

Full Length Research Paper

Estimating farmers patronage level of informal credit in Imo State: Implication for efficient formal and informal financial linkage and rural development

N. C. Ehirim* and N. N. O. Oguoma

Department of Agricultural Economics, Federal University of Technology Owerri, Imo State, Nigeria.

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Low agricultural productivity in Imo State is blamed on poor grassroot financial development. Farmers are caught between marginalization, clumsy, costly and grossly inefficient credit delivery system. An efficient informal credit patronage that engenders informal-formal credit linkage system in Imo State was investigated. Data were collected from 59 arable crop farmers and 15 Informal Financial Agencies (IFAs) in Imo State and analysed using both descriptive statistics and econometric tools such as frequency/means and Ordinary Least Square regression analysis (OLS) respectively. The result showed that 93.2% of the farmers must have accessed credit from town union/age grade while 55.5 and 33.9% were with Esusu and cooperatives respectively. The mean informal credit patronage ratio of 0.712, ranging from 0.64 (town unions) to 0.97 (esusu groups) was recorded. Average loan of N12,756.61 (town unions) to N12,959.79 (esusu) was obtained. Though there were disbursement with more members in the town unions yet the level of credit patronage was highest (97.0%) with esusu group of farmers. Increase in education, farming experience, household size and social capital each has a significant and positive effect on informal credit patronage while interest rate reduces it. It is recommended that the formal credit sectors should cash on this high informal credit patronage to market loan facilities to informal credit agencies at a lower cost for an informal-formal credit linkage.

Key words: Patronage, cooperative, esusu, town union, formal and informal linkage and credit delivery.

INTRODUCTION

Resource poor farmers in Nigeria are faced with low productivity due to lack of access to improved farm inputs as credit facilities to acquire them were beyond the reach of rural farmers. Resource poor farmers were marginalized by most conventional financial houses. Anyanwu (2004) noted that, the poor socio-economic disposition of the farmers do not allow easy facilitation of credits from most conventional banks, hence acquisition of the necessary improved farm implements for large scale farming is difficult. The consequence is the use of any available crude farm implements, which hardly increase productivity. Commercial banks traditionally, lend to medium and large enterprises that they judged to

be creditworthy. It was difficult to secure credit facilities from most formal financial institutions due to high cost of credit (high transaction cost), lack of collateral security, high level illiteracy, poor loan quality and wide spread and default, and financial management as deficiencies (Oni, 1972; Ijose and Abaelu, 1973; Oshunotgun, 1973). They avoided doing business with the poor and their micro enterprises because of the associated cost and risks (Anyanwu, 2004) and this led to a review of rural credit scheme in 1975.

The scheme was a move by the federal government to ensure a geographical dispersal of commercial banks branches in the rural areas to facilitate credit needs of the

*Corresponding author. E-mail: ehinadykus@yahoo.com.

resource poor farmers (Anwanwu et. al., 1997). The scheme, which actually started in 1977 and ended its third phase in 1989, recorded a total of 756 out of the intended 766 branches across the nation. The reformation was followed by a liberalization policy of Structural Adjustment Programme (SAP), in 1986. The reforms, rather than improving the grass root credit transactions, expand technology and increase food production, exacerbated the poverty (Olomola, 2006). The loanable funds from government sources dropped considerably and the cost of borrowing escalated substantially, leaving the resource poor farmer with no other choice than the subsistence farming with crude farm implements. Despite the expanded branches across Nigeria and impressive performance recorded by the banks, rural farmers especially the low-income earners were still poor, informal and formal financial linkage expected to facilitate rural development dropped as farmers patronized mostly the traditional financial agencies.

The unwillingness or inability of the formal financial institutions to perform its role at the grass root and unsustainable support from the government credit schemes, have led to the growth of private sector financial services at the grass root in Nigeria. The group provides savings and credit services to their members.

The informal finance arrangements operate under different names across the country: it is called 'esusu' among the Yorubas of Western Nigeria, 'etoto' by the Igbos in the East and 'adashi' in the North by the Hausas (CBN, 2000). The key features of these informal schemes are savings and credit components to the rural populace, informality in operations (though at higher interest rates) allows a large proportion of farmers to participate in the services and they work together for the mutual benefits of their members. Prior to the emergence of formal microfinance (FMF) institutions, it is important to note that, informal financial agencies (IFAs) activities had already flourished all over the country. They however, offer little capital for agricultural development.

Otu and Anyanwu (2003) and CBN (2005), noted that, a large number of rural dwellers rely on the informal sector for their financial services on the account of its relatively low information and transaction cost, easy access to low income groups, timeliness of operation, simplicity and flexibility in financial procedures. The non-traditional, formalized microfinance institutions (NMEIs) are operating side by side with the informal services. They include the NGOs and foreign agencies such as World Bank assistance to the farmers. The private sector seemed to be bracing up to the challenges of grass-root credit needs to resource poor farmers (Olomola, 2006). Past literatures indicated that, these lenders are capable of eliminating the problems of high transaction and information cost, as well as management deficiencies that surrounds extension of credit to small-scale farmers.

Although it was alleged that the fear of no legal and fiscal regulatory and prudential frame work of the

monetary and financial authority will increase the risk of engaging in a reasonable financial net work with the agencies, the existence of social capital acquired through social integrations between the lenders and the borrowers can enhance trust and confidence in microfinance. The rural environment in Nigeria provides such social mobility for informal financial transactions to thrive on.

The need for rural development through self help initiative and productivity requires a linkage. It becomes very important to know the level of IFAs credit services to farmers and how it can be linked to micro financial institutions in the area for a sustainable rural development in Imo State. The relative size of the participants and the factors that accounted for the high patronage of informal credit in Nigeria and Imo State in particular has not been determined to facilitate a financial linkage in the state. This study therefore wants to estimate the volume of credit transactions by farmers with these informal financial institutions and the factors that accounted for farmers' patronage. The study will help to enhance the volume of credit given to farmers if the factors that enhance patronage of informal credit are incorporated into their management strategies while collaborating with the informal credit agencies.

METHODOLOGY

The study was carried out in Imo State. The state is located in the rain forest zone of Nigeria with rainfall and temperature distribution of between 1500 to 2500 mm and 21 to 33°C, respectively annually. There is bimodal climate distribution supports double arable crop production per cropping season. Arable crop production is performed by many small-scale farmers widely distributed in the rural area (Imo ADP, 2004).

Imo state is divided into three zones for administrative purposes and they are Owerri, Orlu and Okigwe agricultural zones (ADP, 2004) and the three zones were used for this study. The study drew its sample from both small scale arable crop farmers and IFAs drawn from six Local Government areas with two from each zones. The areas are Aboh-Mbaise and Ngor-Okpala in Owerri zone, Ideato North and Oguta in Orlu zone and Onu-Imo and Isiala Mbano in Okigwe zone were purposefully selected for the study because of their involvement in arable crop production in the state.

Two different research instruments were designed for the study; one is for the farmers and it elicited information on their socio-economic features, volume of loan obtained and repaid, membership association (social capital) and amount of capital needed for crop production. The other instrument elicited information concerning the number of members each agency has, the total amount disbursed, the repayment capacities, and the type of securities demanded etc. Fifteen farmers who patronized one or more of the IFAs and 3 IFAs were randomly selected from each Local Government Area. About 90 and 18 questionnaires were distributed to farmers and IFAs, respectively but only 59 and 15 questionnaires were found useful for data analysis.

Data analysis was done using simple ratios and or descriptive statistics such as mean and relative frequencies as well as econometric tool such as ordinary least square regression estimate (OLS). The socio-economics characteristics of the farmers such as age, educational levels, farming experience, level of social capital volume of loan obtained, volume of loan disbursed by each agency

etc., were described using this method. The patronage level was estimated using a modified simple patronage ratio or index approach as developed by Okereke (1978), and adopted by Ben-chendo (2005). The index is expressed as:

$$P_{\text{patronage index}} = \frac{X}{Y} \quad (1)$$

Where, X = Aggregate volume of loan an ith farmer obtains from all the agencies the farmers belongs, and Y = Aggregate volume of the loan available to the farmer from all the credit agencies which the farmer belongs or at least patronized in the area

The patronage estimate obtained and the socio-economic data of the farmers are fitted into four functional forms to isolate the determinants of farmer's patronage of informal credit in Imo State. The model is implicitly expressed as:

$$P_{P1} = f(X_1, X_2, X_3, X_4, X_5, X_7, X_8, e) \dots \quad (2)$$

Where, P_{P1} = Patronage ratio, X_1 = Farmers age level measure in years, X_2 = Number of years spent in acquiring formal education measured in years. X_3 = Farming experience measured in year, X_4 = House hold size (number of people under one catering arrangement), X_5 = Interest on borrowed capital measured in naira, X_7 = Social capital which is number of association each farmer belongs, (Olomola, 2006), e = Stochastic (random error) variable.

RESULTS AND DISCUSSION

The socio-economic features of the farmers shown in Table 1 shows that, farmers mean age is 39 years. More than 28% of the farmers are between 31 and 40 years of age while about less than 2% is relatively old of above 60 years. The age distribution showed that, majority of the farmers is young and active and can participate in informal financial services, accept new innovations and improved farming techniques (Ejiogu et. al., 2002; Anebunwa, 2008). It therefore implies that, the respondents are capable of taking any risk associated with such improved packages and financial services. The result also showed that, over 52% of the farmers are females and over 42% of the total respondents have acquired secondary education. Less than 6% had tertiary education and about 13.6%. It implies that, majority of the farmers have acquired at least 12 years of formal education and so can withstand the shocks of informal financial risk. The result further showed that, 32.2% of the farmers had about 1 to 10 years of farming experience while about 39% of them had about 11 to 20 years of farming experience.

The mean household size of the distribution is 7 persons per household. About 44.5% of the respondents have about 4 to 7 persons per house hold while only 25.4% of them have above 8 persons per house hold but less than 11 persons per household. The result also showed that, 15.3% of the total respondents had 12 to 15 persons per household. Majority of the farmers (67.8) have farming as their major occupation. 81.4% of them plant cassava while about 59.3% of them plant maize and 44.1% of them planted beans.

The distribution of respondents according to their level of involvement in informal financial services showed that, majority of the farmers (93.2%) belongs to age grade or town union category offers a lot of social mobility and social capital to rural farmers than other agencies because the farmers are reorganized even from their local setting or by the village heads. The ability of these farmers is easily picked due to close interactions they share among themselves. Another reason for more involvement in age grade than other informal agencies by the rural farmers could be due to small volume of interest and collaterals required before the loan is disbursed. The group does not require much of these items as the farmers can even be traced down to their origins before such money is released to them. In case of default, it is easy to recover money from farmers by the agency as the Union can easily confiscate or seize the property of the farmers. This action guided by customary law and the age grade or town union applies it in case of self help actions on rural development.

Table 2 showed the average volume of loan disbursed by the IFAs. Apart from having the highest number of members than other agencies, the town union has the largest mean of disbursement and the highest total of disburseable credit to farmers. The result revealed a mean volume of loan of N26, 175.93 was disbursed by all the agencies in the state. On individual disbursement, the town unions and age grades disbursed a mean amount of N26,709 ranging from 9,000 to N60,000 while esusu disbursed a mean value of N25,727 ranging from 9,000 to N60,000 and cooperative society disbursed a mean amount of N25,450. This value ranges from a minimum amount of 9,000 to N59,000. The total amount of loan disbursed by the cooperative thrift is N509,000 while the Esusu disbursed a total of N849,000. The town unions disbursed a total of N1,469,000.00. This implies that, the town union/age grade disbursed about 52% of the total credit available to farmers for arable crop production through IFAs. The town union is capable of offering this volume of credit services to farmers due to the available social capital it enjoys with its members.

The result further revealed a patronage index of 0.712. This implies that, an aggregate patronage of 71.2% is recorded for informal credit in the state. It implies that, more than 71% of the farmers are interested in informal credit acquisition. The high rate of demand for informal credit despite its high interest rate could be relevant to micro finance if it is properly coordinated. The formal and informal financial linkage in the state should work towards incorporating this group of farmers for convenient and efficient grass root banking to facilitate rural development in the state. The volume of loan disbursed will increase while the number of farmers increased with the flexible credit services offered by the informal financial services. This is in addition to the informal qualities of loan administration adopted by the town unions that can enhance the repayment performance of the farmers in the

Table 1. Socio-economic characteristics of the farmers in Imo State, Nigeria.

Variable	Frequency	Relative (% age) frequency
Age (years)		
20 – 30	12	20.3
31 – 40	17	28.8
41 – 50	24	14.7
51 – 60	5	8.6
61 – 70	1	1.7
Total	59	100
Mean = 39 years		
Educational level		
Non-formal education	8	13.6
Adult education	2	3.5
Primary education	21	35.6
Secondary education	25	42.2
Tertiary education	3	5.2
Total	59	100.0
Gender (Sex)		
Male	28	47.5
Female	31	52.5
Total	59	100.0
Farming experiences (years)		
1 – 10	19	32.2
11 – 20	23	39.0
21 – 30	11	18.6
31 – 40	6	10.2
total	59	100.0
Mean = 16 Years		
House hold size		
1 – 3	9	15.3
4 – 7	26	44.5
8 – 11	15	25.4
12 – 15	9	15.3
Total	59	100.0
Mean = 7		
Occupation		
Farming as a major occupation	40	67.8
Farming as a major occupation	19	32.2
Total	59	100
Types of crop planted		
Cassava	48	81.4
Maize	35	59.3
Beans	26	44.1
Total	109 ⁺	
Informal financial groups		
Esusu	33	55.9
Cooperative	20	33.9

Table 1. Contd.

Age grade/town union/club	55	93.2
Total	108 ⁺	

Source: field survey 2007. (*) = multiple responses.

Table 2. Level of membership and volume of informal credit disbursement in imo state.

	Informal agency number of farmers	total credit	mean credit	min. credit	max. credit	std. deviation
Esusu	33 (55.5)	849,000	25,727	9000	60,000	12,959.79
Cooperative	20 (33.9)	509,000	25,450	9000	50,000	12,959.79
Town union	44 (93.2)	1,469,000	25,709	9000	60,000	12,756.61
Total	108 ⁺	2,827,000	26,175.93			

Source: field survey 2007, (*) multiple response

Table 3. Patronage index of informal credit agencies in Imo State, Nigeria.

Informal agency	Total credit	Total cash	Patronage ratio	Patronage index
Esusu	849,000	875257.73	0.97	
Cooperative	509,000	783076.92	0.65	0.712
Town union	1,469,000	2,309,748.43	0.636	
Total	2,827,00	3,968,083.08		

Source: field survey 2007.

state. Table 3 shows the rate at which farmers patronize informal credit for initial capital. The patronage ratio is the ratio of total credit disbursed to the farmers and the total cash available for loan in each informal credit agency in the state.

The result showed a mean patronage level of 71.2% from the farmers in all the agencies. This result is consistent with that of Ojo (1991) findings that between 70 to 90%, credit needs of farmers are obtained from informal agencies and this may be a pointer to slow status of production system as these agencies hardly disburse enough and quality credit to meet the farmers' capital need in the rural areas. However, the patronage ratio of the farmers in the state ranges from 63.6% as in the case of town unions to 97% as it is with esusu. Despite the high membership of the town union, Esusu group recorded the highest patronage index. This is because 97% of their total cash for disbursement are released to farmers as farmers form the bulk of there membership. As for the town unions, only 63.6% of their credit is made available to the farmer. The remaining 36.4% of their total cash are kept for other community development projects. This implies that, there is a credit rationing behaviour with most town unions in the area so that, an integrated rural development can be achieved. The cooperative thrift only disbursed about 65% of their total credit for farmers while 35% of their total cash were used for the growth of the cooperative in the area.

Table 4 showed the determinants of farmers patronage of informal credit. The patronage level of individual farmers and their socio-economic factors as well as social capital and the amount contributed by each farmer were fitted into four functional forms. The result showed that, the linear model is the best fit. It has the highest coefficient of multiple determinations, the highest number of significant explanatory variables and highest F-statistics. The F-statistic is significant at 1% and the coefficient of multiple determinations is 0.527. This implies that, the null hypothesis which includes explanatory variables such as social capitals, socio-economic factors and the amount contributed by each farmer as well as the interest charged have significant effect on farmers rate of patronizing the informal credit services and also about 52.7% explanation to the variation in the rate at which informal credit services is patronized, traditional farmers can be explained by these included variables.

Increasing educational level, farming experience, household size and social capital of the farmers by a unit will give a direct increase in the rate of patronage by a more than proportionate unit of 0.40, 4.9 0.32 and 0.615%, respectively. Again reducing the interest rate charges on a unit of credit by the agency will lead to a more than proportionate increase in rate of patronage of informal credit by 2.1%. Amount contributed by farmers to the agency has an insignificant and inverse effect on

Table 4. Determinants of farmers patronage of informal financial services in Imo State, Nigeria.

Variable	Constant C	Age (X ₁)	Edulevel (X ₂)	FarmExp. (X ₃)	Household size (X ₄)	Interest rate (X ₅)	Social capital (X ₆)	Amount contributed (X ₇)	R ²	Adj. R ²	F-stat.
Linear model coeff.	15.689	0.11	0.405	4.901	0.321	-2.12	0.615	-1.527			
Std. error	4.269***	0.133	0.105***	1.115***	0.133***	0.998***	0.189***	2.421	0.527	0.423	3.092
/t-value/	3.675	0.838	3.82	4.396	2.414	2.122	3.25	0.631			
Semi-log model coeff.	34.598	-5.523	5.251	0.929	2.391	-2.102	2.124	1.657			
Std. error	21.956	4.797	1.755**	0.513*	1.178**	1.072*	2.480	2.556	0.504	0.407	2.086
/t-value/	1.579	1.151	2.997	1.811	2.030	1.960	0.856	0.648			
Cob-douglas coeff.	3.793	-0.369	0.210	5.06×10 ⁻⁶	8.04×10 ⁻²	6.78×10 ⁻²	0.170	-0.154			
Std. error	1.325**	0.289	0.106*	0.0109***	0.0131***	0.150	0.164	0.155	0.446	0.378	1.522
/t-value/	2.863	1.276	1.996	4.64	6.137	0.453	1.036	0.997			
Exponential coeff.	2.914	7.12×10 ⁻²	1.17×10 ⁻²	3.48×10 ⁻²	2.04×10 ⁻²	-1.1710 ⁻²	5.69×10 ⁻²	-9.74×10 ⁻²			
Std. error	0.269***	0.008	0.007*	0.097	0.0071**	0.0569	0.027**	0.153	0.423	0.302	1.388
/t-value/	10.830	0.849	1.763	0.481	2.873	0.206	2.10	0.638			

Source: Result analysis 2007; *, **, ***significant at 10, 5 and 1% respectively; coeff., coefficient.

rate of patronage. This means that, less emphasis is placed on level of contribution by the farmers but on social capital acquisition for credit disbursement. The formal credit agencies or the micro finance houses should avail themselves of this important feature in credit transactions with the traditional society as this can be a major linking factor in formal and informal credit transaction and rural development in the state.

CONCLUSION AND POLICY RECOMMENDATION

The level of credit marginalization that characterized the grass root financial services in the rural areas of Nigeria makes formal and informal financial linkage imperative. Showcasing a harsh conventional banking system on the

traditional society and unrecorded credit transactions that characterized seemingly effective formal financial services for grass root rural development cannot solve the problems of declining food production in Nigeria. There is need to show a direct credit linkage between the informal and formal credit agencies in Nigeria. Data were obtained from both the IFAs and arable crop farmers and analyzed using both descriptive and econometric tools.

It was discovered in this study that, the Town unions has both the largest membership and the highest credit transaction but recorded the lowest patronage. The study further to showed that, increasing the educational level, farming experience and social capital, which include social mobility and social organization membership, increases rural farmers credit patronage. Again incorporating and synergizing the activities of

informal-formal credit systems can facilitate quick and increasing deliveries to rural farmers in Nigeria. The study therefore suggests that, micro finance institutions should cash on these advantages to increase farmer's credit patronage in the rural areas.

The study recommended that, farmers' level of education be increased through extension education to enhance grass root financial performance. Secondly, the micro finance services should work with the IFAs to serve the interest of the farmers or they should prefer to work with farmers as a group rather than individuals if the grass root financial status is to be raised in the area.

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