaction. Information is, however, costly and distributed asymmetrically (North, 1995). In order to let one party develop a trust on the other, it should have enough information about the involving party. This works for formal financial institutions. Formal institutions are more likely to offer a loan to a customer who they know previously than offering to a new customer. This is because the banks have better information about the already customers than the new ones. As it is clearly explained in game theory, the probability of getting a cooperative solution is high when the players repeat the game many times. This makes the transaction cost higher for individuals who want to join formal institutions as a new customer since they do not have transaction history. This will hence encourage individuals to establish their own way of handling and reducing the cost of transaction which give birth to RoSCAs. As evidenced in the data collected for this research, many of the *equb*s exist for over a single life cycle though some members could leave or additional members could join. This helps members to have enough information about other members which leads to low probability of default. The main job of banks is managing portfolio and risks. The level of risk is dependent on the level of information the bearer have regarding the risk. Formal institutions can hardly get as much information about their customers as *equb*s have about their members. This risk level determines the cost of transaction made with the other parties. This is where *equb*s took advantage over formal institutions.

The second variable affecting the transaction cost is the cost of enforcing an agreement and cost of measuring agents' performance (North, 1995). In formal institutions a customer will sign a contract and if failed to stick with it the enforcing mechanism is taking the customer to a legal body. This will create additional cost for the institution and hence by calculating the risk as well as cost of enforcing will set a higher financing cost on their customers. Formal institutions also need to measure the performance of their customers once they extend their service which will cost them and make the interest rate higher. In RoSCAs, however, the enforcing and measuring cost is low which will keep the transaction cost very low since most of the *equb*s use a social enforcing mechanism. In big *equb*s, the organizers are responsible for controlling the performance of members while in small and medium *equb*s the whole group will look at each other's performance since most of them either reside or work in similar places.

The third component of a transaction cost is travelling cost and distance (Sandsör, 2010). In order to perform a transaction with formal institutions an individual needs to visit the office of the institutions physically. This is especially true when the institutions are located in a country or environment where the industry is not yet able to use modern technology. In Ethiopia, a bank customer cannot perform banking transactions using an internet or mail. Thus, the customer needs to visit the office which brings its own transaction cost. This includes not only the travelling cost but also the opportunity cost that the individual forgoes to appear physically at the office. But in *equb*s such kind of travelling cost is minimal. First, members hold their periodic meetings at the place where it is not far either from their office or residence. Second, mostly *equb* meetings are held in the weekend. Therefore, members are not expected to sacrifice their working time to attend *equb* meetings, they only use their leisure time where meeting friends is one way of spending it. As the medium size *equb* members explicitly stated they cannot manage their account in formal institutions since they will quarrel with their bosses if they leave their office during a working hour. However they can manage the *equb* since the transaction will be made immediately after they receive their salaries in their office. While discussing with the CEO of an MFI operating in the area where the rural samples were taken, he said that his company do have a plan to send cashiers to the government offices to enable the employees to use the services without affecting their working time. The significance of this strategy on the *equb* participation of those individuals should be studied in the future after the implementation of the strategy by the MFI.

The level of bureaucracy could be the fourth variable in calculating transaction costs (Sandsör, 2010). The number of steps and offices that an individual should pass through to get a given service determines the service speed – the longer the steps, the longer the service delivery time. In *equb*, the bureaucratic step is very small, if there is any, and will help a fast service delivery. As the respondents of this research stated getting a loan from a bank is not an easy task. According to them, the waiting time is very long which will hinder them from implementing what they propose. In addition, *equb*s enjoy very low operating and administrative costs, when there is any. As Bouman suggests the operating cost and the bureaucracy is minimum because the institutions are informal.

Finally, in simple market contracting costs will be incurred in the transaction process because of the existence of owners on the one hand and other parties on the other. Ownership is then one of the mechanisms to mitigate some of the costs of transacting (Coase, 1937 cited on Österloh, *et al.,* 2002) since it will at least reduce conflict of interest between contracting parties. E*qub*s are owned by the members (the customers themselves) and obviously there will not be an interest conflict among parties. This helps them keep the transaction cost very low.

Based on the above mentioned discussion constructed using empirical findings and the suggestions given so far by scholars, the researcher of this study suggests that the reason why members of big and medium size *equb*s join or establish *equb* is to escape from high cost of financing in formal institutions in general and high transaction costs in particular.

An individual who want to get a credit service from formal institutions should wait until the application is processed where the process bear its own cost. The individual, therefore, want to avoid those costs by joining *equb*. The timeliness and flexibility features discussed above reduce the cost of transaction. But this does not mean that there is no transaction cost at all in *equb*s but it is small as compared to the cost in formal financial institutions.

As it can be learnt from the empirical finding and the analysis made above, the study revealed that big *equb* members are considering the institution as a credit mechanism and the reason

for not using other credit mechanisms is high interest rate and transaction cost. The study result has also suggested that the low transaction cost in *equb*s is what attracts those members who want to use *equb*s as a saving mechanism (those who want to purchase durable good and want to commit themselves for saving).

5.5 Discussion of results with other similar studies

This study confirms some of the findings of similar studies conducted previously in Ethiopia. Mauri (1987) for example, lists some of the reasons why members join *equb*. His list includes: members like the contractual and forced saving nature of *equb*; flexible and adaptable nature of *equb* to various needs and situations; "low or practically non-existent cost of administration and transaction", absence of threshold minimum investment; and the probable tendency of gambling in *equb* which the lottery holds. The finding of this study resembles with some of the suggestions given by Mauri (1987). Accordingly, the medium and small size *equb* members join the institutions because of their need to enjoy the committing nature of *equb*s. Members in all size *equb*s are also motivated to enjoy a very reduced, if available, transaction cost while getting the financial services from *equb*s. One of the suggestions of Mauri is not confirmed in this study. Members did not show any tendency to the feeling of gambling by participating in *equb*s. The flexible and adaptable nature of *equb*s has played a very important role for the existence of the institutions in all sizes of *equb*s. The study conducted by Dejene (1993) has also stressed the importance of self-discipline, flexibility, timeliness and collective action from participation as important reasons for members to join *equb*s. In his recent study, Temesgen (2008) found that the most important reason for members for joining *equb*s is their need to secure finance for less cost as compared to the formal financial institutions.

In an empirical study conducted in Benin by Dagnelie and Lemay-Boucher (2008) it is found that the major motive for RoSCA participation is the need for a commitment to save. In a study carried out in Kenya, Gugerty (2007) has also found the major reason for members to join RoSCAs is the demand for a committing device for saving. One of the findings of this study resembles with the findings in Benin and Kenya. However, the results of this study shows the need for commitment device is a motive for only participants in medium and small size *equb*s. In addition, the results of this study revealed that the committing feature of *equb*s could be used beyond financial needs. It serves as a commitment device for social activities too for small size *equb*s.

Dagnelie and Lemay-Boucher (2008) has also found that Beninese RoSCA participants do not use RoSCAs as a mechanism to solve intra-household conflicts. This is evidenced by the requirement set by Beninese RoSCAs. Many of them request an approval from spouses of each member before they join. In addition most of the RoSCAs organize a party at the end of every cycle where non-member friends and neighbors will be invited and participate. This will give participants no chance to use it as an intra-household mechanism since information will sure be leak out of the members. In the empirical study conducted in Kenya, Gugerty (2007) has also found that RoSCA participation is not a mechanism to keep money away from husbands rather it is a household strategy. The results found from this research resemble with the study in both Benin and Kenya in this regard. The requirements set by some *equb*s as well as the information flow in the community are reasons that hinder members from using *equb*s as a mechanism to solve intra-household mechanism.

Like the findings in Kenya by Gugerty (2007) members in Ethiopian RoSCAs do not use *equb*s for explicit insurance coverage although members in rural *equb*s said that they

sometimes perceived it as insurance. However, the *equb*s can be used to deliver limited implicit insurance when members suffer from a negative shock.

Most of the studies previously carried out on the field, except the one by Mauri (1987) overlook the motive of RoSCA participants to reduce transaction costs and total costs incurred because of other source of financing including formal financial institutions. The results of this study, however, suggest that one of the reasons why members participate in RoSCAs is to reduce cost of using financial services in general and transaction cost in particular.

When we consider studies conducted on RoSCAs in general, most of them stated that RoSCAs are usually established and used by women. It is this belief that push researches on the field to concentrate on the small size RoSCAs, even if the researchers do not explicitly mention that they focus on small RoSCAs. This can be inferred from the results they come up with. The conclusions they made are also biased towards small RoSCAs since the belief that the institutions are established to serve the need of poor women in developing countries. The result of this study however shows that RoSCAs could be established by let alone men but also businessmen who are running big businesses. The new suggestion derived from the empirical finding of the study will hopefully bring a shift on the way RoSCAs are understood in this regard.

6 Conclusions

Based on the empirical findings, different trends have been identified regarding members motive to join as well as other variables of RoSCAs. First of all, it is found that the *equb* size and the level of formality in *equb* are directly related, i.e. as the *equb* size gets larger, the *equb* became more formalized. This has been shown in the form of agreement prepared for membership and establishment as well as the way the day to day operation is managed. It is also expressed in terms of the charge paid by members to the *equb*, and the time they should wait to get the pot if they cannot either buy it or win the lottery. This affects the costs and benefits of joining *equb*, at least the financial benefit. The formality and equb size relationship is also an indicator for the wider usage as well as flexibility nature of equbs which in turn paves the way for members to join the perfect fit size of *equb* to satisfy their motive.

The formalization in big *equb*s is high because the involved money is relatively huge as compared to middle and small size *equb*s. In addition, as the number of participants gets larger, the possibility that every member will know each other will reduce. These two factors bring their own risk for members. In order to reduce the risk and develop the trust among each other, the institutions prefer to make themselves a bit formal. The formality level, however, does not affect the flexibility nature of the institution that much and it is not comparable with the levl of the formal institutions.

Secondly, based on the findings, it is possible to say that most of middle size *equb* members are indeed motivated to join because they want to purchase durable good. However, this does not give an explicit answer why do they choose *equb* instead of using other alterbatives to purchase durable goods. Those individuals who are motivated to purchase durable goods could use any of the three strategies to save money for the purchase - to save up, save down or save through. The finding of this study suggests that, individuals cannot implement the saving up strategy in bank or at home since those options lack the committing feature. The higher transaction cost on the other hand hinder individuals from implementing saving down strategy using formal institutions. *Equb*, however, can serve as a means to implement the saving up strategy by overcoming the shortcoming of the saving alone at home or bank option which is lack of commitment, or the saving down strategy by offering the service with little transaction cost, if there is any.

Thirdly, although RoSCA can be used as a commitment device for medium and small size *equb*s, the results of this study does not suggest that it is a common motive among big size *equb* members. The big *equb* members are instead interested to avoid higher costs caused by higher transaction costs in formal institutions. Thus, they prefer to use *equb* as a mechanism to reduce the cost of financing. As compared to formal institutions, the average waiting period, the transaction cost as well as the interest expense is very low in *equb*s. This attracts members in big *equb*s to join.

The commitment motive could also apply for small size *equb* members, however, with a little modification. The members in small size *equb*s do not want to commit themselves with the saving of the money. They are instead interested on other social commitments. They think that they will not be as committed as they should be if they use other associations that cover merely the social aspect. The results of this study reveal that members in small size *equb*s are more interested in the social life they enjoy by joining *equb*. *Equb* is an institution where they can show their cooperation and solidarity with others who they think are their friends found in same social strata.

The informal financial institutions are different in the way they treat risk and manage portfolio. The information that members have about each other's background helps everyone establish an organization where every member can achieve his/her own goal. The availability of information will also allow the making of transactions easily and less costly, when there is any. This makes every member to keep on participating instead of using some other means. *Equub*s are all in one institutions where one can enjoy credit service for less cost (as demanded in big and middle size *equub*s), saving committing feature of both from deposit and withdrawal side (as demanded by medium and small size *equub*s), and friendship or social cohesion (as demanded by small size *equub*s.

To conclude the researcher has found that 3 of the four hypotheses made at the beginning are true. Hypothesis 1, 3 and 4 are confirmed using the empirical data, while hypothesis 2 found false. The study result suggests that the motive to join *equub* differs based on size. Members in small, medium and big size *equub*s expressed that their reason for joining *equub* is different. The big *equub* members are influenced by financial motives, the medium size members need the commitment feature, and the small size *equub* members enjoy the socialization feature of *equub*s. Previous studies made in the field have attempted to give a single answer irrespective of the size of *equub*s where members are part of. The results of this research, hence, mark a point of departure for future investigations in the field.

When we say big *equub* members are financially motivated and the institution basically serves the financial need of participants does not mean that big *equub*s do not have the features that we can find in middle and small size *equub*s. Of course there is socialization and commitment in big *equub*s. Members in medium size *equub*s also enjoy the credit service from one another so do members in small size *equub*s. The point is, nevertheless, the financial motive dominates other motives in big size *equub*s, the social motive dominates other motives in small size *equub*s, and the commitment motive outweighs other motives in medium size *equub*s. The flexible nature of *equub*s contributes much for all those features that the institution holds. The institutions are informal and enjoy flexibility feature which otherwise is limited in formal institutions. The results of this study are in line with Bouman's explanation regarding benefits of becoming informal. In deed it is the informal features of *equub* that attracts and keep individuals to participate in *equub*.

Formal financial institutions in Ethiopia can attract customers from equubs in two ways. The first way is to reduce transaction cost in particular and the total fee they charge to offer a financial service. Secondly, they should develop modern services that will help their customers to be committed towards their savings (like services explained by Ashraf *et al.,* 2003). By doing so, formal institutions can attract those individuals who are "financially motivated" and in need of commitment. It is, however, very hard – if possible – to bring those individuals who are socially motivated while joining equubs.

Based on the results of this study, future research areas in the field could be:
- Is there a change on the *equub* structure and operation? If yes what are the trends and why?
- How much reduction in cost of using informal institutions could attract the attention of *equub* members who are financially motivated when joining *equub*?
- May the introduction of developed "saving side" and "withdrawal side" commitment mechanisms in formal banking system attract individuals who join *equub* for the sake of getting committed?

Bibliography

Literature and publications

Abera, B. D. & Zeller, M. 2009. *Using panel data to estimate the effect of rainfall shocks on smallholders food security and vulnerability in rural Ethiopia*. Discussion paper No. 2/2009, University of Hohenheim. Available at: http://ageconsearch.umn.edu/bitstream/57994/2/Abera_Discussion_Paper-2-09_final.pdf

Ambec, S., & Treich, N. 2003. *Roscas as financial agreements to cope with social pressure*. Centre for Studies in Economics and Finance, Working Paper No. 103. Available at: http://www.csef.it/WP/wp103.pdf

Anderson, S., Baland, J.M. and Moene, K.O. 2003. *Sustainability and organizational design in informal groups, with some evidence from Kenyan Roscas.* working paper, University of Oslo. Available at: http://ipl.econ.duke.edu/bread/papers/020703_Conference/enforce91.pdf

Anderson, S. Baland J.-M, and. Moene K. O. 2009. Enforcement in Informal Saving Groups. *Journal of Development Economics 90 (1): 14 - 23.*

Ardener, S. 1964. The comparative study of rotating credit associations. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland 94 (2): 201 - 229.*

Ashraf, N., Gons, N., Karlan, D., & Yin, W. 2003. *A Review of Commitment Savings Products in Developing Countries*. Asian Development Bank Economics and Research Department Working Paper Series 45.

Besley, T., Coate, S., and Loury, G. 1993. The Economics of Rotating Savings and Credit Associations. *American Economic Review. 83 (4): 792-810.*

Besley, T., Coate, S., and Loury G. 1994. Rotating Savings and Credit Associations, Credit Markets and Efficiency. *Review of Economic Studies, 61 (4): 701-719.*

Birchall, J., & Simmons, R. 2004. What motivate members to participate in Co-operative and mutual businesses? A theoretical model and some findings. *Annals of Public and Cooperative Economics 75(3): 465–495.*

Bouman, F.J.A. 1994. ROSCA and ASCRA: Beyond the financial landscape. In: Bouman, F.J.A. and Hospes, O., Editors, 1994. *Financial Landscapes Reconstructed*, Westview Press, Boulder, CO, pp. 375–394.

Bouman, F.J.A. 1995. Rotating and accumulating savings and credit associations: A development perspective. *World Development, 23(30): 371-84*.

Bryan, G., Karlan, D. and Nelson, S. 2010. Commitment Devices. *Annual Review of Economics, 2 (1): 671 – 698.*

Bryman, A. 2008. *Social research methods.* 2nd ed. Oxford University press. Oxford

Coase, R. 1998. The New Institutional Economics. *The American Economic Review, 88(2): 72 – 74*

Dagnelie, O. & Lemay-Boucher, P. 2008. *Rosca Participation in Benin: a Commitment Issue.* UFAE and IAE Working Papers 735.08.

Dejene, A. 1993. *The informal and semi-formal financial sectors in Ethiopia: A case study of Iqqub, Idder, and Saving and Credit Co-operatives*, African Economic Research Consortium (AERC), Nairobi.

Engdawork, D. 1995. Agricultural producer cooperatives: Some lessons of experience from Ethiopia. *GeoJournal, 36(4): 353-360.*

Flick, U, von Kardorff, E & Steinke, I. 2002. *A companion to Qualitative Research.* Sage Publications Inc, Thousand Oaks

Frankfort-Nachmias, Chava and David Nachmias. 1996. *Research Methods in the Social Sciences.* 5th ed. New York: St. Martin's Press.

Geertz, C. 1962. The Rotating Credit Association: A "Middle Rung" in Development. *Economic Development and Cultural Change 10 (3): 241 – 263.*

Getaneh, G. 2005. *Livelihoods through micro-enterprise services? Assessing supply and demand constraints for microfinance in Ethiopia (with particular reference to the Amhara Region).* Paper Presented at the 3rd International Conference on the Ethiopian Economy, Bahirdar.

Gugerty, M. K. 2007. You Can't Save Alone: Commitment in Rotating Savings and Credit Associations in Kenya. *Economic Development and Cultural Change 55 (2): 251 -282.*

Hansmann, H. 1999. Cooperative Firms in Theory and Practice. Finish *Journal of Business Economics, 4, 387-403*.

Jones, D.C., Jussila, I., & Kalmi, P. 2009. *What determines membership in Co-operatives? A new framework and evidence from banks*. Available at:
http://academics.hamilton.edu/economics/Home/workpap/09_09.pdf

Kedir, A. M., Disney, R. F. & Dasgupta, I. 2011. *Why use RoSCAs when you can use banks? Theory and evidence from Ethiopia*. IZA Discussion Paper No. 5767. Available at:
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1867036

Mauri, A. 1987. *The role of financial intermediation in the mobilization and allocation of household saving in developing countries: interlinks between organized and informal circuits: the case of Ethiopia*, International Experts Meeting on Domestic Savings Mobilization, East-West Centre, Honolulu, 2-4 June 1987.
Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=943426

Merriam, S B.1995. What can you tell from an N of 1: Issues of Validity and Reliability in Qualitative Research. *PAACE Journal of Lifelong Learning*, Vol.4, pp 51-60

Miles, M & Huberman, A 1994, *Qualitative data analysis: An expanded sourcebook*, 2nd ed., SAGE Publications, Thousand Oaks.

North, D., 1995, *The New Institutional Economics and Development*, in J. Hunter, J. Harriss and C. Lewis (eds.), The New Institutional Economics and Third World Development, London: Routledge.

O´Donoghue & Rabin, M. 1999. Doing it now or later. *The American Economic Review, 89(1): 103 – 124.*

Rutherford, S. n.d. The Economics of Poverty: How Poor People Manage Their Money. Available at: http://media.microfinancelessons.com/resources/Economics_poverty_rutherford.pdf

Sandsör, A. M. J. 2010. *The rotating saving and credit association - An economic, social and cultural institution.* MSc Thesis. University of Oslo. Available at: http://www.esop.uio.no/research/masterthesis/sandsor.pdf

Saunders, M. Lewis, P. Thornhill, A. 2007. *Research methods for business students*. 4th ed. Pearson Education Limited. Essex England.

Temesgen, T. 2008. *Role and potential of Iqqub in Ethiopia*. MSc Thesis, Addis Ababa University. Available at: http://etd.aau.edu.et/dspace/bitstream/123456789/1967/1/Temesgen%20Teshome.pdf

Tirfe, M. 1999. *The paradox of Africa´s Poverty: the role of indigenous knowledge, traditional practices and local institutions – the case of Ethiopia.* The Red Sea Press, Inc. Asmara, Eritrea.

Whittemore R, Chase, S.K & Mandle, C.L. 2001. Validity in Qualitative Research, *Qualitative Health Research*, Vol. 11 No. 4, July 2001 522-537

Wickremarachchi, J. 2003. *New co-operatives: Motivations and barriers*. Australian Center for Cooperative Research and development Paper no. 10. Available at: http://www.business.uts.edu.au/cacom/publications/ACCORD_paper10.pdf

Österloh, M., Frost, & J., Bruno, S. 2002. The dynamics of motivation in new organizational forms. *International Journal of the Economics of Business, 9 (1): 61 – 77.*

Internet sources

Acess Capital, 2011, Monetary Policy Review—April 2011, Available at:
http://www.accesscapitalsc.com/downloads/Monetary-Policy-Review-April-2011.pdf

CDI, Cooperative Development Institute, www.cdi.coop , 2011
Available at: http://www.cdi.coop/historyofcoops.php

Umanitoba, University of Manitoba, www.umanitoba.ca , 2011
Available at: http://www.umanitoba.ca/afs/agric_economics/ardi/history.html

Appendixes

Appendix I. Meeting of equb members

Photo 1: meeting in one of the sample big equb (photograph: by own)

Photo 2: meeting in one of the sample small equb (photograph: by own)

Appendix II. Questionnaire distributed to respondents – English version

Swedish University of Agricultural Sciences
Faculty of Natural Resources and Agricultural Sciences
Department of Economics

Questionnaire to be filled by *equb* members

Dear Sir/Madam

My name is Bisrat Agegnehu. I am a 2nd year MSc student in Business and Economics at the Swedish University of Agricultural Sciences. Currently, I am writing my thesis on *equbs*, with a title ***"what motivates members to join equbs?"***

The objective of this study cannot be realized without your cooperation to fill this questionnaire. I therefore kindly request you to answer these questions based on your experience. There is no need of writing your name and I guarantee that your answers will only be used for the research purpose.

Thank you very much in advance for your time!
Bisrat Agegnehu

Note: Mark ***"X"*** *in the box in front of your choice.*
Choose only one answer except for the questions where it is stated as allowed to choose more than one

I. Background information

1. Sex
   A.   Male ☐   B. Female ☐

2. Age
   A.   Below 20 ☐   B. 20 – 29 ☐   C. 30 - 39 ☐
   D.   40 - 49 ☐   E. 50 and above ☐

3. Marital status
   A.   Single ☐   B. Married ☐   C. Divorced ☐   D. Widow ☐

4. Academic status
   A.   Basic writing and reading ☐   B. Elementary school ☐   C.   High school ☐
   D.   Diploma ☐   E.   First degree ☐   F. Master's degree and above ☐

5. Occupation (possible to choose more than one)
   A.   Government employee ☐   B. NGO employee ☐   C. Private Sector employee
   D.   Trader ☐   E. Farmer ☐   F. Other, please specify _____

6. If your answer for no.5 is trader, in what sector are you working? _____

7. How much is your average monthly income in Birr?_____
8. How much do you contribute to *equb* monthly? _____
9. Which *equb* do you want to join based on the frequency of the pot assignment?
    A. Daily ☐   B. Weekly ☐   C. Biweekly ☐   D. Monthly ☐   E. other _____
10.   For how many years have you been participating in *equb*?

	period				
	Below 1 yr	*1 – 3 yr*	*3 – 5 yr*	*5 – 10 yr*	*Above 10 yr*
Equb in general					
In the particular equb you are active now					

11. In which of the following institutions were you active and for how long?

Institution name		Were you a member		If yes, for how long?					Remark (Mark X if you are still active)
		Yes	No	below 1yr	1 – 3 yr	3 – 5 yr	5 – 10 yr	Above 10 yr	
Bank	As depositor								
	As borrower								
Micro - finance institution	As depositor								
	As borrower								
Insurance company									
Mahiber									
Edir									
Debo									
Other_____									

II. *About equb choice and structure*

1. What is *equb* for you? *(possible to choose more than one)*
   A. A financial institution like bank, micro finance institution, or insurance ☐
   B. An association that I strengthen my friendship with others ☐
   C. An association where I show up my solidarity with others ☐
   D. Other, please specify_____

2. Why did you join your first *equb*? *(possible to choose more than one)*
   A. Because there was no bank or micro finance branch near my residence ☐
   B. To buy a durable good ☐
   C. To help my friend who was organizing *equb* to take the first pot ☐
   D. Because I can't save alone at home ☐
   E. Everyone in the community was participating, so I joined not to be different ☐
   F. Because of the pressure from my friends ☐
   G. Other, please specify_____

3. When is the best period or time in the *equb* cycle for you to take the pot?
   A. At the beginning ☐   B. In the middle ☐
   C. At the end ☐   D. I don't care about the order ☐
   E. Other, please specify_____

4. Why do you choose that period in question no. 3? _____

5. Which one do you prefer?
   A. To join an already established *equb* with written agreement ☐
   B. To join an already established *equb* without a written agreement ☐
   C. To organize a new one as per my need with a written agreement ☐
   D. To organize a new one as per my need without a written agreement ☐
   E. To join already established *equb*, I don't care about the agreement ☐
   F. To organize a new one, I don't care about agreement ☐
   G. Other, please specify_____

6. Which kind of *equb* do you prefer to join if you have to choose based on the pot assignment criteria?
   A. The *equb* where the pot is assigned on a lottery basis ☐

B. The *equb* where the pot is assigned based on need ☐
C. The *equb* where the pot is assigned based on bid ☐
D. I don't mind ☐
E. Other, please specify_____

7. When do you want the order to be assigned?
   A. It must be assigned at the beginning of the cycle for the whole period ☐
   B. It must be assigned at the beginning of each period ☐
   C. I don't mind ☐
   D. Other, please specify_____

8. Do you usually made a cost benefit analysis before joining a given *equb*?
   A. Yes ☐   B. No ☐

9. If yes, what variables do you consider in evaluating your membership?
   _____

10. Have you ever thought about time value of money in *equb*? A. Yes ☐   B. No ☐

11. Do you think that it will be better for the *equb* as institution and its members if calculation of interest is going to be started?   A. Yes ☐   B. No ☐

12. Do you always discuss with your spouse whenever you join *equb*?
    A. Yes ☐
    B. No ☐   Why? _____

13. Have you ever been in more than one *equb* at a time? Why?_____

14. How many participants do you want to have, on average, in one *equb* cycle that you are part of?
    A. Less than 10 ☐   B. 10 – 20 ☐   C. 21 – 30 ☐   D. More than 30 ☐
    E. I don't mind ☐   F. Other, please specify_____

15. How long do u think is the best due date length in a given *equb* cycle?
    A. Less than half a year ☐   B. 6 months – 1 year ☐   C. 1 – 2 year ☐
    D. More than 2 year ☐   E. I don't care ☐

16. Why do you choose that period? _____

17. What criteria of membership do you look when you join *equb*? *(possible to choose more than one)*
    A. Members should be related by blood ☐
    B. Other members should be from the same professional status ☐
    C. Other members should be from the same village ☐
    D. Other members should be from the same ethnic group ☐
    E. Other members should be from the same religious group ☐
    F. I don't really care ☐
    G. Other, please specify_____

18. Why do you consider that criteria in no. 17? _____

19. Have you ever perceived participation in *equb* as a social obligation? A. Yes ☐ B. No ☐

20. Are you always willing to change pot position in a case where one of the members wants the pot at your turn for emergency case? Why? _____

21. Have you ever asked the same favour too?   A. Yes ☐   B. No ☐

22. Is this feature an important component in *equb* for you? A. Yes ☐   B. No ☐

23. Assume that you reach at a point where you are not able to pay the periodic contribution for your *equb*. Will you be worried that much about it?   A. Yes ☐   B. No ☐

24. If your answer for 23 is yes, which one of the following reasons will make you more worried?
    A. The legal consequence, since it will be taken to court ☐
    B. My participation in future *equb* will be limited ☐
    C. The social pressure and discrimination by members from other social activities ☐
    D. The social pressure from the community outside the *equb* members group ☐
    E. Other, please specify _____

25. If your answer for no. 23 is no, why don't you get worried that much?
    A. Other members will understand the situation and give me additional time for payment ☐
    B. Other members will understand the situation and allow me to forgo the monthly payments
    C. Because I can join other *equb* easily ☐
    D. Because it will not have any implication in my future relation with the members ☐
    E. Other, please specify_____

III. Equb, motivation and formal financial sector

26. Have you ever participate in *equb* where you need to show collateral to be a member?
    A. Yes ☐   B. No ☐

27. Does the *equb* that you are a member now put collateral as a requirement for membership?
    A. Yes ☐   B. No ☐

28. Why do you keep on participating in *equb* while you have a chance to work with banks or micro finance institutions? *(possible to choose more than one)*
    A. Because bank branches are too far from my residence ☐
    B. Because the deposit interest rate is low, I will not be benefited by depositing there
    C. Because the loan interest rate is high in banks and microfinance institutions, it is expensive to borrow ☐
    D. Because of the long service delivery time in banks and microfinance institutions☐
    E. Because I don't have full trust on banks and micro finance institutions ☐
    F. I don't want to bother myself with questions and procedures about the money I am going to deposit ☐
    G. If I borrowed money from banks or microfinance institutions I will not enjoy full right on where to spend the money ☐
    H. If I go to banks or MFIs, other parties including the government will have full information about my transactions ☐
    I. Because I already have a very good experience with *equbs* ☐
    J. Other please specify_____

29. Which institution or association could you use as a substitute for *equb*?
    A. Bank ☐   B. Microfinance institution ☐   C. Edir ☐
    D. Mahiber ☐   E. Nothing can substitute it ☐   F. Other, _____

30. As you know, many share companies are being established in the country and are providing an investment choice for the public. Does this have an impact on your future decisions to join *equb*s?   A. Yes ☐   B. No ☐

31. Have you ever had a discussion with other members in *equb*s that you were part of about transforming your *equb*s into formal institution like saving and credit association?
    A. Yes ☐   B. No ☐

32. If your answer for 31 is yes, do you think that it is possible to keep the values of *equb* in the newly transformed institution?_____

33. If your answer for 31 is no, why?_____

34. What do you think about organizers of *equb*s?_____

IV. *General remarks about equb*

35. Are you satisfied with the institutional structure and performance of *equb*s that you have been part of so far? If no, what do you think should be improved in the operation of *equb*s?
    _____

36. Do you perceive any change in the structure and operation of *equb*s during the time that you are active in *equb* membership?   A. Yes ☐   B. No ☐

37. What do you think is the major problem in *equb*s? _____

38. What reason do you think will force you to cease participating in *equb* once and forever?

39. Please indicate which of the following reasons has ever motivated you to join *equb*

Reason to join	Scale		
	Agree	*neutral*	*disagree*
I don't have access to formal financial institutions			
It is expensive to use formal institutions			
I feel ashamed to go to formal institutions to save small amount of money			
To purchase durable goods			
Equb is an insurance for me in case of cash need in the future			
I usually join when others organize since I fear they will discriminate me if I say no to join			
To cooperate other members, I believe that it is my duty to participate in such kind of institutions without expecting any special gain			
I cannot get the money until I receive my pot, thus I like that commitment			
To protect myself from money request by relatives			
Now it is a habit for me			
I consider it as a gambling event			
Can't save at home, money gets used on other things			
To get strength to save when I see other members in *equb*			
Group will make sure that each member had a certain item after winning the pot			
For safety reasons, fear of theft if I put it at home			
To visit each other's house and see how other members live			
Because can't save at home, my family will use it			

Structured interview guideline questions for equb organizers

1. Could you tell me about when and how you started to join *equb*?
2. When did you start to organize *equb*s?
3. What motivates you to organize *equb*s?
4. Is it difficult to mobilize other members to join? What mechanisms do you usually use?
5. Is it not difficult to compromise the different motives of members so that all will be satisfied and keep on participating?
6. How do you solve it when conflict of interest occurs among members?
7. Why do you think participants are motivated to join *equb*s?
8. What is the benefit of organizing *equb*? Do you enjoy special benefit by organizing *equb*s?
9. What do you think is the main problem in running *equb*s?
10. Do you think that it is possible to transform *equb*s into formal institutions?
11. Do you think that you will keep on organizing and participating in *equb*s in the future?

Appendix III. Questionnaire distributed to respondents – Amharic version

<div align="center">

በስዊድን የግብርና ሳይንስ ዩኒቨርሲቲ

የተፈጥሮ ኃብትና ግብርና ሳይንስ ፋኩልቲ

የኢኮኖሚክስ የትምሕርት ክፍል

</div>

በእቁብ ተሳታፊዎች የሚሞላ መጠይቅ

ውድ መላሽ

ብስራት አገኘሁ እባላለሁ:: በስዊዲን የግብርና ሳይንስ ዩኒቨርሲቲ በቢዝነስና ኢኮኖሚክስ የትምሕርት ዘርፍ የሁለተኛ ዓመት የማስተርስ ዲግሪ ተማሪ ነኝ:: በአሁኑ ሰዓት የመመረቂያ ጽሁፌን "ተሳታፊዎችን እቁብ ለመግባት ምን ያነሳሳቸዋል?" በሚል ርዕስ በመጻፍ ላይ የምገኝ ሲሆን ይህ መጠይቅም ለጽሁፉ የሚሆን መረጃ ለመስብሰብ የተዘጋጀ ነው::

ያለእርስዎ ቀና ትብብር ጥናቱ ግቡን ሊመታ አይችልም:: በመሆኑም መጠይቁን በእቁብ ተሳትፎያ ካላዎት ልምድ በመነሳት እንዲሞሉልኝ እጠይቃለሁ:: የእርስዎ ምላሾች ለዚህ ጥናት ብቻ የሚውሉ መሆናቸውን እያረጋገጥኩ ስምዎትን መጥቀስም የማያስፈልግ መሆኑን እገልጻለሁ::

ስለ ትብብብርዎ በቅድሚያ አመሰግናለሁ!

ማሳሰቢያ: የመልስ ምርጫዎን ከአማራጮቹ ፊት ለፊት ባለው ሳጥን ውስጥ የ "X" ምልክት በማድረግ ይግለጹ:: ከአንድ በላይ መልስ መስጠት እንደሚቻል ከተጠቀሰባቸው ጥያቄዎች በስተቀር ለሁሉም ጥያቄዎች አንድ መልስ ብቻ እንዲመርጡ እጠይቃለሁ::

I. የግል መረጃ

1. ጾታ ሀ. ወንድ ☐ ለ. ሴት ☐

2. እድሜ

ሀ. ከ 20 በታች ☐ ለ. 20 – 29 ☐ ሐ. 30 – 39 ☐ መ. 40 – 49 ☐ ሠ. 50 እና ከዚያ በላይ ☐

3. የጋብቻ ሁኔታ

ሀ. ያገባ ☐ ለ. ያላገባ ☐ ሐ. የተፋታ ☐ መ. በሞት የተለየ ☐

4. የትምህርት ደረጃ

ሀ. ማንበብና መጻፍ ☐ ለ. አንደኛ ደረጃ ትምህርት ☐ ሐ. ሁለተኛ ደረጃ ትምህርት ☐

መ. ዲፕሎማ ☐ ሠ. የመጀመሪያ ዲግሪ ☐ ረ. ማስተርስና ከዚያ በላይ ☐

5. የስራ ሁኔታ (ከአንድ በላይ መምረጥ ይችላሉ)

ሀ. የመንግስት ሠራተኛ ☐ ለ. መንግስታዊ ያልሆነ ድርጅት ተቀጣሪ ☐ ሐ. የግል ድርጅት ተቀጣሪ ☐

መ. ነጋዴ ☐ ሠ. ገበሬ ☐ ረ. ሌላ ካለ ቢገልጹልኝ _____

6. ለጥያቄ ቁጥር 5 መልስዎ ነጋዴ ከሆነ የተሰማሩበትን የንግድ ዘርፍ ቢገልጹልኝ_____

7. አማካይ ወርሃዊ ገቢያ ምን ያህል ብር ይሆናል? _____

8. በወር ምን ያህል ብር እቁብ ይጥላሉ? _____

9. በየስንት ጊዜው የሚጣል እቁብ መግባት ይመርጣሉ? ሀ. በየቀኑ ☐ ለ. በየሳምንቱ ☐

ሐ. በየ15 ቀኑ ☐ መ. በየወሩ ☐ ሠ. ሌላ ካለ ቢገልጹልኝ_____

10. እቁብ መሳተፍ ከጀመሩ ምን ያህል ጊዜ ሆነዎት?

	የጊዜ ርዝመት				
	ከ 1ዓመት በታች	ከ 1 – 3 ዓመት	ከ 3 – 5 ዓመት	ከ5 – 10 ዓመት	ከ10 ዓመት በላይ
በአጠቃላይ በእቁብ					
አሁን ባሉበት እቁብ					

11. ከሚከተሉት ተቋማት ውስጥ በየትኞቹ ውስጥ ተሳታፊ ነበሩ (ነዎት)? ለምን ያህል ጊዜ?

የተቋሙ አይነት		ተሳታፊ ሆነው ያዉቃሉ?		ተሳትፈዉ ካወቁ ለምን ያህል ጊዜ?					እስከሁንም ተሳታፊ ከሆኑ የ "X" ምልክት ቢያደርጉልኝ
		አዎ	የለም	ከ 1 ዓመት በታች	ከ 1 – 3 ዓመት	ከ3 – 5 ዓመት	ከ 5 – 10 ዓመት	ከ 10 ዓመት በላይ	
ባንክ	አስቆጣጭ								
	ተበዳሪ								
አነስተኛ ብድርና ቁጠባ ተቋም	አስቆጣጭ								
	ተበዳሪ								
ኢንሹራንስ									
ማህበር									
እድር									
ደቦ									
ሌላ ካለ ቢጠቅሱ_____									

II. ስለ እቁብ ምርጫዎ እና የእቁብ መዋቅር

1. እቁብ ለእርስዎ ምንድን ነው? (ከአንድ በላይ መምረጥ ይችላሉ)

ሀ. ልክ እንደ ባንክ፣ አነስተኛ ብድርና ቁጠባ ተቋም ወይም ኢንሹራንስ ሁሉ የገንዘብ ተቋም ነው ☐

ለ. ከሌሎች ሰዎች ጋር ጓደኝነቴን የማጠናከርበት ተቋም ☐

ሐ. ለሌሎች ሰዎች አጋርነቴን የማሳይበት ተቋም ነው ☐

መ. ሌላ ካለ ቢገልጹልኝ _____

2. የመጀመሪያ እቁብዎን ሲገቡ ምክንያትዎ ምን ነበር? (ከአንድ በላይ መምረጥ ይችላሉ)

ሀ. በአቅራቢያዬ ባንክም ሆነ አነስተኛ ብድርና ቁጠባ ተቋም ባለመኖሩ ☐   ለ. ቋሚ ዕቃ ለማግዛት ፈልጌ ☐

ሐ. ቤቴ ብቻዬን መቀጠብ ስላልቻልኩ ☐   መ. ጓደኞቼ እንድሳተፍ ጫና ስላሳደሩብኝ ☐

ሠ. የመጀመሪያዉን እቃ ለመውሰድ የፈለገ ጓደኛዬ ያዘጋጀዉ እቁብ ስለነበር እሱን ለመተባበር ☐

ረ. በአካባቢዬ የነበሩ ሰዎች በአብዛኛው እቁብ ስለነበራቸው የተለየሁ ላለመሆን ፈለጌ ☐

ሰ. ሌላ ካለ ቢገልጹልኝ_____

3. የእቁብ እጣ ለመውሰድ የትኛዉን ጊዜ ይመርጣሉ?

ሀ. መጀመሪያ ላይ ☐   ለ. መሃል ላይ ☐   ሐ. መጨረሻ ላይ ☐

መ. ግድ የለኝም ☐   ሠ. ሌላ ካለ ቢገልጹልኝ_____

4. ለተራ ቁጥር 3 ለመረጡት ጊዜ ምክንያትዎት ምንድን ነው? _____

5. ከሚከተሉት ውስጥ የትኛውን ይመርጣሉ?

ሀ. እኔ በምፈልገው መሰረት በጽሁፍ ስምምነት ላይ የተመሰረት አዲስ እቁብ ማደራጀት ☐

ለ. እኔ በምፈልገው መሰረት ያለ ጽሁፍ ስምምነት አዲስ እቁብ ማደራጀት ☐

ሐ. በጽሁፍ ስምምነት ላይ ተመስርቶ የተቋቋመ እቁብ መቀላቀል ☐

መ. ያለጽሁፍ ስምምነት የተቋቋመ እቁብ መቀላቀል ☐

ሠ. አዲስ እቁብ ማቋቋም እመርጣለሁ ስምምነቱ ግን በጽሁፍ ቢሆንም ባይሆንም ግድ የለኝም ☐

ረ. የተቋቋመ እቁብ መቀላቀል እመርጣለሁ ስምምነቱ ግን በጽሁፍ ቢሆንም ባይሆንም ግድ የለኝም ☐

ሰ. ሌላ ካለ ቢገልጹልኝ _____

6. የእቁብ አደላደልን መሰረት በማድረግ መምረጥ ቢኖርቦት የትኛውን እቁብ መቀላቀል ይመርጣሉ?

ሀ. አደላደሉ በሎተሪ ወይም በእጣ የሆነበትን እቁብ ☐   ለ. አደላደሉ በጨረታ የሆነበትን እቁብ ☐

ሐ. አደላደሉ የአባላትን የገንዘብ ፍላጎት መሰረት በማድረግ በዒዜዉ የሚወሰንበትን እቁብ ☐

መ. ስለ አደላደሉ ግድ የለኝም ☐

ሠ. ሌላ ካለ ቢገለጹልን_____

7. የእቁብ ድልድሉ መቼ እንዲወሰን ይፈልጋሉ?

ሀ. አጠቃላይ ድልድሉ በእቁቡ መጀመሪያ ላይ ቢወጣ አፈልጋለሁ ☐   ለ. አሸናፊው በየዒዜው ቢደለደል ደስ

ይለኛል ☐   ሐ. በፈለገው መንገድ ቢደለደል ችግር የለብኝም ☐

መ. ሌላ ካለ ቢገልጹልኝ _____

8. ወደ እቁብ ከመግባትዎ በፊት ወይም ለመግባት ሲያስቡ የወጭ ገቢ ምዘና ይሰራሉ?   ሀ. አዎ   ☐   ለ. የለም ☐

9. ለተራ ቁጥር 8 መልስዎ አዎ ከሆነ ወጭ ገቢ ምዘና ለመስራት ምን ምን ነጎሮችን ግንዘቤ ውስጥ ያስገባሉ?_____
_____

10. እቁብ ሲጥሉ ገንዘቡ ከዒዜ ጋር ተያይዞ ስለሚኖረው የዋጋ መውጣትና መውረድ አስበው ያውቃሉ?

ሀ. አዎ   ☐   ለ. የለም ☐

11. በእቁብ ገንዘብ ላይ ወለድ መተሳሰብ ቢጀመር ጥሩ ነው ብለው ያስባሉ?   ሀ. አዎ   ☐   ለ. የለም ☐
ለምን? _____

12. ሁልጊዜ እቁብ ከመግባትዎ በፊት ከትዳር አጋርዎ ጋር ይነጋገራሉ? ሀ. አዎ   ☐   ለ. የለም ☐   ለምን?
_____

13. በተመሳሳይ ጊዜ ከአንድ በላይ እቁብ ይሳተፋሉ? ለምን?_____

14. እርስዎ በሚሳተፉበት እቁብ በአማካይ ምን ያህል ተሳታፊዎች ቢኖሩ ጥሩ ነው ብለው ያስባሉ?

ሀ. ከ10 በታች ☐   ለ. ከ 10 – 20 ☐   ሐ. ከ 21 – 30 ☐

መ. ከ 30 በላይ ☐   ሠ. ግድ የለኝም ☐   ረ. ሌላ ካለ ቢገልጹልኝ_____

15. በእርስዎ እይታ የአንድ ሙሉ ዙር እቁብ አማካይ ርዝማኔ ምን ያህል ቢሆን ጥሩ ነው?

ሀ. ከ 6 ወር በታች ☐   ለ. ከ 6 ወር – 1 ዓመት ☐   ሐ. ከ 1 ዓመት – 2 ዓመት ☐

መ. ከ 2 ዓመት በላይ ☐   ሠ. ግድ የለኝም ☐   ረ. ሌላ ካለ ቢገልጹልኝ _____

16. ለተራ ቁጥር 15 መልስዎ የጠቀሱትን ያህል ጊዜ ለምን መረጡ? _____

17. እርስዎ ሊገቡበት ያሰቡት እቁብ ውስጥ የሚገኙ ሌሎች አባላቶች ምን መስፈርት ሊያሟሉ ይገባል ብለው ያስባሉ?
(ከ በላይ መምረጥ ይቻላሉ)

ሀ. አባላት የስጋ ዝምድና ያላቸው መሆን አለባቸው ☐

ለ. አባላት በተመሳሳይ የስራ መስክ ወይም የገቢደረጃ ላይ የሚገኙ መሆን አለባቸው ☐

ሐ. አባላት በአንድ የመኖሪያ አካባቢ የሚኖሩ መሆን አለባቸው ☐

መ. አባላት ከተመሳሳይ ብሔር መሆን አለባቸው☐   ሠ. አባላት የተመሳሳይ ሃይማኖት ተከታይ መሆን አለባቸው☐

ረ. ስለአባላት ስብጥር ግድ የለኝም☐

ሰ. ሌላ ካለ ቢገጹልኝ_____

18. ለተራ ቁጥር 17 መልስዎ የጠቀሱትን መስፈርት ለምን መረጡ? _____

19. እቁብ መሳተፍን እንደ ማህበራዊ ግዴታዎ አስበውት ያውቃሉ?   ሀ. አዎ ☐   ለ. የለም ☐

20. እርስዎ እየተሳተፉበት ካሉት እቁብ አባላት አንዱ ለእርስዎ የደረሰውን እጣ እንዲቀይሩት ቢጠይቅዎ ፍቃደኛ ይሆናሉ? ለምን? _____

21. እርስዎስ ለሌላ አባል የደረሰ እጣ እንዲቀይርዎ ጠይቀው ያውቃሉ?   ሀ. አዎ ☐   ለ. የለም ☐

22. ለተራ ቁጥር 21 መልስዎ አዎ ከሆነ የእጣውን ገንዘብ ለምን ለመጠቀም ነበር የቀየሩት?

_____

23.በአንድ አጋጣሚ ለእቁብ መክፈል የሚገባዎትን ክፍያ መክፈል አቃተዉት ብለን እናስብ፦ መክፈል አለመቻልዎ ያን ያህል ያስጨነቅዎታል?

ሀ. አዎ ☐   ለ. የለም ☐

24. ለተራ ቁጥር 23 መልስዎ አዎ ከሆነ ከሚከተሉት ውስጥ የበለጠ የሚያስጨንቅዎት የትኛው ምክንያት ነው?

ሀ. ጉዳዮ ወደ ፍርድ ቤት ስለሚሄድና ህጋዊ እርምጃ ሊያስወስድብኝ ስለሚችል ☐

ለ. ወደ ፊት በሚኖረኝ የእቁብ ተሳትፎ ላይ ተአማኒነት ስለሚያሳጣኝና አሉታዊ ተጽእኖ ስለሚኖረው ☐

ሐ. ከእቁቡ አባላት ጋር ወደ ፊት በሚኖረኝ ሌሎች ማህበራዊ ግንኙነቶች ላይ ተጽእኖ ስለሚኖረው ☐

መ. የእቁቡ አባል ከልሆኑ ሌሎች የማህረሰቡ አባላት ጋር ወደ ፊት በሚኖረኝ ሌሎች ማህበራዊ ግንኙነቶች ላይ ተጽእኖ ስለሚኖረው☐

ሠ. ሌላ ካለ ቢገልጹልኝ _____

25. ለተራ ቁጥር 23 መልስዎ የለም የሚል ከሆነ እንዳይጨነቁ የሚያደርግዎት ምክንያት ምንድን ነው?

ሀ. የእቁቡ አባላት ችግሬን ተረድተው ተጫማሪ የመክፈያ ጊዜ ስለሚሰጡኝ ☐

ለ. የእቁቡ አባላት ችግሬን ተረድተውና ለጊዜው ያለውን ክፍያ ሰርዘውልኝ ሳልከፍል እንድቀጥል ስለሚፈቅዱልኝ ☐

ሐ. ወደፊት ከእቁቡ አባላት ጋር በሚኖረኝ ግንኙነት ምንም ዓይነት ተጽእኖ ስለማይኖረው ☐

መ. ሌሎች እቁቦችን ከመቀላቀል ስለማያግደኝ ☐

ሠ. ሌላ ካለ ቢገልጹልኝ _____

III. ስለ እቁብ፣ እቁብ የመግባት ፍላጎትና መደበኛ የፋይናንስ ሴክተር

1. አባል ለመሆን የንብረት ዋስትና ማስያዝ በሚያስፈልግባቸው እቁቦች ተሳትፈው ያውቃሉ? ሀ. አዎ ☐ ለ. የለም ☐

2. በአሁኑ ሰዓት እየተሳተፉበት ያሉት እቁብስ ለአባልነት የንብረት ማስያዝ ይጠየቅበታል? ሀ. አዎ ☐   ለ. የለም ☐

3. ባንኮች ወይም አነስተኛ የብድና ቁጠባ ተቋሞች ጋር መስራትእየቻሉ ለምን እቁብ መሳተፍን ቀጠሉ? (ከአንድ በላይ መምረጥ ይቻላሉ)

ሀ. በአቅራቢያዬ ባንክም ሆነ አነስተኛ ብድርና ቁጠባ ተቋም ባለመኖሩ ☐

ለ. ባንኮች ወይም አነስተኛ የብድና ቁጠባ ተቋሞች ለተቀማጭ ገንዘብ የሚከፍሉት ወለድ መጠን አነስተኛ ስለሆነ ☐

ሐ. ባንኮች ወይም አነስተኛ የብድና ቁጠባ ተቋሞች ለማበደር የሚጠይቁት ወለድ መጠን ከፍተኛ ስለሆነ ከነሱ መበደር ውድ ስለሆነ ☐

መ. ከባንኮች ወይም አነስተኛ የብድር ቁጠባ ተቋሞች አገልግሎት ለማግኘት የሚፈጅው ጊዜ ረጅም ስለሆነ ☐

ሠ. በባንክ ወይም አነስተኛ የብድርና ቁጠባ ተቋም ስርአቱ ላይ ሙሉ እምነት ስለሌለኝ ☐

ረ. ገንዘብ ለማስቀመጥ በባንኮች ወይም በብድርና ቁጠባ ተቋሞች ያለው የአሰራር ስርአት ስለማይመቸኝ ☐

ሰ. ከባንኮች ወይም አነስተኛ የብድርና ቁጠባ ተቋሞች ገንዘብ ብበደር ገንዘቡን የፈለኩት ቦታ ላይ የማዋል ሙሉ ነጻነት ስለማይኖረኝ ☐

ሸ. እቁብ ጋር ጥሩ የሆነ ልምድ ስላላኝ መተው አልፈልግም ☐

ቀ. ሌላ ካለ ቢገልጹልኝ_____

4. ከሚከተሉት ተቋማት ውስጥ ለእርስዎ ከእቁብ የሚያገኙትን አገልግሎት ሊተካልዎት የሚችለው የትኛው ነው?

ሀ. ባንክ ☐   ለ. አነስተኛ የብድርና ቁጠባ ተቋም ☐   ሐ. እድር ☐   መ. ማህበር ☐

ሠ. ምንም ሊተካው አይችልም ☐   ረ. ሌላ ካለ ቢገልጹልኝ_____

5. እንደሚታወቀው በአሁኑ ሰዓት በአገሪቱ የተለያዩ አከስዮን ማህበሮች በመቋቋም ላይ ናቸው። የእነዚህ ማህበሮች እባበዙ መሄድ ወደፊት እቁብ ለመግባትና ላለመግባት በሚኖረዎ ውሳኔ ላይ ተጽእኖ የሚኖረው ይመስልዎታል?

ሀ. አዎ ☐   ለ. የለም ☐

6. በእስከዛሬ የእቁብ ቆይታዎ ከሌሎች አባላት ጋር እቁባችሁን ወደ መደበኛ የፋይናንስ ተቋም (ለምሳሌ የብድርና ቁጠባ ህብረት ስራ ማህበር) ለማሸጋገር አስባችሁና ተወያይታችሁ ታውቃላችሁ?   ሀ. አዎ ☐ ለ. የለም ☐

7. ለተራ ቁጥር 6 መልስዎ አዎ ከሆነ አዲስ ለማቋቋም ባሰባችሁት ተቋም ውስጥ የእቁብን እሴቶች ሙሉ በሙሉ ማግኘት የሚችሉ ይመስልዎታል? _____

8. ለተራ ቁጥር 6 መልስዎ የለም ከሆነ ምክንያትዎ ምንድን ነው?_____

9. ስለ እቁብ አደራጆች ያለዎትን አመለካከት በአጭሩ ቢገልጹልኝ _____

IV. የማጠቃለያ ጥያቄዎች

1. በአጠቃላይ በእቁቦች አደረጃጀት ፣ መዋቅር ፣ እንዲሁም እንቅስቃሴና አገልግሎት ደስተኛ ነዎት? ካልሆኑ ምን ምን ነገሮች ቢስተካከሉ ጥሩ ነው ይላሉ?_____

2. በእቁብ ተሳትፎዎ እርስዎ በቅጭነት እየተሳተፉባቸው በነበሩባቸው እቁቦች የመዋቅር ወይም የአሰራር ለውጥ አስተውለው ያውቃሉ? . አዎ ☐   ለ. የለም ☐   አዎ ካሉ የተመለከቲቸውን ለውጦች ቢገልጹልኝ

_____

3. በእቁቦች ላይ የሚስተዋለው ትልቅ ችግር ምንድን ነው ብለው ያስባሉ?_____

4. ወደፊት እቁብ ከመሳተፍ ሊያግድዎት የሚችል ምክንያት ቢኖር ምንድን ነው? _____

5. እባክዎን ከሚከተሉት ውስጥ የትኛው ምክንያት እቁብ ለመግባት አነሳስቶዎት እንደሚያውቅ ከታት ለፊት ካሉት አማራጮች ላይ ምልክት በማድረግ ይግለጹ።

እቁብ ለመግባት ያነሳሳዎ ምክንያት	መለኪያ		
	እስማማለሁ	ገለልተኛ	አልስማማም
መደበኛ የገንዘብ ተቋማትን አገልግሎት ለማግኘት እድሉ ስለሌለኝ			
መደበኛ የገንዘብ ተቋማትን አገልግሎት ለማግኘት የሚጠየቀው ዋጋ ውድ ስለሆነ			
ትንሽ ገንዘብ ለመቆጠብ ወይም ለመበደር ወደ መደበኛ የገንዘብ ተቋማት መሄድ ስለማፍር			
ቋሚ እቃ ለመግዛት ስለፈለኩ			
ለወደ ፊት የጥሬ ገንዘብ ፍላጎቴ እንደ መድህን ዋስትና (ኢንሹራንስ) ስለምቆጥረው			

የማዉቃቸዉ ሰዎች እቁብ አደራጅተዉ እንድገባ ሲጠይቁኝ እምቢ ብል ከሌሎች ማህበራዊ ግንኙነቶች እንዳያገሉኝ ስለምፈራ			
ምንም አይነት የተለየ ጥቅም ባላገኝም እንኳን በእንደዚህ አይነት ተቋሞች የመሳተፍ ማህበራዊ ግዴታ አለብኝ ብዬ ስለማስብ			
እቁብ ከገባሁ እጋ ካልደረሰኝ በስተቀር ገንዘቤ እንደፈለኩ ስለማላገኘዉና ይህን የእቁብ ባህርይ ስለምወደዉ			
የተለያዩ ዘመዶቼ ገንዘብ በየጊዜዉ ገንዘብ ስለሚጠይቁኝ እቁብን እንደ ማምለጫ ለመጠቀም			
እቁብ መግባት ልማድ ስለሆነብኝ			
እቁብን እንደ ቁማር ስለምቆጥረዉ			
ብቻዬን ገንዘብ መቆጠብ ስለላቻልኩ (ገንዘቡን ብዙም የማልፈልጋቸዉን እቃዎች በመግዛት ስለማጠፋዉ)			
ብቻዬን ገንዘብ መቆጠብ ስለላቻልኩ (ገንዘቡን ለቤተሰብ ወጪ ሊዉል ስለሚችል)			
ሌሎች የእቁብ አባላት ሲቆጠቡ በማዬት ተመሳሳይ ጥንካሬ ማግኘት ስለምፈልግ			
እቁባን እጋ በደረሰኝ ሰአት እያንዳንዱአባል የሆነ እቃ መግዛቱን ስለሚያረጋግጥና ይህን ነገር ስለወደድኩት			
ገንዘቡን ቤቴ ባስቀምጠዉ ይሰረቃል ብዬ ስለምሰጋ ለደህንነቱ ስል እቁብ እገባለሁ			
እቁቡን የሚያስተናግደዉን ተረኛ ሰዉ ቤት የማየት እድሉን ስለሚፈጥርና ይህም የወይዘት ተሞክሮ ለመለዋወጥ ስለሚረዳ			
ሌላ ካለ ቢገልጹልኝ			

ከእቁብ አደራጆች ጋር ለሚኖር ቃለመጠይቅ የሚሆኑ መሪ ጥያቄዎች

1. እቁብ መቼና እንዴት መሳተፍ እንደጀመሩ ቢገልጹልኝ

2. እቁብ ማደራጀት መቼና እንዴት እንደጀመሩ ቢያብራሩልኝ

3. እቁብ ለማደራጀት ምን አነሳሳዎ?

4. ሰዎች እቁብ እንዲገቡ ማነሳሳት ከባድ ነዉ? ምን ምን ዘዴዎችንስ ይጠቀማሉ?

5. በጣም የተለያዩ ፍላጎት ያላቸዉን ሰዎች በአንድ እቁብ እንዲሳተፉ ማድረግና ያን እቃችሎ ሁሉም አባላት ደስተኛ ሆነዉ እቁቡ እንዲቀጥል ማድረግ ምን ያህል አስቸጋሪ ነዉ?

6. በአባላት መካከል የጥቅም ግጭት ሲኖር እንዴት ትፈቱታላችሁ?

7. አብዛኞቹ ተሳታፊዎች እቁብ እንዲገቡ የሚያነሳሳቸዉ ምክንያት ምንድን ነዉ ብለዉ ያስባሉ?

8. የእቁብ አደራጅ መሆን ጥቅሙ ምንድን ነዉ? የተለዬ ጥቅም ያስገኛል? ጉዳቱስ?

9. እቁቦችን ወደ መደበኛ የፋይናንስ ተቋምነት መቀየር ይቻላል ብለዉ ያስባሉ?

10. ወደ ፊት እቁብ በመሳተፍ እንዲሁም በማደራጀት የሚቀጥሉ ይመስልዎታል? ለምን?

Appendix IV: Sample written agreement of big equbs

የዕቁብ መተዳደሪያ ደንብ

ይህ የዕቁብ መተዳደሪያ ደንብ በፍ/ብሔር ሕግ ቁጥር 404/1731/1675/2005/1889/1891 መሠረት ወደን ፈቅደን ተስማምተን አጽቀመናል::

ዕቁብ በጉለሌ ክ/ከተማ በቀበሌ 21 ክልል ውስጥ ድሜርሽ ሆቴል ቢታሳው ውስጥ በአቶ ታዬ ኮርሳ ዳኝነት በአቶ ተሾመ ወንድሙ ፀሐፊነት በአቶ ብርሃኑ አስፋ ሰብሳቢነት በየሳምንቱ ሐሙስ ከቀኑ 6 ሰዓት እስከ 7 ሰዓት ድረስ የሚጣል ዕቁብ ነው::

ይህ ዕቁብ ሙሉ ዕጣው 2020 /ሁለት ሺ ሃያ ብር/ ሲሆን ጠቅላላ እጣው ደግሞ 1012 እንድ ሺ አስር ብር/ ፤ ዕጣው 508 ሐምሳት መቶ ስምንት ብር/ነው::

የዕቁቡን ገንዘብ ከ 6 ሰዓት እስከ 7 ሰዓት ድረስ አጠናቆ ያልከፈለ እና ያሳደረ መቀጮ 15.00 /አስራ አምስት ብር/ ሲሆን እቁብ በልቶ ያልከፈለና ያሳደረ በየሳምንቱ ብር 50.00 /ሃምሳ ብር/ መቀጫ ይከፍላል:: ሙሉ ዕጣ ሆነ ግማሽ ዕጣ የሚጥል እቁብተኛ እቁቡ በሚደርሰው ጊዜ 2 /ሁለት / የሰው ዋስ ጠርቶ ገንዘቡን ይወስዳል:: ገንዘቡን ከወሰደ በኋላ በወቅቱ ባይከፍልና አጠናፉ ጊቢ ባያደርግ ዕቁቡ እስከሚያልቅ ድረስ እሱም ሆነ ዋሱ በፍ/ብሔር ተከሰው የመክፈል ግዴታ እንደሚኖርባቸውና በወንጀልም ሆነ በአምነት ማጉደል ክስ የሚመሰረትባቸው ናቸው::

በእቁቡ ደንብና ሕግ መሠረት ለዳኛ ለፀሐፊ ለሰብሳቢ. አንድ ዕጣ ስመጣል የተስማማን ሲሆን እንድ ዕቁብተኛ ዕቁብ በልቶ ሲያቋርጥ ዋሱን የማስከፈል መብት ሲኖራቸው ሁለቱም በለተው ካጿረቡ ግን ሁለቱንም የመክሰስ መብት የሰጠናቸው ለሰብሳቢ፤ ለዳኛ እና ለፀሐፊ መሆኑን ከታች በፈርማችን እናረጋግጣለን::

ይህ ገንዘብ በተሰበሰበበት ወቅት ገንዘቡ በባንክ ወለድ እና እንዲሁም በጠበቃ ክስ ከተመሰረት የገንዘቡን ልክ የጠበቃውን ኪሳራና የዳኝነትን ልይ ልይ ወጪዎችን ጥምር ዋና ባለዕዳና ዋሶች ተጠያቂ ናቸው::

እኛ የዕቁቡ አባላት በዛሬው ዕለት ከዚህ በላይ በተፃፈው የእቁብ መተዳደሪያ ደንብ ተስማምተን በየስም ዝርዝራችን ላይ የፈረምን መሆኑን እናረጋግጣለን::

ይህ የዕቁብ መተዳደሪያ ደንብ ከጥር 13/2002 ዓ.ም ጀምሮ ዕቁቡ እስከሚጠናቀቅ ድረስ በሥራ ላይ ይውላል::