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EFFECT OF INFORMAL FINANCIAL MARKET ON RURAL WOMEN HEALTH AND WELFARE IN OWO LOCAL GOVERNMENT AREA, ONDO STATE, NIGERIA

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ABSTRACT

This study examined the effect of the operations of informal financial institutions on the economic and health welfare of rural women in Owo Local Government Area of Ondo State, Nigeria from two perspectives: rural economic welfare and health welfare. 362 structured questionnaires were administered to members of thirteen cooperative and credit societies drawn from Owo town and its suburbs based on stratified sampling. Secondary data was employed for the loan/credit portfolio of selected cooperative societies together with the information gathered through questionnaire. The questionnaire covers the demography of the respondents and the two focal areas of the research. Descriptive and inferential statistics were used in analysing the data collected. The methods used to test the research hypotheses were percentages and ordinary least squares regression analysis. Findings show that from the economic welfare (poverty reduction) standpoint, only interest rates on cooperatives credit have positive and significant effect on poverty reduction. In contrast, from the perspective of health welfare (health improvement), credit granted to members by cooperative societies have positive and significant effect on rural women economic and health improvement. The null hypotheses in both situations could not be accepted. The study therefore recommends that potential borrowers should look beyond attractive interest rate to the actual overall economic and health benefit of the credit obtained; there should be greater accessibility to fund and close monitoring of how the women utilise the credits obtained; and the local government should strive to fill the gap in quality health delivery for their rural women.

Keywords: Informal Financial Market, Rural Women, Health Economics, Poverty Reduction, Health and Welfare

1. INTRODUCTION

The strategies on how to improve rural women's economic and health status are greatly influenced by their access to finance. Economic empowerment and improved healthcare for rural dwellers in terms of procurement of inputs, petty and small scale businesses and access to quality health services need continuous access to financial services from both the formal and informal financial institutions around them (Food and Agricultural Organisation, (FAO) 2011). Fletcher and Kenny (2010) stated that accessibility to improved financial services help rural women to improve their own healthcare and care for their families. This access

to finance, as noted by FAO (2019), is however constrained in most rural areas. Taylor and Boubakri (2013) asserted that rural women's accessibility to credit is usually limited by barriers in terms of their economic and social status, culture as well as, legal and education related issues. The World Bank's Global Findex (2017) reports that out of the estimated 1.7 billion unbanked adults in the world, about 980 million (56%) are women, many of who rely on informal financial institutions to have access to credit.

The World Bank (2016) identified lack of productive assets acceptable by formal financial institutions for collateral as another barrier to rural women's access to finance. The Bank noted that in most rural communities, the womenfolk own or control less of the available properties, especially in developing countries. Also countries with high gender discrimination (against women) are most likely to have low level of assets ownership, savings and borrowing by women (World Bank, 2018). Hansen (2013) proposed that financial institutions should develop gender sensitive strategies that will be adaptable to rural women and have an understanding of the challenges facing the rural dwellers and agricultural sector.

Empirical literature on the effect of informal financial capital market on rural women health and welfare in Owo Local Government Area (OWLGA) is to the best of the researchers' knowledge not available. Most works done in this regard have concentrated on the relationship between informal financial market and economic development of the country with no distinction between men and women. Again, most of these works are unpublished. This necessitates that a study that examines the effect of informal financial market and women welfare (economic and health) be carried out to fill this obvious gap.

1.2 Objectives of the Study

The overall goal of this study is to examine the effect of informal capital market on the health and welfare of rural women in Owo Local Government Area of Ondo State, Nigeria. In specific terms, the study addresses the following objectives:

- ❖ To examine the effect of informal financial institutions on poverty reduction among rural women in Owo Local Government Area of Ondo State, Nigeria and
- ❖ To examine the effect of informal financial institutions on health and welfare of rural women in Owo Local Government Area of Ondo State, Nigeria.
- ❖ Thus the two research hypotheses to be tested in the study, in their null forms, are that:
- ❖ Informal financial market has no significant effect on poverty reduction among rural women in Owo Local Government Area of Ondo State, Nigeria
- ❖ Informal financial market has no significant effect on the improvement of rural women's health in Owo Local Government Area, Ondo State, Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Issues

2.1.1 Informal Financial Market

The concept of informal finance could have originated from the two main theories underlining the relationship between financial development and economic growth: the financial repression hypothesis (FRH) and the neo-structuralist hypothesis (Goldsmith, 1969). Shaw (1973) and Mckinnon (1973) argue that excessive monetary controls can hinder financial institutions from contributing efficiently to economic growth and that for meaningful financial system contribution towards economic growth and development, monetary authorities must relax regulations on the financial system. In essence, informal financial institutions, which are less regulated, arose to bridge the regulation induced finance gap. Informal financial market refers to a financial system that is relatively rural and largely free from formal regulations that are applicable to formal financial intermediaries. Von-Pischke (1992) stated that informal financial institutions provide a platform for borrowing and lending through individuals and societies that are not necessarily registered as financial intermediaries with the government and hence not subjected to strict legal controls like the formal institutions.

In Nigeria, the informal financial market consists of credit and cooperative societies, money lenders, Esusu, Adashi, Dam rudimentary mobile banks, loans from friends and relatives, business angels, periodic and rotational savings among others. As early as 1989, the World Bank (1989) posited that family members/relatives and friends, often constitute the most important source of informal finance.

2.1.2 Challenges Facing Rural Women's Access to Finance

Women in rural areas have limited access to finance from formal and highly regulated financial institutions hence their resort to the informal financial sector for credit acquisition. The reasons for this are not farfetched. The FAO (2019) identifies them as first, the traditional role attached to rural women limits their access to finance from formal sources. In most rural communities, women's time are consumed by series of household chores in addition to their roles as mothers and they are mostly low income earners. Fletschner and Kenny (2010) submit that these "triple work burden" hinders women from engaging in more activities that are more productive. Formal financial resource providers often see rural women as dependents on their husbands for access to finance.

Second, the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2017) reported that not less than 75% of the population of illiterates in the world are women. This estimated figure has its larger share among the rural women. Since education is essential requirement for access to formal finance, most rural women tend to lose out in this regard, hence they become more comfortable with the informal financial arrangement.

Moreover, rural women access to finance from the formal market is also constrained by factors relating to issues such as adequacy of the services the market offers them. Financial service adequacy requires that it is reliable, cost-effective, safe and convenient which the formal arrangement does not offer rural women (United Nations Women Watch, 2012). Finally, as noted by Demircug-Kunt and Klapper (2013), one of the reasons why rural women embrace the informal financial market in sourcing funds relates to the unsuitable mechanisms with which formal financial institutions deliver services. Essentially, high cost is involved in delivering financial services to rural women because of their dispersed population, poor communication facilities and other accessibility problems.

2.1.3 Informal Financial Market and Rural Women Health and Welfare

Informal financial institutions provide veritable platforms through which rural women could be empowered because they offer micro-credit facilities. Mayoux (2009) stated that availability of micro-credit significantly and positively aids rural women economic and health wellbeing leading to enhanced individual status and community emancipation. Informal financial assistance can be in form of rural women self-help groups meant to promote the specific economic health and social welfare of members. They also help such women to possess higher bargaining power occasioned by enhanced participation in income generating ventures. Pande, Tiwari and Arya (2017) state that women's health involves their emotional, social and physical well-being which in turn is determined by the biological, social, political and economic context of their lives. Women are unable to reach their full potential because of persistent health, nutrition, social and gender inequalities and health system inadequacies. With respect to health for instance Kurgat, Kibas and Otuya, (2018) observed that Asian rural women who have access to finance are more likely to practice birth control than those who do not; this is essential because rural women have lesser ability to pay for their needed health services (Richardson 1987). Generally, it is believed that rural women's access to credit has a multiplier effect on their overall welfare.

2.2 Theoretical Underpinnings

A few theories can be linked to the concept of informal capital market and economic welfare. They include the social capital, dependency, modernization and cooperative society theories.

2.2.1 Social Capital Theory

The social capital theory can be traced to the World Bank (1998) which emphasized that social capital refers to human institutions and relationships that foster economic development among the citizens. It is the relationship that brings rural people together to form cooperative and credit unions for mutual benefits. Nugent (2002) and Basargekar (2010) believed that social capital is a potent tool for improving the economic welfare of rural people. Social capital also encourages unity and cooperation among members of cooperative unions and societies which further foster development among them.

2.2.2 Modernization Theory

Dhemba (1999) stated that the proponents of modernization theory argues that development is a product of some "tricks" that are meticulously carved to aid it. To cause a drastic reduction in rural poverty, one of the so-called "tricks", according to the author is to strengthen traditional informal financial so that they can spur growth and development in the economy of rural areas.

2.2.3 Dependency Theory

The dependency theory as revealed by Sambe, Korna and Abanyam (2013) argues that the dominance of poverty in rural communities is as a result of the dependency of the larger society on the structures and institutions of the western developed countries. In essence, this dependency theorists are of the view that foreign institutions have not been able to meet the development yearnings of the local people and for a clear-cut and penetrative development, rural and indigenous institutions must be promoted to counter the exploitative tendencies of foreign institutions.

2.2.4 Cooperatives Society Theory

Helmberger and Hoos (1962) through their theory of cooperative societies developed an optimization model for cooperative societies, the fulcrum of which is that they exist principally to maximize the benefits of their members rather than profit making.

2.3 Empirical Literature

Ample literature exist on the effect of informal finance and economic development on one hand as well as the relationship between it and citizens welfare, usually captured by poverty reduction and other indicators of standard of living. Kinyondo and Kagaruki (2019) examined the impact of Informal Financial Institutions (IFIs) on Tanzania's socio-economic development using quasi-experimental method to ascertain the link between Informal Financial Institution's membership and economic indicators. The authors discovered that membership of informal financial groups have positive and significant relationship with economic indicators.

Kurgatet *al* (2018) studied the relationship between informal banking activities and women economic empowerment in Kericho, Kenya using descriptive statistics, Chi-square and regression analysis. The results indicated that it is difficult for rural women groups to have access to credit from formal financial market due to high interest rates hence they opt for the informal financial institutions that are available. Cornish et al. (2019) confirm the notion of power related to women's income generation, financial independence and being listened to in social relationships will improve their health. Saunyama (2013) examined the contribution of informal financial institutions to poverty reduction in Rusapecounty, Zimbabwe with the use of descriptive statistics. The researcher found out that informal financial institutions assist members in improving their diets, medical welfare, housing and other family needs. Nixon, Lawrence, Symon and Moses (2015) studied the relationship between credit advancement by non-bank financial institutions and the living standard of people living below the poverty line in Kenya between 1980 and 2013. However, the World Bank in 2017 offered some support in Mexico where a rural finance project extended credit lines to 40,000 farmers and small rural businesses, with the average loan totalling \$2,000 and women account for 78% of recipients (World Bank 2017). Analyzing the data collected with the autoregressive distributed lag technique, the results of the study shows that the credit advanced by non-bank financial institutions exerts a negative effect on the living standard of people living below the poverty line in Kenya.

In Nigeria, Abraham (2018) while using the logit regression to estimate the effect of access to finance on poor farmers in two rural communities in Northern Nigeria found out that farmers' savings groups in Fakai and Rijaus communities are of tremendous benefits to rural farmers who are members of such groups. Specifically, the study revealed that the vulnerable group members who are mostly women benefit more. A study of 110 households by Beeior, Ajegi and Tyoakosu (2016) reveals that in Konshisha Local Government Area of Benue State, non-beneficiaries of credits from informal financial institutions are worse off economically when compared to their counterparts who are beneficiaries. Dare and Okeya (2017) used descriptive and Chi-square statistics to examine the effect of informal capital market on the economic and health wellbeing of rural dwellers in Akoko North-West Local Government Area of Ondo State. The results from the study indicated that credits from the informal capital market substantially aid rural dwellers' economic and health wellbeing in the local Government.

3. RESEARCH METHOD

This study was undertaken to examine the effect of informal financial market on the welfare of rural women in Owo Local Government Area of Ondo State, Nigeria. The study employed the survey research design which comprised of questionnaire with questions that are relevant to the objectives of the study. To make descriptive and inferential statistics possible, the answers to the questions are standardized in quantitative form. For a descriptive research design to be good enough, it should possess the six w's of reliable research design, which includes who (the targeted population); where (location of targeted population); when (the period for data and information gathering); what (the needed information); why (the purpose for which the information is gathered) and the way (the process of information gathering) (Cooper & Schindler, 2014).

3.1 Research Design

The nature of this research supports the use of cross-sectional survey research that solicit for responses from active female and some male members of selected cooperative and credit societies. This method also enables drawing of inferences on the population underlying factors.

3.2 Owo Local Government Area of Ondo State

The area of focus of this study is Owo Local Government (OWLGA) with its headquarters in Owo, Ondo State, Nigeria. The local government was created alongside with the creation of Ondo State in 1976 and situates on latitude 7° 11' N (equator) and on longitude 5° 33' E (Greenwich Meridian). OWLGA is bounded in the North by Emure-Ise- Orun Local Government Area of Ekiti State, East by Akure North and South LGAs; South by Idanre LGA and West by Ose LGA. As at 2006, population census, OWLGA was populated by about 222,262 people while the National Population Commission posits that the population would be in excess of 300,000 by the year 2016. Undoubtedly, this figure is expected to have also increased over the years. The major towns making up the OWLGA include Owo, Emure-Ile, Uso, Ipele, Iyere, Isuada, Upenmen, Eporo and Amurin among others. OWLGA has about 13 districts.

3.3 Population, Sampling Techniques and Research Instruments

The targeted population for this study are the women members of the registered cooperative societies and other credit associations in Owo Local Government Area (OWLGA), Ondo State, Nigeria. Unregistered informal financial organizations are specifically excluded from this research because most of their activities are not recorded and information about their operations are kept secret by the operators. As at December 2019, the number of registered cooperative societies in OWLGA was 169 out of which 29 were inactive (active = 140). The total membership strength of these societies as at that date was 3,779. This study employed the Slovin's sampling estimator (Philip, Samson and Ogwu, 2013) to determine the sample size for the study.

Data on the gender distribution of members of cooperative and credit associations in OWLGA are not available, hence the actual number of women in each of these groups could not be ascertained. However, since the focus of this research is on women welfare, the estimation of sample per cooperative society and credit association will be based on their total membership strength from which the

women and some men were selected for interview. Using the Slovin’s sample size determinant, the sample size for this study is calculated as:

$$n = \frac{N}{1 + Ne^2}$$

$$1 + Ne^2$$

where n = Sample Size, N= Population and e= error margin

a 5% error margin is selected for this study, therefore, the sample size for this study is estimated as:

$$3779$$

$$1 + 3779(0.05)^2 = 362$$

The sample size from the total number of registered cooperative societies in OWLGA is 362.

To determine the actual sample from each of the cooperative societies, the entire OWLGA was stratified into two main districts: Owo main and its suburbs. The percentage of the societies from each district on the whole was used to determine the number of respondents expected from the societies in each of the districts. Table 3.1 contains the districts, number of societies and the number of expected respondents from them.

Table 3.1: OWLGA Districts, Cooperative Societies and Respondents

S/N	Districts	Number of Cooperative Societies	% of Total	Expected Respondents (approx.)	Number of Members
1	OWO MAIN	105	75	272	2909
2	OWO SUBURBS (IYERE, UPENMEN, IPELE/USO, AMURIN/ EMURE-ILE, EPORO)	35	25	90	870
	TOTAL	140	100	362	3779

Source: Authors Computation (2020)

To determine the number of cooperative societies on which questionnaires are to be administered, the Taro Yamane’s formula

$$S_s = \frac{N_s n_s}{N}$$

$$N$$

is used

where S_s = Number of societies selected per group

n_s = Number of expected respondents form each group

N_s = Number of societies in the two groups

N = Entire population of the study

So that the actual sample size is now as shown in Table 3.2

Table 3.2 Number of Cooperative Societies Selected

S/N	Districts	Number of Societies
1	Owo Main	$\frac{272 \times 140}{3779} = 10$
2	Owo Suburbs	$\frac{90 \times 140}{3779} = 3$

Source: Authors Computation (2020)

The criterion for selecting the society from each group is based on performance, that is, the volume of credit granted to borrowers since inception. However, in the suburbs, preference is given to societies with the highest credit in each of the three sub-groups such that one (1) society is chosen in each of the three sub-groups in the suburbs as shown in Table 3.1. Table 3.3 contains the selected societies based on this criterion. The number of respondents per society is based on the percentage of the credit granted to total credit.

Table 3.3: Actual Sample Size per Society

S/N	Name of Selected Society	Number of Members	Credit Granted to Date (N)	% to Total	Number of Respondents (Questionnaires)	Number Retrieved
1	OwoOgo-Oluwa CMS Ltd	65	70,226,500	17.4457	63	61
2	OwoIfedoyin CMS Ltd	52	53,342,200	13.2513	48	47
3	Owo Hope CMS Ltd	50	40,826,056	10.142	37	36
4	OwoOwodunni CMS Ltd	40	36,619,699	9.0971	33	31
5	OwoOwonifari CMS Ltd	40	35,520,400	8.824	32	31
6	OwoIfedayo CMS Ltd	35	32,839,394	8.158	30	29
7	OwoImisiOluwa CMS Ltd	25	26,228,100	6.5156	24	24
8	Owo Grace CMS Ltd	45	21,555,713	5.3549	19	19
9	OwoOwoniyi CMS Ltd	40	20,952,975	5.2051	19	19
10	OwoOluwakemi CMS Ltd	40	19,339,200	4.8043	17	17
11	IpeleOwolayo CMS Ltd	35	16,673,992	4.1422	15	15
12	UsoUsodun CMS Ltd	45	14,907,830	3.7034	13	13
13	EporoOluwanisola CMS Ltd	45	13,511,204	3.3565	12	12
	TOTAL	557	402,543,263	100	362	354

Source: Authors Compilation, (2020)

Structured questionnaire as well as secondary data sources were used to gather information in this study. The questionnaire was broadly grouped into two groups with the first group covering personal data and the second group (five sections) covering the research related questions. Also, the secondary data used in the study is the pooled data on credit granted by each of the selected cooperative societies since its inception. The questionnaire were administered to women and men (to answer questions for their wives who are members of the same or other cooperative societies).Data from secondary source was extracted from the Annual Reports and Accounts of the Owo Cooperative Multipurpose Union Limited as at December 2018 (OCMUL, 2019). The data gathered was analyzed with the use of descriptive statistics and multiple regression.

3.4 Research Model

The study adopted the model used by Kurgat, Kibas and Otuya (2018) in their study of the effect of informal banking Services on the economic welfare of rural women in Kericho (Kenya) with modifications. This study expands the model by incorporating variables such as education level, household size, interest rates and access to medical assistance in addition to credit. Furthermore, the model used in this study examine the effect of informal financial institutions on women welfare from two perspectives: poverty reduction and women health.

Therefore, the two models for the objectives of this study are:

$$REPO = f(CRE, EDU, HZE, INT) \dots\dots\dots 3.1$$

$$WOHE = f(CRE, EDU, HZE, MED) \dots\dots\dots 3.2$$

Stated in econometric form, equations (3.1) and (3.2) are as follows in natural log:

$$\ln REPO_{it} = \alpha + \Omega_1 \ln CRE_{it} + \Omega_2 \ln EDU_{it} + \Omega_3 \ln HZE_{it} + \Omega_4 \ln INT_{it} + \mu_1 \dots\dots\dots (3.3)$$

$$\ln WOHE_{it} = \alpha + \Omega_1 \ln CRE_{it} + \Omega_2 \ln EDU_{it} + \Omega_3 \ln HZE_{it} + \Omega_4 \ln MED_{it} + \mu_1 \dots\dots\dots (3.4)$$

Where

- REPO = Reduction in poverty among women
- WOHE = Improvement in women health
- CRE = Credit granted by cooperative and credit unions
- EDU = Education level
- HZE = Size of respondent household
- INT = Interest rate on credit facilities to women
- MED = Medical assistance by cooperative societies

3.5 Description of Variables

Table 3.4 contains the description of the variables in the models.

S/N	Variables		Response	Value
1	REPO	If poverty has been significantly reduced among women through Informal Financial Market (IFM) credit	YES	1
			NO/UNSURE	0
2	WOHE	If women's health has improved through IFM assistance	YES	1
			NO/UNSURE	0
3	CRE	Credit granted by society since inception	Absolute figures from annual reports	
4	EDU	If least qualification is secondary school	YES	1
			NO	0
5	HZE	Effect of household size on REPO and WOHE	YES	1
			NO	0
6	INT	Effect of interest on loan on REPO and WOHE	YES	1
			NO	0
7	MED	If women visit medical facilities regularly or get assisted medically	YES	1
			NO/UNSURE	0

Source: Authors Compilation (2020)

3.6 A Priori Expectation

The theoretical *a-priori* expected relationship between the dependent and explanatory variables are such that CRE, EDU and MED should have positive and significant effect on REPO and WOHE while HZE and INT should have significant negative effect on REPO and WOHE.

4. RESULTS AND DISCUSSION

Three hundred and sixty-two (362) questionnaires were administered to members of 13 cooperative and credit societies in Owo LGA out of which 354 were returned.

4.1 Demography

Table 4.1 contains the summary of the demographic characteristics of the respondents including gender, age, occupation, marital status and family size.

Table 4.1: Demography Characteristics of Respondents

S/N	DETAILS	TOTAL RESPONDENTS	CLASS	FREQUENCY	PERCENTAGE
1	Gender	354	Male	124	35
			Female	230	65
2	Age	354	21-40	88	24.9
			41-above	266	75.1
3	Education Level	354	Minimum of secondary school	198	56
			Below secondary	156	44
4	Marital Status	354	Married	280	79.1
			Single	74	20.9
5	Occupation	354	Petty traders	181	51.1
			Civil servants	64	18.1
			Agriculture	109	30.8
			Others	-	-

Source: Authors Compilation from Field Survey (2020)

From Table 4.1, it is revealed that 35% of the respondents are males while 65% are females, hence a higher percentage of the respondents are females because they are actually the target population of this study. About 24.9% of the respondents are aged between 21 and 40 while 75.1% fall into age 41 and above. While about 56% of the respondents have a minimum of secondary school education, about 44% of them do not have up to secondary school education. Furthermore, about 79.1% of the respondents are married

while about 20.9% are single. Not less than 51.1% of the respondents are petty traders while about 18.1% and 30.8% are engaged in the civil service and agricultural occupation respectively.

4.2 Analysis of Summarized Responses

Table 4.2: Does the Informal Financial Markets Activities Improve Rural Women's Economic Welfare in OWLGA?

RESPONSE	FREQUENCY	PERCENTAGE
YES	202	57
NO	152	43
TOTAL	354	100

Source: Authors Computation (2020)

About 57% of the respondents agree that the activities of informal financial markets improve rural women economic welfare by reducing poverty whereas about 43 disagree.

Table 4.3: Does Informal Financial Markets Activities Improve Rural Women's Health in OWLGA?

RESPONSE	FREQUENCY	PERCENTAGE
YES	156	44
NO	198	56
TOTAL	354	100

Source: Authors Computation (2020)

While about 44% of the respondents agree that informal financial market helps to improve rural women's health, about 56% of the respondents believe it does not.

Table 4.4: Does Your Family Size Affect the Utilization of Credit from Informal Financial Markets

RESPONSE	FREQUENCY	PERCENTAGE
YES	177	50
NO	177	50
TOTAL	354	100

Source: Authors Computation (2020)

About 50% of the respondents agree that their family size have adverse effect on the utilization of credit from informal financial market while another 50% do not agree.

Table 4.5: Effect of Informal Financial Market on Women's Patronage of Healthcare Facilities

RESPONSE	FREQUENCY	PERCENTAGE
YES	127	36
NO	227	64
TOTAL	354	100

Source: Authors Computation (2020)

There are 3 questions on whether informal financial market increases access to medical facilities.

While about 36% of the respondents agree that informal financial markets increase rural women's access to medical facilities, about 64% disagree.

Table 4.6: Effect of Interest Rate Charged by Informal Financial Institutions (IFI) on the Economic Welfare of Rural Women

RESPONSE	FREQUENCY	PERCENTAGE
YES	205	58
NO	149	42
TOTAL	354	100

Source: Authors Computation (2020)

While about 58% of the respondents agree that the interest rates charged by IFIs encourage borrowing, about 42% disagree.

4.3 Test of Hypothesis on the effect of IFIs on poverty reduction among rural women in OWLGA (Model 3.3)

The first objective of this research is to examine the effect of informal financial institutions on the reduction of poverty among rural women in Owo Local Government Area, Ondo State. It is to establish or reject the hypothesis that informal financial market does not significantly affect the economic welfare of rural women in OWLGA, Ondo State. Table 4.7 contains the results of regression analysis for model 3.3. The regression is based on the responses recorded to research questions in appendix A (1) and the data for credit granted by each of the cooperative societies.

Table 4.7: Results of Regression Analysis for Model 3.3

Dependent Variable REPO				
Variables	Coefficient	Standard Error	t-Statistics	Prob.
EDU	-0.604919	0.537272	-1.125907	0.2893
HZE	0.386207	0.228513	1.690089	0.1253
CRE	-1.60E-07	1.19E-07	-1.353352	0.2090
INT	0.338215	0.146503	2.308591	0.0433
C	56.84344	23.96086	2.372346	0.0417
R-Squared	0.626822			
Durbin Watson Stat	2.225379			
F-Statistics	3.779295			
pro (F-Stat)	0.043265			

Source: Authors Computation (2020)

From Table 4.7, the coefficient of EDU, HZE, CRE and INT are -0.604919, 0.386207, -0.000001.60 and 0.338215 respectively. This implies that a unit change in EDU and CRE will have negative effect of 0.609419 and 0.000001.60 on REPO respectively while a unit change in HZE and INT will have positive effect of 0.386207 and 0.338215 on REPO respectively. Of all the variables, only the positive effect of INT is statistically significant with a probability value less than the 0.05 level of significance (that is 0.043265) while others are not. The coefficient of multiple determination (R^2) is 0.626822 implying that about 63% of changes in REPO is explained by the independent variables while the remaining 37% is explained by other factors outside this study. Hence, rural women in OWLGA who are members of cooperative societies agree that about 63% of the improvement in their economic welfare is explained by the activities of the societies. The Durbin Watson Statistics (2.225379) implies that none of the variables suffer the problem of autocorrelation since it is approximately 2. Finally, the probability of F-Statistics (0.043265) shows that the research model is reliable and statistically significant as it falls below the 0.05 level of significance. The null hypothesis that IFIs have no significant effect on poverty reduction among rural women in Owo LGA cannot be accepted since the effect of interest rate is statistically significant. Hence, it is concluded that IFIs exerts significant effect on rural women economic welfare in OWLGA.

4.4 Test of Hypothesis on the effect of IFIs on improvement in rural women's health in OWLGA (Model 3.4)

The second objective of this research is to examine the effect of informal financial institutions on the health of rural women in Owo Local Government Area, Ondo State. It is to establish or reject the hypothesis that informal financial market does not significantly affect health and welfare of rural women in OWLGA, Ondo State. Table 4.8 contains the results of regression analysis for model 3.4. The regression is based on the responses recorded to research questions in appendix A (1) and the data for credit granted by each of the cooperative societies.

Table 4.8: Results of Regression Analysis for Model 3.4

Dependent Variable WOHE				
Variables	Coefficient	Standard Error	t-Statistics	Prob
MED	0.022855	0.317786	0.071919	0.9444
HZE	-0.338279	0.274644	-1.231701	0.2530
EDU	0.552349	0.606522	0.910683	0.3891
CRE	9.08E-07	1.48E-07	6.133006	0.0003
C	-6.494568	27.39770	-0.237048	0.8186
R-Squared	0.900590			
Durbin Watson Stat	1.964517			
F-Statistics	18.11872			
Prob. (F-Stat)	0.000449			

Source: Authors Computation (2020)

Results from Table 4.8 shows that the coefficients of MED, HZE, EDU and CRE are 0.022855, -0.338279, 0.552349 and 0.000009.08 respectively. This implies that a unit change in MED, EDU and CRE will have positive effect of 0.22855, 0.55239 and 0.00009.08 on WOHE respectively while a unit change in HZE have a negative effect of 0.338279 on WOHE. However, only the positive effect of CRE is statistically significant with a probability value of 0.0003. The coefficient of multiple determination (R^2) is 0.900590 implying that about 90% of changes in WOHE is explained by the independent variables while the remaining 10% is explained by other variables outside the model. Hence, rural women in OWLGA who are members of cooperative societies agree that about 90% of the improvement in their health welfare is explained by the activities of their societies. The Durbin Watson Statistics (1.964517) implies that none of the variables suffer the problem of autocorrelation since it is approximately 2. Finally, the probability of F-Statistics (0.000449) shows that the research model is reliable and statistically significant as it falls below the 0.05 level of significance. The null hypothesis that IFIs have no significant effect on the health of rural women in Owo LGA cannot be accepted since the effect of credit granted by the societies is statistically significant. Hence, it is concluded that IFIs exerts significant effect on rural women health in OWLGA.

4.5 Implication of Findings

Results on the effect of informal financial market on the economic welfare (poverty reduction) and health among rural women in OWLGA shows that though education level and volume of credit granted by IFIs have negative effect on rural women economic welfare, and that household size has positive effect on it, these effects are not significant enough to draw inferences. However, it is important to note the effect of interest rate on rural women economic welfare which is positive and significant. This may imply that the interest rates charged by IFIs encourage rural women in OWLGA to borrow even when the overall effect of the credit borrowed on the economic welfare may not be significantly positive. In essence, the interest rates charged by IFIs appear reasonable and affordable for the rural women borrowers. However, the more interest-induced credit they borrow, the less they seem to benefit from such credits and the more it affects their health improvement. This finding runs contrary to the *a-priori* expectation of a significant negative relationship between interest rate, health and economic welfare.

From the analysis on the effect of IFIs on the health of rural women in OWLGA, it was revealed that while access to medical assistance and educational qualification affect women health positively, their household size negatively affects their health and well-being, these effects are not statistically significant enough to draw inference. However, credits granted by the IFIs have positive and significant effect on the rural women health and well-being in OWLGA. The null hypothesis that the IFIs do not contribute positively to rural women health and welfare in OWLGA cannot be accepted and the alternative hypothesis that the IFIs positively affects women health cannot be rejected. This finding is in agreement with the *a-priori* expectation of a significant positive relationship between informal financial market and the health of rural women in OWLGA. This is in agreement with Dare and Okeya (2017) whose findings indicated that informal financial institutions contribute significantly and positively to economic and health welfare of rural dwellers in Akoko North-West LGA, Ondo State. The implication of this findings is that rural women who are members of cooperative societies in Owo Local Government Area of Ondo State will enjoy improvement in their health well-being by the virtue of being members. In addition, it may mean that much of the expenditures on health from the credit obtained by the rural women are used in buying drugs from outlets different from the recognized hospitals and maternities since the effect of access to medical facilities on women health is not significant.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study was carried out to examine the effect of informal financial market on the welfare of rural women in Owo Local Government Area, Ondo State, Nigeria. The study set out to examine the effect from two perspectives: women economic welfare (reduction in poverty) and women health improvement. The study applied descriptive statistics and regression analysis (Ordinary Least Squares) to analyze response from structured research questionnaire as well as the secondary data obtained on credit collected from the annual reports and accounts of thirteen different cooperatives selected in four major divisions in Owo Local Government Area (namely: Owo main; Uso/Amurin; Emure-Ile/Eporo and Iyere/Ipele). In terms of rural women economic welfare and poverty reduction, the study finds that only interest on credit granted to the rural women has positive and significant effect on their economic welfare. However, the credit itself and other variables such as educational qualification and family size have no significant effect on rural women economic welfare. This contrast with the findings of Mohammed, Abdulahi, Abdulahi and Omoniyi (2015) on the effect of interest rate on ability and willingness of intending borrowers from informal financial markets. On the issue of the effect of informal financial market on women health, the study shows that the credits granted by the selected cooperative societies have positive and significant effect on women health, that is, the credits bring about improvement in their health. In all, on the twin issues of rural economic welfare and health welfare, the null hypotheses of no effect cannot be accepted, and the alternative hypotheses cannot be rejected.

Based on the findings of this study, it is concluded that informal financial institutions positively affect women economic and health welfare in Owo Local Government Area of Ondo State, Nigeria. Specifically, while the interest rates charged by these informal financial institutions have positive effect on their economic welfare, volume of credit granted by the institutions positively affect the health welfare of rural women in the local government.

In the light of the foregoing, this study makes the following recommendations:

- i. That since the credit granted to women by informal financial institutions does not directly impact on rural women economic welfare in spite of the positive relationship the latter has with interest rate, potential borrowers should look beyond attractive interest rate to the actual overall economic benefit of the credit obtained. This entails a comprehensive appraisal of the effect of credit from these institutions before obtaining such credits for economic improvement purposes.
- ii. Since majority of the respondents are either petty traders or persons engaged in agriculture, there should be greater accessibility to fund and close monitoring of how the women utilize the credits they obtain from the institutions so that they can enjoy improved economic and health welfare.
- iii. The results from this study revealed that despite the fact that about 56% of the respondents have at least secondary school education, this neither improves women economic welfare nor enhance quality of their health condition. This calls for a drastic step by the authorities to inculcate entrepreneurship training right from the preliminary stages of education such as elementary schools through secondary and tertiary levels of education.
- iv. The positive but insignificant effect of access to medical facilities on overall women health calls for attention. It could only mean that there exists considerable quality health facility gap in the local government which requires urgent intervention by the government agencies in charge.

REFERENCES

- [1] Abraham, T.W. (2018). The effects of financial access on poor farmers in rural Northern Nigeria, *Financial Innovations*, 4(25). Available at: <http://doi.org/10.1186/340854-018-0112-2>
- Basargekar, P. (2010). Measuring effectiveness of social capital in microfinance: A case study of urban Micro finance programme in India. *International Journal of Social Inquiry*, 3(2), 25-43.
- [2] Beeior, C.T., Ajegi, S.O. & Tyoakosu, J.A. (2016). Informal financial institutions and poverty reduction in Konshisha Local Government Area of Benue State, Nigeria. *Asian Journal of Social Sciences and Management Studies*, 3(1), 82-90.
- [3] Cornish, H., Walls, H., Ndirangu, R., Ogbureke, N., Bah, O.M., Tom-Kargbo, J.F., Dimoh, M. & Ranganathan, M. (2019). Women's economic empowerment and health related decision-making in rural Sierra Leone. *Culture, Health & Sexuality. An International Journal for Research, Intervention and Care*, 1-18.
- [4] Cooper, D.R. & Schindler, P.S. (2014). *Business Research Methods*. 12th Edn. New York, N.Y.: McGraw-Hill.
- [5] Dare, F. D. & Okeya, E. O. (2017). The impact of informal capital market on the economic development and health of rural areas, *IOSR Journal of Humanities and Social Science*, 22(8), 23-33.
- [6] Demirgüç-Kunt, A. & Klapper, L. (2013). Financial inclusion in Africa: A snapshot. African Development Bank. *Financial Inclusion in Africa*. 43–61.
- [7] Dhemba, J. (1999). Informal Sector Development: A Strategy for Alleviating Urban Poverty in Zimbabwe, *Journal of Social Development in Africa* 14(2), 5-19.
- [8] FAO. (2019). *Women's access to rural finance: challenges and opportunities*. Rome, Licence: CC BY-NC-SA 3.0 IGO
- [9] FAO (2016). *Gender and land statistics*, Rome. Available at: <http://www.fao.org/3/a-i5488e.pdf>.
- [10] FAO. (2011). *The state of food and agriculture. Women in agriculture: Closing the Gap for Development*. Rome Available at <http://www.fao.org/docrep/013/i2050e/i2050e.pdf>
- [11] Fletschner, D. & Kenney, L. (2010). *Rural women's access to financial services: credit, savings and insurance*. Background Paper No. 11-07, FAO. Available at <http://www.fao.org/3/a-am312e.pdf>.
- [12] Goldsmith, R.W. (1969). *Financial structure and development*. Yale University Press, New Haven.
- [13] Hansen, A. (2013). Financial inclusion for rural areas and agriculture. In African Development Bank. *Financial Inclusion in Africa*, 84–93
- [14] Kinyondo, A. & Kagaruki, G. (2019). The impact of informal finance groups on socio-economic development of Tanzania. *African Development Review*, 31(1) 99-114
- [15] Kurgart, C. F., Kibas, P. & Otuya, R. (2018). Role of informal financial banking services in economic empowerment of rural women through self-help groups affiliated to joyful women organization in Kericho County, Kenya, *IOSR Journal of Business and Management*, 3(12), 55-66
- [16] Mayoux, L. (2009). Questioning virtuous spirals: Micro-finance and women's empowerment in Africa. *Journal of International Development*, 11: 957-984.
- [17] McKinnon, R. I. (1973). *Money and capital markets in economic development*, Washington, D.C.: The Brookings Institution.
- [18] Mohammed, Y., Abdullahi, H., Abdullahi, Y. Z. & Omonoyi, A. E. (2015). Socio-economic impact of informal financial sector and inclusive growth: empirical evidence from North Central-Nigeria. *Applied Economics and Finance* 2(4), 126-136.

- [19] Nixon, K. R., Lawrence, K., Symon, K. & Moses, M. (2015). Effect of non-bank financial institutions credit on poverty reduction in Kenya: A co-integration analysis (1980-2013). *European Journal of Business and Social Sciences*, 4(7), 126 – 141.
- [20] Owo Cooperative Multipurpose Union Ltd OCMUL (2019). Annual reports and accounts for the year ended 31st December 2018, 57th Annual General Meeting, 19-24.
- [21] Pande L., Tiwari J., Arya C. (2017) Socio-economic Wellbeing and Mental Health Profile of Rural Hill Women of Uttarakhand, India. In: Chand R., Nel E., Pelc S. (eds) *Societies, Social Inequalities and Marginalization. Perspectives on Geographical Marginality*. Springer, Cham.
- [22] Philip, A. A., Samson, A. J. & Ogwu, H. P. (2013). Strategy for reducing unemployment in Nigeria: The role of informal sector. *International Journal of Capacity Building in Education and Management*, 2(1), 32-44.
- [23] Richardson, H. (1987). The Health Plight of Rural Women. *Women Health*. 12(3-4):41-54.
- [24] Sambe, N., Korna, J. M. & Abanyam, N. L. (2013). The effects of informal financial institutions on the socio-economic development of Adikpo town. *International Journal of Business and Social Science*, 4(15), 75-82.
- [25] Saunyama, T. C. (2013). *The contribution of informal sector trade to poverty reduction in Rusape, Zimbabwe*. Project Submitted for the Partial Fulfillment of the Requirements for the Degree, Master of Social Work: Social Development and Policy, University of Pretoria, 1-92 (Unpublished)
- [26] Shaw, E.M. (1973). *Financial deepening in economic development*. Oxford: Oxford University Press
- [27] Taylor, S. & Boubakri, N. (2013). Women and finance: Unlocking Africa's hidden growth reserve. African Development Bank. *Financial Inclusion in Africa*, 75–83.
- [28] UNESCO (United Nations Educational, Scientific and Cultural Organization, 2017). *Gender disparities in literacy rates*. UNESCO eAtlas of Literacy, Available at: <http://tellmaps.com/uis/literacy/tellmap/1082895961>
- [29] United Nations Women Watch (2012). *Overview: Access to productive resources, assets, services and infrastructure*. UN Women. Available at <http://www.un.org/womenwatch/feature/ruralwomen/overview-access.html>
- [30] Von-Pischke, J.D. (1992). *ROSCAs: State-of-the-art financial intermediation* in Adams, D. W. and D.A. Fitchett (eds) (1992). *Informal finance in low-income countries*. San Francisco, CA: Westview Press.
- [31] World Bank. (2018). *Women, business and the law: Key findings*. Washington, DC. Available at <http://pubdocs.worldbank.org/en/102741522965756861/WBL-Key-Findings-Web-FINAL.pdf>.
- [32] World Bank (2017). *Global Findex Database: Financial inclusion data*, World Bank, Washington, DC. <https://globalfindex.worldbank.org>.
- [33] World Bank (2017). *Women in Rural Mexico Benefit from Loan to Expand Financial Services*. <https://www.worldbank.org/en/news/feature/2017/09/05/women-in-rural-mexico-benefit-from-loan-to-expand-financial-services>.
- [34] World Bank (2016). *Women, Business and the Law: Getting to Equal*. Washington, DC. Available at <http://pubdocs.worldbank.org/en/810421519921949813/WomenBusiness-and-the-Law-2016.pdf>.
- [35] World Bank (1989). *Financial systems and development. World Development Report*, New York: Oxford University Press.