AN EMPIRICAL STUDY OF THE CONTRIBUTIONS OF ROTATING SAVINGS AND CREDIT ASSOCIATIONS (ROSCAS) TO ECONOMIC DEVELOPMENT OF ILORIN METROPOLIS

Mufutau Ayinla Abdul-Yakeen

Economics Unit, College of Humanities Management And Social Ssciences, Kwara State University, Malete, Nigeria

Abstract

The Empirical Study of The Contributions of Rotating Savings and Credit Associations (ROSCAS) to The Economic Development of Ilorin Metropolis, capital of Kwara State of Nigeria, was informed by the fact that CBN/NDIC (1995) confirmed that there was distress in the Nigerian financial industry; Besley, et al (1994) observed that there was little focus of economists on the activities of ROSCAS; and Ijaiya (2002) suggested that there should be further studies conducted on the informal financial institutions in Ilorin Metropolis. So the researcher obtained primary data to analyze the views of four hundred respondents who were ROSCAS members in the study area. Data was analyzed using descriptive and inferential models of data analysis. After using E-View 3 software package to run the regression analysis, the hypotheses tested were to know the relationship between the years of employment of respondents and the number of ROSCAS they have joined; their savings and income relationship; and the relationship between the items bought with loans obtained from ROSCAS. Students' t-test was conducted on the first two hypothesis while f-statistic was employed on the last hypothesis. The results of the tests did not conform with the priori assumptions. It was discovered that respondents were likely to join ROSCAS even if they do not earn income, contribute about thirty percent of their incomes to ROSCAS and this showed that savings to the purse of ROSCAS are not idle but active funds which could lead to an instantaneous multiplier effect of over one hundred and forty growth of the economy. As such ROSCAS' membership did promote cordial relationship between the lenders and the borrowers, employment generation, increase in output, consumption, savings, investment, and price stability because interest charges were absent in their dealings. It was recommended

that individual persons, households, firms and governments should do everything possible to promote ROSCAS by prompt payment of dues, organization of ROSCAS, ensure that ROSCAS were available, and promulgate ROSCAS' laws respectively. Finally, the study of Keynesian, Simple Multiplier shall be extended to the savings of people to ROSCAS.

Keywords: Savings and Economic Development. Key acronym: ROSCA

Introduction

Land is a free gift of nature. However, outputs of land, most at times are not consumablewithout being processed into finished product by labor, to suit human desires. Land or Nature is therefore, the original instrument of financing development. At microeconomic level every rational person knows that one sector of the economy is at the bottom of development of another and this is reciprocal in nature. On this basis, at macroeconomic level, all underdeveloped sectors (individuals, households, firms and governments) shall be ready to work for the development of other sectors in order to earn income for the improvement of their standard of living.

Some people have become extremely rich through real work and manipulations while some are desperately poor due to unequal distribution of income. For personal aggrandizement, some capitalists and institutions (e.g Banks) lend their wealth to the poor ones in return for interest. In order to alleviate poverty, some rich men and philanthropic organizations lend money to the poor ones without any recourse to interests. For personal and group development, some people, especially low income earners, rally round themselves to form associations, in order to ameliorate the economic melancholy of members. Such associations are called cooperative societies, self-help groups, Rotating Savings and Credit Associations (ROSCAS), etc.

There was distress in the Nigerian Financial System,CBN/NDIC (1995). The crisis in the Nigerian financial system continues up to this moment.At the end of 2010, Nigeria's HDI was 0.423 ranked 142 out of 169 countries studied (www.hdrstats.undp.org/en/countries/NGA.pdf....2012/4/9). Nigerian banks are not providing adequate financial services for people, Yusuf, et al (2009), Orisankoko (2009), CBN/NDIC (1995), etc.

The study of ROSCAS by Aliero (2004) was in Sokoto Metropolis and that of Yusuf, et al (2009) was in Offa town in Kwara State. Though the study conducted by Ijaiya (2002) on the role of Informal Financing in Minimizing Poverty in Ilorin Metropolis recommends

further studies on the informal sector of the economy it did not say particularly what type of informal financial institutions should be studied.

The foregoing lead the researcher to the following research questions which are:What was the strategy of participating inROSCAS in Ilorin Metropolis? What was the contribution of ROSCAS in Ilorin Metropolis to economic development of the study area? And, how could we solve some of their problems in order to make them millennium compliant?

The general objective of this work was to investigate the contributions of ROSCAS to economic development of Ilorin Metropolis to an order to suggest ways of improving their operational strategy. The specific objectives of the study include the estimation of the possibility of respondent's being a ROSCA member, evaluation of the Marginal Propensity to Save (MPS) of respondents to ; analyze how ROSCAS' loans were expended by the respondents to foster economic development, and suggest solutions to the problems of in the study area.

The assumptions of the paper were: there was no significant difference between thenumber of ROSCAS joined (M) the number of years spent at work (W) and by the respondents; there was no significant difference between the savings (S) of respondents to ROSCAS and their income (Y); and there was no significant difference between the amounts of ROSCAS' loans spent on various basic necessities of life.

The study involved the analysis of the financial activities of respondents who were ROSCAS members in Ilorin Metropolis in 2012. This was a period within which United Nations invented andwere pursuing all components of Human Development Indices via the Millennium Development Goals (MDGs). Purpose of pursuance of human development as informed, by the United Nations resolution, was to enlarge the choices of people.

Inadequate finance, dearth of literature, submission of questionnaires, lack of appropriate documentation of respondents financial activities, semi-illiteracy, request for 'brown envelope' (money or compensation) before filling the questionnaire, hatred for formal or government induced programmed, time constraints, desire of respondents not to disclose their financial dealings, etc were the research problems. These were solved through researcher's spending out of his meager salary, educating the potential respondents, keeping it cool with late return of questionnaire by the respondents who were late to submit questioner, interviewing and converting the questioners in the questioner into topic of discussion and giving hope to the people who were not employed by the government.

The paperwas presented in five sections where section one introduced the work, section two reviewed literature, section three explainedresearch methodology, section four

containeddata presentation and analysis;and section fivewas conclusion and recommendations of the study.

Review of Literature

Savings is defined as excess of income over the expenditure on consumption, Keynes (1964:62). What is saved by a sector of the economy is what is taken for investment by that sector or the other sectors of the economy.

The process of raising funds or capital for any kind of expenditure is financing, Safra, et al (2007: 779). Finance is much more than raising of fund or capital as opined by Olowe (2011: 1) who referred to finance as the management of money. Investorswords website conceptualized finance as a branch of economics concerned with the resource allocation as well as resource management, acquisition and investment. Conclusively, the website puts it that finance simply deals with matters relating to money and the markets (www.investorswords.com/1940/finance.html ... 2012/9/5).

Stakeholders in conventional finance are the management, shareholders, creditors, governments, employers, employees, customers, financial analysts, financial advisers, competitors, trade owners, pressure groups, professional bodies, regulatory bodies, future generations, local and international communities, Olowe (2011).

Institutions that channel funds from sources to users are called financial intermediaries. They include: commercial banks, saving banks, savings and loans association and such non-bank institutions (e.g. credit unions, insurance companies, pension funds, investment companies, and financial companies), Safra, et al. (2007:779). Financial institutions are classified into Formal and Informal Financial Institutions, Schreiner (2000). The financial institutions that are formed and registered in consonance with the existing rules and regulations of the states or national governments are known as Formal Financial Institutions (FFI) while those that are not formed and registered in consonance with the existing rules and regulations of the state are called Informal Financial Institutions (IFI). IFIs are operated on mutual trusts, poor based, collaterals, borrowings and repayments, Yusuf, et al (2009). Thus, Rotating Savings and Credit Associations (ROSCAS) belong to this group of associations.

There is no consensus opinion among scholars as to the definition of development. Sen (1985) viewed development as freedom and explains it as an expansion of the choices that people have to lead them to living lives that they value. Included in the choices are: growth, leisure hours, long, healthy and secure lives (en.wikipedia.org/wiki/Development_

as_Freedom … 2012/7/25). Economic Development, according to Todaro (2009), is the improvement in the standard of living of people in terms of feeding, health, education, etc up to freedom of making choices.

Indices of measuring Human Development are known as Human Development Index (HDI). HDI was established in 1990 by the United Nations. The concept of Human Development Report (HDR) was mooted first by a Pakistani economist, MahbubulHaq (1934-1998) with the assistance of many other reputable economists who wrote on economic development (http://en.wikipedia.org/wiki/Human_Development_Theory). The primary goal of MahbubulHaq was to develop an alternative way of measuring national development outside Gross National Income (GNI) per capita. This is a good development in the sense that money is a means to an end not an end itself. Then, Sen (1985) wrote on human capabilities which included: long and healthy lives, knowledgeable, access to resources needed for a decent standard of living participate in the lives of the community, and to enlarge people's choices, leisure hours, political and cultural freedoms, etc which could be termed as Human Development Index (HDI). HDI, therefore, becomes the composite statistical data through which human development of countries are measured.

According to Aredo (1993:15) a ROSCA was formed when a man in financial need asked his friend to form an *Iqqub* (Ethiopia name for ROSCAS) for him.Homogeneous groups form ROSCAS, Aredo (1993: 11), Ardener (1964), Aryeetey (1995), Nweze (1995), and Besley, et al (1994) among others.The average number of people in ROSCA is usually eleven (Aredo, 1993: 14); twelve in Ghana, (Aryeetey, 1995:53); and ranges from two to hundreds (Ardener, 1964: 210).

ROSCAS do give loans to small scale industries, Ardener (1964), Aliero (2004), etc; ensure improved income distribution and standard of living of members, World Bank (1989) and Goodland, et al (1999) cited by Yusuf, et al (2009).ROSCA loans increase income and build assets, Ardener (1964).

Some of the criticisms meted on ROSCAS are that of shallowness and narrowness; issuing small loans; irrationality; little linkage with conventional banks, limited geographical spread; unequal benefits, Aliero (2004:50) who cited scholars like Chipeta and Mkandawire (1992), etc. Others are: provision of short term loans, no deposit insurance, non-provision of money transfer services and incongruent time of earning to financing as put forward by Gonzalez-Vega (1992), Aliero (2004), Besley, et al (1994), and Adeoye (2007:53) among others. Incongruent time of earnings to financing issuing small loans, (Aliero, 2004:50) who cited scholars like Chipeta and Mkandawire (1992), etc; irrational because they do not charge

interest on loans. Ardener (1964); Unequal Benefits, reliance on mutual trusts, Ardener (1964), Aliero (2004), etc; and takers of the first bundle gain while the receivers of the last bundle loose,Ardener (1964), Aredo (1993), Aryeetey (1995), Aliero (2004), etc. Besley, et al (1994) blamedROSCAS for not discounting loans.

Besley, et al (1994) used integral and graphical models of analysis and discovered that in general do not produce efficient allocation of resources for biddings in are Pareto dominated by Credit Markets while a Random may yield ex-ante expected utility than the Credit Markets. Their model is an assumed model and it may not conform with the reasons why people form or join ROSCAS, as such their conclusion that individuals are better-off at Credit Market than bidding at ROSCA is fallacious, especially, if one is not rich enough to operate at Credit Market. Above all, there is no Credit Market where loan disbursement and trading are not based on interest, commission and/or profit-or-loss basis where-as loans disbursement and trading are based on full return of principal in ROSCAS.

Abdul-Yakeen (2004:166) studied the attitudes of Bank customers concerning Islamic Banking Windows in the two state capitals where objectively thinking people would expect Islamic Banking to flourish. He obtained both primary and secondary data to obtain cross-sectional and time series data for the study and analyzed them using descriptive and inferential models of analysis respectively. The result of the study showed that Islamic Banking Windows was practicable and practiced in Nigeria but with no persistently increasing patronage due to non-conformity of some of respondents' behavior to the operational guidelines of the scheme. The non-conformity of the behavior of the respondents, therefore, made it necessary and sufficient to look for the kind of financial institution that majority of the people of Ilorin partake-in, study it critically to know its operational strategy, strengths and weaknesses that would facilitate a way of promoting economic development of the study area and the global economy

Yusuf, et.al (2009) in their study of ROSCAS in Offa town used adjusted Components of Human Development Index (HDI), etc to formulate questionnaires to studyROSCAS. They used primary data which were put under P-Alpha-Class measure of poverty and Multiple Regression Analysis to analyze their data via SPSS. They result of the test conducted shows that majority of them belong to Common ROSCAS, have received a loan of an average of #10,000 and money received from ROSCAS were spent on food, housing rent, health care, business activities as expected signs, thus fulfilling their a priori expectations, while those spent on asset accumulation, education and insurance are inversely related to poverty reduction in the informal sector of Offa town, thus contradicting their a-priori

expectations. Conclusively, they found out that informal financial institutions play an important role in reducing poverty in Offa.

In his study of the Rotating Savings and Credit Associations (ROSCAS) in Sokoto Metropolis, Aliero (2004) discovered that there was no gender and tribal segregation in the operation of in Sokoto Metropolis and as such opined that robust government policies could be formulated from the knowledge of ROSCAS' operation

Research Methodology

The study area was capital of Kwara State of Nigeria. Ilorin Metropolis was located on coordinate 8^0 30 N, $4^0$37 E, with an estimated population of 847,582 population as at 2007.Economically, Ilorin Metropolis was adjudged to be the town of lawyers, scholars, sports, media, commerce, transport, Islamic culture, etc, (www.wikipedia.org/wiki/ Ilorin_Nigeria ....2012/5/9).

Cross-sectional data obtained on different entities for a single period, Stock and Watson (2007:11).To get cross-sectional and direct data, questionnaires, questionnaires structured interview, discussion and participant-observation methods were used.Stratified sampling methodwas used. Sample population of the study wasfour hundred respondents who were ROSCAS members but only three hundred and twenty-eight responses were good for analysis..The questions in the questionnaire were to know their sexes, ages, education, marital status, occupation,religion,years spent at work, number of ever joined, period of contribution, savings each period, income level,how loans were expended, current number of membership, most desired bundle or box, decision making rules, relationship between contributions and loans obtained, interest payment, desire on savings, reasons for borrowing, savings with other financial institution, other contributions after savings,secrecy of membership, reason for ROSCAS' membership, most important action after earning of income, and remarks on ROSCAS' membership.The researcher joined two ROSCAS and employed five research assistant (threemale and two female).

The researcher used both descriptive and inferential statistical models of data analysis to analyze the data.The data obtained was rated with equal standard.

Concerning the number ofROSCAS respondents joinedand contributions of respondents to, in the first and second hypotheses, the researcher employed Simple Regression Model. Multiple regression analysis was used to analyze the ways respondents allocate the loans obtained from ROSCAS to different goods and services.The usage of regression analysis to analyze cross-sectional data in conformity with Upender (2008:8) who

cited Ernst Engel, a German statistician who constructed a regression data on cross-sectional data in his (Engel) book published in 1895.The dependent variables were the number of ROSCAS joined, contribution to ROSCAS and the loans obtained with which some items were bought while the independent variables were the number of years spent at work, income of respondents and articles bought with loans obtained from ROSCAS.

Where the variables were two in number, simple linear regression models was used. Here, the researcher had two different equations which were based on Engel's Function or Curve but substitute the consumption expenditure with savings or contributions of respondents to ROSCASand retain the income variable. They are:

Relationship between ROSCAS'membership(M) andyears of work (W)

$M_i = b_o + b_1 W_i + e$, i = 1, 2, 3,…, n. The subscript 'i' in the equation stands for an individual respondent. The 'n' in the equation is the number of respondents, i.e. 400.

"M_i" is the number of ROSCAS respondents' joined while "W_i" is the number of years the respondents had put in as an active worker or income earner.

"M" is the dependent variable while "W"is the independent variable.

"b_o" is the intercept which indicates the value of "M" when "W" is zero or inexistent.

" b_1" is the slope of the curve which shows the marginal propensity of respondents to joinROSCAS while working.

"e" is the "error term" or 'white noise' which shows the likely mistakes the researcher might have made in the calculation due to omission, commission, dynamism of the economy. etc.

Relationship between Savings and Income of ROSCAS'members

$S = a_o + a_1 Y + e$, where "S" is the contributions made by the respondents to out of their earnings. 'S' is the dependent variable. The independent variable "Y" stands for the income of the respondents.

"a_o" is the intercept of the equation showing what the value of "S" would be if "Y" is zero.

"a_1" is the gradient of the curve which shows the marginal propensity to contribute to ROSCAS out of respondents' income.

"e" is the error term, as explained above.

Relationship between Loans obtained from ROSCASand the Commodities purchased

$L = c_0 + c_1P_1 + c_2P_2 + c_3P_3 + c_4P_4 + c_5P_5 + e$. where "L" is Total Loan obtained from ROSCAS and it is regarded as dependent variable.

"c_0" is the intercept of the equation of expenditure of ' loans. It connotes the amount of ROSCAS' loans that may not be expended on the articles stated in the equation.

"c_1", "c_2", "c_3", "c_4", and "c_5" represent the propensity to spend loans on "P_1", "P_2", "P_3", "P_4" and "P_5" respectively. "e", as stated earlier, is the error term or disturbance term.

"P_1" stands from the first item a respondent may purchase and that is food and health related commodities."P_2" represents the second item a ROSCAS member may buy and that is cloth, housing and security concerned goods."P_3" denotes the third good and services a respondent may acquire with loans and this consists of transportation and communication facilities."P_4" is the fourth commodity a reasonable thinking man may expend his assets on, and this is educational resources."P_5" takes the place of all monies expended on ceremonies, sports, culture, gifts, etc which are the last economic goods on which a rational man would spend his hard earned loans.

The researcher calculated R^2(coefficient of determination) to show the reliability of the equation to explain the extent of relationship between all variables.Here, $0 < R^2 < 1$ or $0\% < R^2 < 100\%$.

The hypothesis were tested using students' t-test, analysis of variances and f-statistic as recommended by Gujuratiand Sangeetha (2007: 145) who approved the usage of students' t-test when two variables were under observation and f-statistic when multiple variables were regressed. In addition, r^2 was used to explain the ability of the equations to explain the variations of dependent variable explained by the independent variable.

Software package used was E- view 3.

Data Analysis And Results

It was observed that 56% of the respondents were of male sex while 44% were of female sex. The range of the age of respondents was 28years $(60 - 22$ years).51% of the respondents were employed by the governments while the rest were self employed. Over 71% of respondents were married, less than 21% were single and 3% percent were widow(er). 5%, 30%, 40%, 23% and 3% of respondents were holding post graduate degree, first degree, NCE| HND, secondary school and primary school certificate respectively.

Currently, 45%, 17%, 13%, and 25% of respondents joined one, two, three andmore them one ROSCAS.The most desired bundle or box was the middle ones with 51% of

respondents followed by the last bundle with 21% when only 18% want the first set of bundles.Decision making rules concerning who takes the next bundle12% of respondents use circumstances,36% use negotiation,21% abide by coordinators' advice,24% use balloting while the rest use other methods.On relationship between contributions and loans obtained, 31% of the respondents obtained loans that multiplied their savings by the number of people in their ROSCAS,28% obtained loans that multiplied their savings by the number of times the made contributions,22%obtained loans that multiplied their savings three times the rest were multiplied by lower multiplications.

On interest payment,88% never pay interest, 10% occasionally pay interest while %2% always pay interest on loans.With respect to what respondents want theircontributions to ROSCAS to do, 45%, 27%,5%, and 25% want their contributions to develop other people, be secured, earn interest, and all of the above respectively.Data on reasons for borrowing shows that 43%, 19%, 13%, 7% and 18% borrow from because they wanted to buy some things, it was their turn to borrow, were afraid of default, want to stop others from borrowing, and other reasons best known to them respectively.Field study on other financial institutions where ROSCAS members save their assets showed that 13%, 31%, 7%, 45% and 4% save their other assets with Community Development Associations, Cooperative Societies, Government, Banks and Money Lenders as orderly arranged.

Other contributions that respondents made to ROSCASafter savings were Financial Donations (16%), Training of members (22%), Business Information (50%), Employment (7%) and others (5%).Secrecy of membership of as obtained from the field study were that people get to know of their contributions to through purchase of new commodities (28%), debtors told them (39%), coordinator told them (18%), and none of the above (15%).Respondents who joined ROSCAS because they wanted to help others (24%),their income increased (13%), to get interest free loans (32%), and none of the above (25%). The rest of the respondents said they joined ROSCAS because they wanted to belong to the social union.

The most important financial actions thatROSCAS' members take after earning of income are: debt repayment (24%), making contributions toROSCAS (25%), buying of food and other household consumable goods (18%), investment (31%) and donations (2%).Comments or remarks ofROSCAS' members concerning their membership shows that64% of them were very happy, 23% were happy, 2% were indifferent and one percent was very sad for being ROSCAS' members.

Relationship between ROSCAS' Membership and Years of Work

The print-out obtained on the above subject matter via E-Viewstatistical software was:

Dependent Variable: M

Method: Least Squares

Date: 09/07/12   Time: 10:25

Sample: 1 328

Included observations: 328

Variable	Coefficient	Std. Error	t-Statistic	Prob.
W	0.677269	0.022568	30.00999	0.0000
C	-0.077457	0.388163	-0.199547	0.8420
R-squared	0.734225	Mean dependent var		9.868902
Adjusted R-squared	0.733409	S.D. dependent var		7.086914
S.E. of regression	3.659145	Akaike info criterion		5.438415
Sum squared resid	4364.925	Schwarz criterion		5.461543
Log likelihood	-889.9000	F-statistic		900.5998
Durbin-Watson stat	1.035822	Prob(F-statistic)		0.000000

Estimation Command:

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LS M W C

Estimation Equation:

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M = C(1)*W + C(2)

Substituted Coefficients:

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M = 0.6772692106*W - 0.07745666979

Therefore, as obtained via E-View statistical software,the researcher has the following equation:

M	=	0.775	+	0.6773W	+	e
se	=	(0.3882)	+	(0.02257)		r^2=0.7342
t	=	(-0.1996)		(30.01)		df = 327
p	=	(0.8240)		(0.0000)		$f_{1.327}$= 900.5998

The constant, 'b$_o$' is 0.775 shows that there is about eighty-percent chance that the respondents join even if they do not work. The 'b$_1$' in the equation indicates that the respondents decided to join using about seventy percent of their years of work.Themean value of the dependent variable (M) is 9.869 meaning that the average number of the respondents have joined is ten in number when the minimum number of years spent at work was one years and the maximum number of years at work was forty-five.

The value of R^2= 0.734. This means that 73.4% of the variations in dependent variable isexplained by the independent variable. Thus, if we use the equation of 'm' above to predict an event, we are likely to be over 73% correct. The t-statistic is 30 while the probability of rejecting the null hypothesis is put at 0.0000, as such the researcher accept that there no significant difference between number of years spent at work and the number of they subscribed for membership.

Relationship between Savings (S)and Income (Y)of respondents

The print-out obtained on the above subject matter via E-Viewstatistical software was:

Dependent Variable: S

Method: Least Squares

Date: 09/08/12   Time: 18:37

Sample: 1 328

Included observations: 328

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y	0.290246	0.014237	20.38685	0.0000
C	1.046688	0.591451	1.769695	0.0777
R-squared	0.560424	Mean dependent var		11.40793
Adjusted R-squared	0.559075	S.D. dependent var		8.250894

S.E. of regression	5.478771	Akaike info criterion	6.245717
Sum squared resid	9785.519	Schwarz criterion	6.268846
Log likelihood	-1022.298	F-statistic	415.6235
Durbin-Watson stat	0.735854	Prob(F-statistic)	0.000000

Estimation Command:

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LS S Y C

Estimation Equation:

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$S = C(1)*Y + C(2)$

Substituted Coefficients:

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$S = 0.2902456581*Y + 1.046687772$

The equation of savings obtained via E-View statistical software is:

S	=	1.0466	+	0.290246Y	+	e
se	=	(0.59145)		(0.01423)		$r^2 = 0.5604$
t	=	(1.769695)		(20.38685)		df = 327
p	=	(0.0777)		(0.0000)		$f_{1.327}$ =415.6235

The "a_o" which is the intercept of the equation is 1.0466 shows that the respondents would save about one thousand and fifty-naira even if they are not earning income.The "a_1" is the slope of the above equation shows that respondents would contribute less than thirty-percent of their income to ROSCAS.The t-statistic is 20.38685while the probability of rejecting the null hypothesis is put at 0.0000. Thus,the researcher does not accept that there no significant difference between savings to ROSCASand income of respondents.Mean ofS is 11.46793shows that average savings is#11,467:93. $R^2 = 0.560424$ shows that the equation can only explain fifty-six percent variations in dependent variable (S) is explained by the independent variable (Y).

Relationship between Loans obtained and their Expenditure on basic life necessities

The print-out obtained on the above subject matter via E-Viewstatistical software was:

Dependent Variable: L

Method: Least Squares

Date: 09/08/12   Time: 09:31

Sample: 1 328

Included observations: 328

Variable	Coefficient	Std. Error	t-Statistic	Prob.
F	1.285650	0.045725	28.11676	0.0000
H	1.015797	0.027713	36.65353	0.0000
T	0.917794	0.043941	20.88709	0.0000
E	1.024448	0.030279	33.83343	0.0000
C	1.557560	0.205594	7.575914	0.0000

R-squared	0.961335	Mean dependent var	97.42683
Adjusted R-squared	0.960856	S.D. dependent var	57.59285
S.E. of regression	11.39464	Akaike info criterion	7.719290
Sum squared resid	41937.61	Schwarz criterion	7.777110
Log likelihood	-1260.963	F-statistic	2007.698
Durbin-Watson stat	1.041525	Prob(F-statistic)	0.000000

Estimation Command:

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LS L F H T E C

Estimation Equation:

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L = C(1)*F + C(2)*H + C(3)*T + C(4)*E + C(5)

Substituted Coefficients:

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L = 1.28564987*F + 1.015797024*H + 0.9177942225*T + 1.024447772*E + 1.557560121

From the above print-outobtained via E-View statistical software, the equation of spending of 'loans is:

L   =   1.29P_1 +   1.02P_2 +   0.92P_3 +   1.03P_4 +   1.56P_5 +   e

se   =   (0.04573)   (0.02771)   (0.04394)   (0.03028)

(0.2056) r^2 =0.96

t   =   (28.1168)   (36.6535)   (20.8871)   (33.8334)

(7.5759) df = 327

p   =   (0.0000)   (0.0000)   (0.0000)   (0.0000)   (0.0000) $f_{1.327}$ =

F-statistic   2007.698

 Prob(F-statistic)   0.0000

"c_o" which is supposed to be the intercept of the equation of expenditure of ' loans is not present in the equation stated above. This indicates that it is not possible to spend the money that is not borrowed.

The coefficients ofP_1, P_2, P_3, P_4, and $P_5$are "c_1","c_2","c_3","c_4", and"c_5" are 1.29, 1.02, 0.92,1.03 and 1.56 respectively. This implies that respondents would purchase more Food, Housing, Transportation, Education and ceremonial commodities when they obtain loans from .That is to say, more sales, investment, employment, income, etc would be created in these sectors of the economy. Ther^2 = 0.96 in the print-out means that ninety-six percent variations in the dependent variable can be explained by the independent variables. For the fact that the value of f-statistic is greater than the value of its probability, the researcher does not accept that there is no significant differences between the way respondents spend their ROSCAS' loansamong different commodities.

Results

The results or findings of this study were:

There was no sex, age, employment, marital and educational exclusion in ROSCAS' membership. Most at times, they use negotiations to determine who would take the next bundle, want their savings to develop other members, no interest payment, borrow because they want to purchase somecommodities, ensure secrecy, and above all, they are happy members of ROSCAS.

In addition, it confirms that there is distress in the Nigerian financial services industry because there is a very great probability that every worker that works in Nigeria would have joined an informal financial institution, before they become income earners and the average of respondents income that are being saved with is #11,493:13 when the range of income is between two and an hundred thousand naira per month. However, it discovered that respondents do join more than one ROSCAS at a time and the next financial institution that respondents would patronize is Banks.

The study explained the proportion of ROSCAS loans being expended on the basic needs of life (food, education, housing, health, transportation, communication and ceremonies, so as to have the ability to predict the amount of economic growth expected of them in the near future, all things being equal (*ceteris paribus*);

It allows the interested readers to know the rate at which people associate themselves with a traditional financial institution, ROSCAS. It exposes the marginal prosperity of respondents, to contribute to ROSCAS. It explains the fraction of respondents' loans that are being expanded on some commodities.It extends the Keynesian Theory (General Theory) to ROSCAS by having the view that 'savings' that is being tagged as 'idle' resource in the economy may not be idle if they were not kept personally but saved with ROSCAS and the debtors were allowed to consume or invest them.It discovered that there was sense and considerablepatronageof traditional and informal financial system in the study area.It emphasizes the fact that some people do not save because they want their assets to increase or earn interest but because they want to borrow more than they have saved.

It was found out that Civil-Servants' contributions to are usually on monthly basis while self-employed people's contribution are usually on weekly basis.

Conclusion and Recommendation

In conclusion, ROSCAS are contributing immensely to the economic development of the study area in the sense that there was no restrictionsto its membership. It involved no payment of interest, made members happy and was being patronized even before respondents become income earners (when respondents were students and apprentices).

Using Keynesian Multiplier Concept discovered by Keynes (1936), the contributions to ROSCASwould have about an additional one and a halfor one hundred and forty-three percent[$1/ (1 − 0.3) = 1.4286$] effect on the economy. This is true, if and only if, all respondents pay to the purse of ROSCAS as at when due and the Loan Takers spend their loan without any delay.

The recommendation of this paper is for the four sectors of the economy (Individual, Household, Firm, and Government). At individual level, each person is advised to ensure that he works to earn income with which he would contribute, at least, ten percent to ROSCAS regularly so that he could obtain loans and use twenty-percent of his income off-set debts. At the end the total payment to ROSCAS, each period, would not be more than thirty-percent of their earnings. Each and every Heads of Families or Houses should ensure that all members of their families cultivate the habit of savings.In addition, all respondents should pay their contributions to the purse of ROSCAS as at when due and the Loan Takers spend their loans on time.All managers of Firms or Business ventures shall form, promote and monitor the activities ofROSCAS under them. Government shall be paying the salaries of civil servants on time,promulgate ROSCAS' laws and set aside some money for promotion and administration of ROSCAS within their domain.Individuals, Households, Firms, and Governmentsshould encourage research on the formalization of ROSCAS or how to incorporate them into formal financial system of the country, Nigeria and the globe.

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