

# ROSCAs as an Islamic Micro Finance Vehicle

## The concept, key drivers and valuation

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**ABSTRACT:** *This article empirically investigates the drives for participation in Jamey'ah (literally, Society) in Egypt as a kind of Rotating Savings and Credit Associations (ROSCAs) that agree in its general framework with Islamic principles. The article also evaluates the sample's experience with it in order to understand the influence of gender and income on the motives behind Society sharing and their valuation. The findings show that the amounts raised by societies are allocated to essential expenses. The tough procedures in case of borrowing; and low return in case of saving were the drivers behind leaving banks to finance via Societies as the results strongly suggest. The valuation of Societies indicate apparent impressive positive trend as the results strongly suggest. There is considerable empirical evidence showing that Societies can be a substitute to banks in providing personal loans.*

**Key words:** Rotating Saving & Credit Associations, Cooperative Finance, Peer-to-Peer funding, Islamic Finance.

**JEL classification:** G23, P460, P480.

## 1. Introduction

The last decades witnessed greater awareness and efforts from the international society in providing financial services for people who have little or no access to the formal finance that is delivered by traditional banks and other capital market institutions. Despite these overwhelming efforts; recent studies have estimated that 2.7 billion adults in the developing world remain unbanked, cf. (Mylenko, 2009), this is commensurate to the World Bank data suggesting that only 50% of adults globally have an account at a formal financial institution in 2011<sup>1</sup> (Demirguc-Kunt & Klapper, 2012), this means that the half of the population have no access to financial services or depend on informal premises in the "shadow banking sector" (Board, 2011) to manage their financial transactions.

Crowd funding, peer -to- peer funding, informal finance, Rotating Savings and Credit Associations (henceforth: ROSCAs), private lending, social lending and interpersonal credit; in addition to other nominations became well known as substitute schemes for conducting financial affairs for personal and household outside banks. The basic premise of these types of informal finance confirms the fact that traditional groups work together for their benefit to meet the financial needs of the participating members (Ehigiamusoe, 2011).

This paper focuses on a well-known cooperative finance model which has been working mainly in developing and underdeveloped countries, it is called in the local Arabic dialect in Egypt as *Jamey'ah* (literally, Society). The documented research tracks this model to the Chinese experience in the early decades of the 20th century as a Rural Credit Cooperative (RCC)<sup>2</sup>. The Indonesian version of ROSCAs is actually a blueprint of this model (Geertz, 1962) as it charges no interest in comparison to the Chinese and Japanese versions. It has served as an effective tool in financial planning, procuring short and midterm funds, in addition to saving surpluses at personal and household levels.

The main purpose of this paper is to report a survey conducted in Egypt as about the motives behind participation in Societies; and valuating them by participants according to gender and income. Another purpose of this paper is devoted to clarify the unique nature of Societies as a premise of informal finance to manage financial affairs that agree with Islamic Shari'ah in rejecting interest rate (which considered as a major sin) and its relation to the ROSCAs. A sample of participants who use to manage part of their financial income depending on Societies was surveyed. Participants were asked about their economic and demographic traits, motives behind participation in the Societies, their experience, how they estimate the current model of Societies, and if they find it better to institutionalize this model or maintain the status quo.

### 1. Societies, the concept and framework

Societies can be defined as an informal mode of group rotating credit raise funding in a crowd funding way between peers in a socially related homogenous groups, based on no interest<sup>3</sup>. This model of financing is not a profit based, nor is it known as devoted to business purposes; it represents an important way in raising money for consumer needs and savings for a short and midterm periods. This premise can be applied for different groups of people, different income clusters, and for different purposes.

The model depends in its structural framework on the contract of the Al Qard Al Hasan (interest free loan) which is historically well known in the Islamic economics and Muslim culture fifteen centuries ago (Al Ajlouni, 2017). Lending needy people for free is a virtue that all religions and moral approaches support for thousands of years. Mutual no interest loans

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1 "The degree of financial inclusion varies widely by region and income level. The share of adults who owned an account ranges from just above 20% on average in low-income countries to almost 90% in high-income economies". (Mehrotra & Yetman, 2015) These facts about inclusion ratios among regions points out that less developed and developing countries have the larger stake of the informal finance alternatives.

2 This model of interest free loan is known very well in the Islamic Economics terminology, it called Al- Qard Al- Hasan, were no charge on lending money, but altruism and looking for compensation in the thereafter life.

3 The interest free base is not restricted to the Societies, family loans among the poor are frequently interest-free (Collins, Morduch, Rutherford, & Ruthven, 2009).

create this virtue through the cooperation between people as a human value.

Supporters of the no interest loans emphasize that economics behind zero-interest loans should not be viewed through the expected utility as so many economic models do, but through the notion of reciprocity, fairness, and dynamic incentives (Kropp, Turvey, & Just, 2008; Zeller, 2006).

According to the common template of Societies, one can procure a sum of money with no charge or any legal requirements or obligations. A group of relevant people as cousins, neighbors, colleagues at work, local village residents, or any related group decides to form a cooperative group. Every one of them pays an equal particular amount of money each month (USD 10 as an example). The collected sum of money from the group is given each month to one of them<sup>4</sup>. Despite the fact that this model of financing is not profit based neither devoted to business purposes, it represents an important way in raising money for the consumer needs and saving for a short and midterm periods. Besides, Societies are an interesting phenomenon of a unique nature (not interest based), which hopefully qualify it as a substitute for the traditional banking system scheme.

Even though Societies have been commonly used since many decades in Egypt and some nearby countries like Jordan (Al Ajlouni, 2015), just a tiny scientific research is done to explore this socio-financial phenomenon (Al Ajlouni, 2015; El-Gamal, El-Komi, Karlan, & Osman, 2014)<sup>5</sup>. The current study is one of the pioneer studies that investigates such phenomenon in an Arabic community; trying to understand it, investigate the role that demographic traits play in using this premise to solve financial problems, along with the possibility to adopt this model to develop an institutional form for Non Interest cooperative thrifts to serve local communities.

## 2. Background and Literature Review

The idea of mutual personal credit on the basis of zero interest rate was studied a long time ago (known as Societies in China-1945). The first rural credit cooperative (RCC) was founded in northern China in 1923 (Myers, 1970) and the idea and implementation spread to such an extent that by 1939 rural credit cooperatives were being established by the government throughout China (Hsiao-Tung & Chih-i, 1945).

The premise based on the idea of mutual personal lending, time value considered implicitly as the participants pay more or less according to their turn in the Society<sup>6</sup>. Recent studies about China, evidence suggests, and quite overwhelmingly, that friends and relatives no longer charge interest on loans. A study found that 61.57 % to 79 % of farm households use informal finance (He, 2006a).

### 2.1 ROSCAs as roots for Societies

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4 Suppose that 20 persons participate in the process, each one of them will pay 10\$ monthly for twenty months and have one chance out of twenty to receive the collected monthly fund (USD 10 \*20= USD 200). The cooperative finance ends in due course of the twentieth month when all members have received their monthly payments. As noted; an amount of USD 4000 (20\*200) leaked out the formal financial system.

5 Alonso (2015) demonstrated the Egyptian experience through a case study about newly established internet-based platforms for crowd funding.

6 According to the RCS original model, anyone in need of money could organize a society and collect 10 members. At the first meeting the organizer will collect a total of 100 Yuan in prescribed amounts from all members and over the subsequent 10 periods, will repay into the pool an amount exactly equal to 100 Yuan. At the second meeting a subscriber receives 100 Yuan and this is treated as a loan. Since it is held for the longest period the first subscriber will have to deposit more than all others. The third subscriber pays a little less to account for shorter loan duration (4.5 years) and so on. The last subscribers are actually contributing as savings and for this they have to pay in less. Thus the first subscriber who receives 100 Yuan in the second meeting might contribute a total of 145 Yuan over 5 years while the 10th subscriber would contribute only 55 Yuan in total to receive 100 Yuan in year 5 (an 81% simple return on savings). The organizer thus gets an interest free loan but must also provide a feast at each meeting. If any member defaults the organizer is responsible for making that member's payment so the RCFs had to rely on existing ties and trust (Hsiao-Tung & Chih-i, 1945).

The earliest records of ROSCA in Japan are traced out to 1275<sup>7</sup> (Salahuddin & Rashmi, 2015). Early research about the idea of rotating credit associations<sup>8</sup> showed that this premise has been working effectively in Asia and Africa (Geertz, 1962), the basic principle upon which the rotating credit association is founded is described by (Geertz, 1962) as: "a lump sum fund composed of fixed contributions from each member of the association and is distributed in turn at fixed intervals, as a whole, to each member of the association. Thus, if there are ten members of the association, if the association meets weekly, and if the weekly contribution from each member is one dollar, then each week over a ten-week period a different member will receive ten dollars"<sup>9</sup>. Kimuyu (1999) concluded that ROSCAs "help in mediating funds where there are limited opportunities for accessing alternative financial instruments, and increase welfare by reducing the utility cost of saving for a lumpy expenditure. They are, therefore, used as surrogates for mitigating financial market failures".

In order to consider the preference and need of members, there're different versions of ROSCAs; according to the legal structure, the turn distribution order, and charges on lending (Besley, Coate, & Loury, 1993; Kirton, 1996; Klonner, 2003).

As a kind of ROSCAs; the role of mutual trust and social ties in bonding the Society "*El Jamey'ah*" and hedge it against delinquency and default risk that stem from the inability of members to fulfill their commitments towards it. Strong social –off Line- networks between members that are based on family, neighborhood, and long term friendship and joint work place strengthen the safety umbrella.

ROSCAs and RCSs represent a mirror image of the Societies in the zero interest rate bases and rotating nature (saving and loans) as structural characteristics; they look alike in the motives behind their establishment and the relative amount of funds rose by each of them. They're similar in that each of them depends on the social bonds between participants and informality of the finance offered by each of them.

Societies resembling ROSCAs and RCSs in regard to the problem of non-payment from the people who receive their sums early; the role of "social collateral" as a guarantee shows impressive results in decreasing the default chances of these premises (Besley et al., 1993). It makes the members strongly adhere to their commitment to pay their due installments. The social connections play vital role in this side, it gives the ROSCA the ability to enforce its contracts (Chiteji, 2002). Al Ajlouni (2015) showed that default ratio between participants in Societies less than 1%. On the other hand, they have some differences in that RCSs is framed in an institutional way while Societies are not. Societies are not restricted to the rural areas, rather; they disseminated in urbanized societies.

In spite of the long experience curve and Societies' viability in application in Egypt and many Arab countries, its current practices still are not institutionalized. It also didn't benefit from the technological advances, especially in the computer and telecommunications like P2P platforms. This can be an advantage and disadvantage at the same time. The simplicity, traditionally well known and ease of arrangement attract the less educated people and work properly in the rural areas in traditional communities as long as people in big cities and urbanized areas who have limited access or willingness to resort to banks; as this study will investigate. But, in a fast developing communities in an environment with good access to modern telecommunication networks and fair educated people; the need for developing Societies may represent a priority.

## 2.2 Literature Review

Many research efforts carried out and handled this issue from different angles in different countries; extensive research from various disciplines was done about ROSCAs in its different versions also. As an Islamic suggested model for microfinance, ROSCAs discussed from the Islamic Sharia'h perspective in addition to including it in the Islamic

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7 This doesn't contradict with the fact that the first documented study about Societies was in China, because records not studies found in Japan.

8 Many terms are used in the literature for this single type of institution at the time of study of (Geertz, 1962): contribution clubs, slates, mutual lending societies, pooling clubs, thrift groups, friendly societies, etc.

9 Later definitions of ROSCAs and characteristics asserted the essence of this definition (Callier, 1990; Chiteji, 2002; Dagnelie & Lemay-Boucher, 2012; Donoso, Altunbaş, & Kara, 2011; Kadir & Ibrahim, 2011; Kimuyu, 1999; Mrak, 1989)

financial system, Aliero (2014) found out that " most of the principles and practices of ROSCAs are Shari'ah Compatible (with exception of very few cases,). The investigates the Level of Compliance of Members of ROSCAs with Islamic Principles of Financing (IPF) has discussed also (Abdul-Yakeen, Gatawa, Aliyu, & Ibrahim, 2016). Adopting ROSCAs by Islamic banks discussed by some researchers through Modernization and Formalization it by opening windows of Savings and Credit Accounts (SACA) (Yakeen, Gatawa, & Na-Allah, 2014), and through bank-insured RoSCAs (El-Gamal et al., 2014) , further study suggested bank-based investing ROSCA (Hamzaoui & Bousalam, 2015). The positive role of rotating savings and credit associations in the economy in general and family economic welfare studied thoroughly (Abdul-Yakeen, 2012; Ambec & Treich, 2007; Carpenter & Jensen, 2002; Chiteji, 2002; Kan, 2000; Mrak, 1989; Oluyombo, 2012). On the contrary of the mainstream of research about the benefit of ROSCAs for less fortunate people; Kimuyu (1999) concluded that poorer households are unlikely to benefit from these compensatory arrangements. Motives behind participation in ROSCAs got the interest of other studies also (Al Ajlouni, 2015; Anderson & Baland, 2002; Dagnelie & Lemay-Boucher, 2012; Donoso et al., 2011; EROĞLU, 2010; Kimuyu, 1999). The socio economic factors behind contributing to credit repayment behavior among the members of savings and credit cooperative societies were examined also ((Dagnelie & Lemay-Boucher, 2012; Donoso et al., 2011; Kedir & Ibrahim, 2011; Kimuyu, 1999; Laguerre, 1998; Musafiri Papias & Ganesan, 2009; Njoku & Odii, 1991). It is proved that the expenditure, female headship and household heads; positively affect the propensity to participate in ROSCAs (Kimuyu, 1999). The enforcement of rotating savings and credit associations, the importance of psycho-cultural factors such as mutual trust, social ostracism and peer pressure has been studied by a variety of scholars from the early days of research up to these days (Ambec & Treich, 2007; Chiteji, 2002; Etang, Fielding, & Knowles, 2011; Geertz, 1962; Mrak, 1989; Oh, 2007). The social commitment; the manager of the Society (as the case in ROSCA) can add additional guarantees (Salahuddin & Rashmi, 2015)<sup>10</sup>

In spite of the fact that ROSCAs most common in the developing countries, they're also available in US through the immigrant societies (Besley et al., 1993).

Unfortunately; very little literature was found about the Egyptian and Arabian experience in using the ROSCAs, El-Gamal et al. (2014) developed an alternative microfinance model which aims to establishing credit unions for the poor that includes bank's involvement, wherein the bank plays the role of a guarantor in the familiar ROSCA. They also addressed the possibility of failure coordination in the standard ROSCA structure (fixed collection order) by introducing bank insurance<sup>11</sup>.

### **3 DATA, HYPOTHESES AND METHODOLOGY**

This section describes the survey data, presents descriptive statistics, and discusses the different hypotheses and we will use econometric methodology to test them. This will be done by showing the demographic characteristics and analyzing the general trend of the motives behind participation and valuation of Societies. Testing the hypothesis and result discussion constitute the second fold of analysis strategy that helps understanding the influence of demographic traits on the motives behind sharing Societies and their valuation.

#### **3.1 Data and Descriptive Statistics**

A sample of 235 respondents was selected in Helwan; a large metropolitan area in Cairo city/ Egypt. The sample is restricted to employed people who involved in Societies. They're randomly selected to answer the questionnaire. 204 individuals of the total sample provided accepted questionnaires, with an 88% response rate.

Female members' portion was about 71%, this ratio not strange, female constituted 84 % of another study (Anderson & Baland, 2002).

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<sup>10</sup> "To reduce the chances of default from organizer and member side, meaning nonpayment of ROSCA value and periodical contribution respectively by the existing members who have already taken ROSCA fund in that case organizer may ask collateral from members either any of them such as social collateral (guarantor), physical (tangible) or financial collateral like signed cheque book so that in case of failure of making payment by the members who enjoyed ROSCA fund, money can be collected on time".

The Cross tabulation between gender with educational level and income summarized in Table 1

**Table 1.** Cross tabulation

gender and educational level			
Certification	Male	Female	Sub Total
under high school	0%	6.9%	4.9%
high school and diploma	46.7%	33.3%	37.3%
higher education	53.3%	59.7%	57.8%
Total	100.0%	100.0%	100.0%

  

gender and income			
Income (EGP)	Male	Female	Sub Total
less than 1000	30.0%	51.4%	45.1%
1000 – 2000	56.7%	31.9%	39.2%
More than 2000	13.3%	16.7%	15.7%
Total	100.0%	100.0%	100.0%

Two Limitations to be mentioned, the Sample selected randomly according to population's cooperation to fill the questionnaire, female were better respondents than males; this may be explained by their high portion in the sample. In addition, the high percentage of educated people is due to the fact that the sample was selected in an urbanized area, the circumstances in the rural and suburban areas differ considerably.

#### 4.1. 1 Motives behind participation

The respondents' motives behind participation in Societies in addition to their attitude toward Societies and its valuation will be discussed in this part through the general trend analysis.

The general trend can be tracked within the value-weighted averages for each question of the questions in this part; each probable answer was given a fixed serial number, the average is calculated after that to know the trend of concentration of answers for each question. Five scale ranges of answers was used as shown in the following table 2 in order to compare the estimated average with these ranges, matching the average with the scale that it belongs to and the answer that the range points for comes after that.

**Table 2.** Weighting ranges and the encountered paragraphs in case of five answers possibility

Paragraph Number	From	To less than
1	1	1.79
2	1.8	2.59
3	2.6	3.39
4	3.4	4.19
5	4.2	5

Source: (Abdul-Fattah, 2008)

Table 3 clarifies the estimation results of the sample's general trend motives to join Societies. The current need for money for expending shape the general trend as those people barely can manage their current financial requirements; this is a reasonable reason for the tendency toward spending the Society's sum for the current disbursements. This implicitly means that saving looks small in comparison to expenditure motive, this is also reflected in a lower tendency of the poor to invest as they still can't meet their essential needs. These findings are compatible with the findings of (Abdul-Yakeen, 2012) concerning the allocation of the ROSCA's sum.

The weighted arithmetic mean (60/204 for Male and 144/204 for female) of the answers, related to the reason behind leaving banks to finance via Societies, shows that the tough procedures in case of borrowing; and low return in case of saving have the weighted answers, these findings are consistent with a previous study which pointed out difficulties in banks in

11 "The banker guarantees the stream of payments and loans to any member of the ROSCA who continues to make required payments on time. Those who default become debtors to the bank, and if they default on their debt to the bank".

regard to obtaining the institutional credit, documentation, terms and condition, collateral etc. for people (Salahuddin & Rashmi, 2015). These findings are also compatible with the suggestion that consider ROSCAs as a response by socially connected groups to credit market exclusion and limited opportunities for accessing alternative financial instruments (Besley et al., 1993; Donoso et al., 2011; Kimuyu, 1999). The general trend answer indicated that the amount raised by societies is allocated to essential expenses; this is consistent with the answer about the main reason behind participation in that those people spend the sum on current essential expenses. This means that a slight portion of participants join Societies for housing and marriage in addition to the fact that the sum of a Societies is small in comparison to the amount of money needed for housing and marriage.

**Table 3.** Results of estimating the weighted arithmetic mean of the answers related to the motives behind participating in Societies and the most weighted answer according to income (EGPs) cluster and the general trend.

Paragraph	< 1000	1000 -2000	2000 >	Weighted* Arithmetic Mean	The Range which the Arithmetic Mean belongs	Weighted answer (general trend)
Main Purpose Behind Participation	1.7826	1.8500	1.6250	1.7843	1	Current Need for Money
Reason Behind Leaving Banks to Finance via Societies (Borrowing)	1.8478	2.0000	1.9375	1.9216	2	Tough Procedures
Reason Behind Leaving Banks to Finance via Societies (Saving)	1.9348	1.9750	1.3125	1.8529	2	Low Return
Purpose of Procuring Money to spend them in:	2.1304	2.6250	3.0625	2.4706	2	Essential Expenses

\* 92/204 for the Less than 1000 EGPs slide, 80 /204 for the 1000-2000 EGPs slide, 32 /204 for the More than 2000 EGPs slide.

#### 4.1. 2 Sample valuation of the Societies' performance

Table 4 shows the estimated results of the general trend for the sample opinions in valuation of Societies, an apparent impressive positive trend showed up clearly; the majority of the respondents strongly agree that joining Societies effectively contributed to solving financial problems totally or partially, Besides, the sample agrees that being involved in Societies effectively contributed to solving financial problems of other people. The results unveil the strong attitude toward organizing Societies in a legal framework and disseminating this premise of financial cooperation. One of the important results revealed through this table is that the respondents see that Societies can be an alternative to banks in providing personal loans. The positive attitude toward Societies is consistent with the findings of other studies that proved the positive impact of ROSCAs (Abdul-Yakeen, 2012).

**Table 4.** Results of estimating the weighted arithmetic mean of the answers are related to the sample members' valuation of Societies and the most weighted answer According to income, Gender, and general trend

Paragraph	Male	Female	1000 >	1000 -2000	2000 >	Weighted Arithmetic Mean	The Range which the Arithmetic Mean belongs	Weighted answer (general trend)
Participation in Societies Helped Effectively in Solving Sole Financial Problems	1.867	1.417	1.5217	1.55	1.625	1.549	1	Strongly Agree
Participation in Societies Helped Effectively in Solving Others Financial Problems	2.1	1.542	1.6304	1.875	1.5	1.706	1	Strongly Agree
Are you with Regulating Societies	2.3	2.625	2.5	2.6	2.4375	2.523	2	Agree
Are You With Expanding	2.533	2.514	2.5652	2.5	2.4375	2.512	2	Agree

Do You Think that the Societies can be Substitute to Banks in Personal Credit	2.2	2.048	2.1087	2.125	1.9375	2.089	2	Agree
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## 4.2 Empirical Strategy and Main Results

In order to test the differences between averages of different sample groups; T test has been used. The answers of respondents were divided according to the demographic criteria (gender and income).

The null hypothesis in this test suggests that there're no statistically significant differences between sample members according to different demographic characteristics (taken in pairs). Four hypotheses were developed for study purposes that are summarized as follows:

- There's a significant difference in motives behind sharing Societies with respect to Gender.
- There's a significant difference in valuation of Societies with respect to Gender.
- There's a significant difference in motives behind sharing Societies with respect to Income.
- There's a significant difference in valuation of Societies with respect to Income.

The study also used F test for homogeneity test. The null hypothesis implies that the variance of the first sample equals the variance of the second sample (with different sample groups)

The availability of homogeneity between the two test groups help to continue using T test in order to test the differences between the arithmetical means averages. In case of non-availability of homogeneity (accepting the alternative hypothesis) we need to resort to another test similar to T test.

### 4.2.1 Testing the motives behind joining Societies

As table 5 unveils; for the first two questions about the goal of participating in Societies and the reason behind joining it in case of credit; the results of statistical test showed substantial difference between males and females in the preferences of each gender. It is clear from the table that females considered that the main reason for participation in Societies is the future need for money, where the males' reason is the current expenditure, this indicates that males are responsible for the family as the mainstream of eastern culture indicates, while women think more in the future and expenses as a sort of helping men in this regard. Karlan, Ratan, and Zinman (2014) pointed out the same argument "if the woman lacks relative power in the household, she may not have agency over her own decisions, and this may also have ramifications for savings that could benefit the children (if the women have child-centered preferences, more so than the men)", the same study discussed the intra-household preference heterogeneity effects on households' savings.

No substantial difference between the males and females answers in the third and fourth question groups about the reasons behind going to Societies in case of saving and where to spend money when procuring money from them; in case of credit. These findings are inconsistent with the documented literature on ROSCAs that it primarily used to save up for the purchase of indivisible durable goods (Besley et al., 1993), it is also in contradiction with the findings of another study which confirmed that the main reason for enrolling in a ROSCA is the need to commit themselves to save money (Dagnelie & Lemay-Boucher, 2012).

According to the reason behind involving in Societies to procure money instead of banks; female members considered the banks complicated routine procedures as the main reason for that, a possible explanation for that may belong to the feeling of women that they are excluded from the economic activity because of the negative impression about women as an unreliable partner in the economic activity, in addition to the fact that economic independence of women in the Arab



countries is still in a lower level in comparison to that of developed or developing countries. The male side relied on religious considerations as banks give credit on the basis of interest rate (*Riba*=Usury)<sup>12</sup> where Societies are free of interest charges.

**Table 5.** Comparison of sample members' answers at the questions about motives behind participation in Societies; according to gender

Paragraph	Levene's Test for Equality of Variances			t-test for Equality of Means			
	F	Sig.	The Result	t	df	Sig. (2-tailed)	The accepted hypothesis
Main Purpose Behind Participation	5.570	.019	NEQ	-2.958	202	.003	H <sub>1</sub>
Reason Behind Leaving Banks to Finance via Societies (Borrowing)	16.269	.000	NEQ	-3.374	151.418	.001	
Reason Behind Leaving Banks to Finance via Societies (Saving)	1.138	.287	EQ	2.796	202	.006	H <sub>1</sub>
Purpose of Procuring Money to spend them in:	1.716	.192	EQ	2.571	93.198	.012	
				-.402	202	.688	H <sub>0</sub>
				-.422	122.931	.674	H <sub>0</sub>
				1.607	202	.110	H <sub>0</sub>
				1.729	130.898	.086	

For the purpose of testing hypothesis about differences in answers about the drivers for participation with respect to income level; the main stream of the hypotheses show that no significant differences between the members in regard to the reason for joining Societies and the purpose for expending its sum concerning to income cluster. A detailed analysis were divided into three counter pairs as the following table shows

<sup>12</sup> Interest based loans called *Riba*

**Table 6.** Comparison of sample members' answers at the questions about motives behind participation in Societies; according to income

Paragraph	Levene's Test for Equality of Variances			t-test for Equality of Means			
	F	Sig.	The Result	t	Df	Sig. (2-tailed)	The accepted hypothesis
Less than 1000 EGPs <=====> 1000-2000 EGPs							
Main Purpose Behind Participation	5.887	0.016	NEQ	-0.452	170	0.652	H <sub>0</sub>
Reason Behind Leaving Banks to Finance via Societies (Borrowing)	0.1	0.752	EQ	-0.445	149.685	0.657	H <sub>0</sub>
				-0.787	170	0.432	
Reason Behind Leaving Banks to Finance via Societies (Saving)	0.262	0.61	EQ	-0.786	166.115	0.433	H <sub>0</sub>
				-0.207	170	0.837	
Purpose of Procuring Money to spend them in:	0.135	0.714	EQ	-0.207	167.37	0.836	H <sub>1</sub>
				-3.1	170	0.002	
				-3.117	169.376	0.002	
Less than 1000 EGPs <=====> More than 2000 EGPs							
Main Purpose Behind Participation	4.732	0.032	NEQ	0.805	122	0.423	H <sub>0</sub>
Reason Behind Leaving Banks to Finance via Societies (Borrowing)	0.63	0.429	EQ	0.692	42.981	0.493	H <sub>0</sub>
				-0.343	122	0.732	
Reason Behind Leaving Banks to Finance via Societies (Saving)	14.839	0	NEQ	-0.335	51.95	0.739	H <sub>1</sub>
				2.644	122	0.009	
Purpose of Procuring Money to spend them in:	3.456	0.065	NEQ	3.665	112.554	0	H <sub>1</sub>
				-4.012	122	0	
				-3.714	47.622	0.001	
1000-2000 EGPs <=====> More than 2000 EGPs							
Main Purpose Behind Participation	0.111	0.74	EQ	0.961	110	0.338	H <sub>0</sub>
Reason Behind Leaving Banks to Finance via Societies (Borrowing)	0.316	0.575	EQ	0.928	53.242	0.357	H <sub>0</sub>
				0.232	110	0.817	
Reason Behind Leaving Banks to Finance via Societies (Saving)	24.263	0	NEQ	0.229	55.409	0.82	H <sub>1</sub>
				2.84	110	0.005	
Purpose of Procuring Money to spend them in:	3.801	0.054	NEQ	3.769	107.174	0	H <sub>1</sub>
				-1.934	110	0.056	
				-1.747	47.134	0.087	

When analyzing the answers of the sample members in the less than 1000 EGPs cluster and those who fall within the 1000-2000 income clusters; no substantial differences in the answers of the two clusters except the answer of the question about the expenditure purpose for the money raised via Societies. The less than 1000 pounds income cluster members answered that the

goal is spending money on essential outlays, while the other cluster showed that the goal is to meet housing related expenditures.

By comparing the answers of the sample members in the less than 1000 EGPs cluster with those who gains more than 2000 pounds a month cluster; results of the test showed that there's a substantial difference between the answers of the two groups in regard to the reason behind going to societies instead of banks in case of saving, the same thing in the expenditure goal. No substantial differences are noticed in answering the other two questions. The table clarifies that the goal of the sample members who fall in the less than 1000 EGPs cluster is spending money on essential outlays, while the group of the above than 2000 EGPs showed that the goal is to meet housing related expenditures.

Substantial differences between the answers in regard to the reason for going to Societies instead of banks in case of saving were shown from the test results and in the payout goal when comparing the answers of the sample members who falls in 1000-2000 EGPs cluster with those who gain more than 2000 EGPs a month, no such differences are found in answering the other questions.

#### 4.2. 2 Tests related to evaluating Societies

In spite of the general trend in the agreement between male and female about the positive role of Societies to solve personal and others problems, table 7 disclose substantial difference in answers according to gender in answering the question about the role of Societies in solving financial problems in sum or partially, males agreed on that, females answers showed strong agreement (see table 4 also). In addition, another substantial difference seems clear between the answers of the two groups in answering the question about the chance that Societies give them to help others, females answers showed strong agreement, while male group agree with that (see table 4 also).

Substantial difference has been shown also in regard to the opinion about organizing Societies legally (by Law) in a form of legislation, males agree on that; while females' answer was neutral. No significant differences in answering the other questions according to gender.

**Table 7.** Comparison of sample members' answers at the questions about valuating Societies; according to gender

Paragraph	Levene's Test for Equality of Variances			t-test for Equality of Means			
	F	Sig.	The Result	t	Df	Sig. (2-tailed)	The accepted hypothesis
Participation in Societies Helped Effectively in Solving Sole Financial Problems	2.308	.130	EQ	4.206 3.699	202 86.125	.000 .000	H <sub>1</sub>
Participation in Societies Helped Effectively in Solving Others Financial Problems	14.920	.000	NEQ	5.135 4.123	202 74.944	.000 .000	H <sub>1</sub>
Are you with Regulating Societies	.145	.704	EQ	-1.998 -1.976	202 107.910	.047 .051	H <sub>1</sub>
Are You With Expanding the Premise of Societies	.015	.902	EQ	.124 .123	202 108.989	.902 .902	H <sub>0</sub>
Do You Think that the Societies can be Substitute to Banks in Personal Credit	2.571	.110	EQ	1.059 1.028	202 103.846	.291 .306	H <sub>0</sub>

The results of table 8 shows testing the differences in answers according to income, no significant differences were found in answering the questions about valuation of Societies performance, an exception is found in answering the question

about the potential of helping others when joining Societies, this difference is shown between the less than 1000 EGPs and the 1000-2000 EGPs group.

The answer of the same question showed significant difference also between the 1000-2000 EGPs group and the above of 2000 EGPs group, respondents from the higher income group strongly agree that Societies grant them a chance to help others, where the middle income group agrees on that. These results seem logical and mean that the people in the lowest clusters barely can help themselves; hence they don't see the Societies helpful in assisting others.

**Table 8.** Comparison of sample members' answers at the questions about valuating Societies; according to income

Paragraph	Levene's Test for Equality of Variances			t-test for Equality of Means			
	F	Sig.		t	Df	Sig. (2-tailed)	The accepted hypothesis
Less than 1000 EGPs<=====> 1000-2000 EGPs							
Participation in Societies Helped Effectively in Solving Sole Financial Problems	.021	.884	EQ	-.26	170.0	.791	H <sub>0</sub>
				-.26	165.1	.792	
Participation in Societies Helped Effectively in Solving Others Financial Problems	.696	.405	EQ	-2.06	170.0	.041	H <sub>1</sub>
				-2.06	165.5	.041	
Are you with Regulating Societies	1.096	.297	EQ	-.60	170.0	.549	H <sub>0</sub>
				-.60	169.1	.548	
re You With Expanding the Premise of Societies	1.221	.271	EQ	.43	170.0	.671	H <sub>0</sub>
				.43	169.5	.669	
Do You Think that the Societies can be Substitute to Banks in Personal Credit	9.469	.002	NEQ	-.11	170.0	.913	H <sub>0</sub>
				-.11	151.2	.914	
Less than 1000 EGPs <=====> More than 2000 EGPs							
Participation in Societies Helped Effectively in Solving Sole Financial Problems	1.476	.227	EQ	-.68	122.00	.497	H <sub>0</sub>
				-.61	45.16	.546	
Participation in Societies Helped Effectively in Solving Others Financial Problems	2.921	.090	NEQ	.90	122.00	.372	H <sub>0</sub>
				1.09	81.99	.281	
Are you with Regulating Societies	2.958	.088	NEQ	.28	122.00	.779	H <sub>0</sub>
				.31	63.54	.761	
Are You With Expanding the Premise of Societies	.966	.328	EQ	.58	122.00	.560	H <sub>0</sub>
				.56	50.36	.578	
Do You Think that the Societies can be Substitute to Banks in Personal Credit	.263	.609	EQ	.93	122.00	.356	H <sub>0</sub>
				.87	49.01	.386	
1000-2000 EGPs <=====> More than 2000 EGPs							
Participation in Societies Helped Effectively in Solving Sole Financial Problems	1.330	.251	EQ	-.47	110.00	.637	H <sub>0</sub>
				-.43	48.33	.667	
Participation in Societies Helped Effectively in Solving Others Financial Problems	.520	.473	EQ	2.50	110.00	.014	H <sub>1</sub>
				2.99	87.32	.004	
Are you with Regulating Societies	.835	.363	EQ	.76	110.00	.449	H <sub>0</sub>
				.79	62.96	.430	
Are You With Expanding the Premise of Societies	3.372	.069	NEQ	.30	110.00	.768	H <sub>0</sub>
				.28	49.50	.784	
Do You Think that the Societies can be Substitute to Banks in Personal Credit	2.742	.101	EQ	.85	110.00	.398	H <sub>0</sub>
				.89	62.73	.379	

## 5. Conclusion

This paper examines the drivers for participation in Societies and evaluates the sample's experience with it in order to understand the influence of gender and income on the motives behind sharing Societies and valuation of them.

With respect to the intention of spending Society's sum; the study showed that the amount raised by societies is allocated to essential expenses. No significant differences between the members regarding the reason for joining Societies and the purpose for expending its sum. These findings are compatible with the findings of (Abdul-Yakeen, 2012) about the allocation of the ROSCA's sum. On the contrary; the findings are inconsistent with the documented literature on ROSCAs that it is primarily used to save up for the purchase of indivisible durable goods (Besley et al., 1993).

The study confirmed that females' main reason for participation in Societies is future need for money, where the males' reason is for the current expenditure.

The findings of the study indicated that the tough procedures in case of borrowing; and low return in case of saving were the drivers behind leaving banks to finance via Societies. These findings are in line with a previous study which pointed out the difficulties in banks in this regard (Salahuddin & Rashmi, 2015). The findings agree also with the suggestion that consider ROSCAs as a response by socially connected groups to credit market exclusion and limited opportunities for accessing alternative financial instruments (Besley et al., 1993; Donoso et al., 2011; Kimuyu, 1999).

No substantial difference between the answers of males and females about the reasons behind going to Societies in case of saving and where to spend money; in case of credit. These findings are similar to Al Ajlouni (2015), where inconsistency was found with the documented literature on ROSCAs that were primarily used to save up for the purchase of indivisible durable goods (Besley et al., 1993), it also contradicts with the findings of another study that confirmed the main reason for enrolling in a ROSCA is the need to commit themselves to save money (Dagnelie & Lemay-Boucher, 2012).

An apparent impressive positive trend in valuation of Societies is revealed by this study, the general trend showed an agreement between male and female about the positive role of Societies in solving personal and others problems and these findings are compatible with previous findings of (Al Ajlouni, 2015).

One of the important results revealed through this study is that respondents see that Societies can be an alternative to banks in providing personal loans. The positive attitude toward Societies is consistent with the findings of other studies that proved the positive impact of ROSCAs (Abdul-Yakeen, 2012). As a general result derived from the previous findings, Societies proved that it can be viable and dependable financing alternative for the Muslim people as it adheres to the principles of Islamic Shari'ah. It can be developed by Islamic banks through different modes which make it a new addition to the Islamic Finance industry.

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