ANALYSIS OF CREDIT RISK LEVELS AND MANAGEMENT AMONG POULTRY FARMERS IN IMO STATE, NIGERIA

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Abstract

The study seeks to analyse credit risks levels and management among poultry farmers in Imo State, Nigeria. The study used structured questionnaire to collect data from randomly selected 70 poultry farmers and 12 banks which was purposively selected in the state. Analysis of data was carried out using descriptive statistics such as mean, frequency distribution and percentages. The result of the study revealed that majority of the poultry farmers (75.7%) were males, and were in there active years of age with mean age of 4338 years. 82.9% were married, with a mean years of 8.4 spent in secondary education, and on the average had 11.7 years experience in farming. The mean household size was 6 persons per household with a mean farm income of N303,350 while 65.7% were members of a social organization. Credit default and delayed repayment were some of the major credit risks levels identified in the study area while Majority (86.6% and 82.9) of poultry farmers adopts production and marketing strategies respectively as some of the credit risk management techniques. The study recommends amongst others that proper education of the farmers is necessary for the farmers to learn to use credit for productivity and development as well as the best practices on credit risks management techniques in order to enhance timely repayment and create bright conditions for future credit advances.

Keywords: credit risks, management, poultry, farmers, Imo State, Nigeria

INTRODUCTION

The poultry industry plays important roles in the development of Nigerian economy constituting a major source of livelihood, income and helps in bridging the dietary protein deficiency prevailing in the country (Abimbola *et al.* 2014). Nigeria is ranked high in poultry production with an estimated production above 140 million birds (Akpabio *et al.*, 2007). Reports by Food and Agriculture Organization indicate that poultry meat represents about 33% of the total global meat production (FAO, 2009). This notwithstanding, the poultry production business environment is characterized by risk in particular is credit risks; with many poultry farmers being less equipped and not having the perfect knowledge to mitigate the risks associated with farm credit.

The incidence of credit risks in agriculture is important to policy makers at both national and international levels. Agricultural farming decisions particularly in the area of poultry farming are taken in an environment of risk which affects the production and marketing decisions of the farmer Ayinde *et al*. (2008). Farmers make decision particularly in the area of credit need of their business enterprise every now and then that affect farming operations as a result, the use and adequate management of credit becomes vital for the survival and growth of any agricultural enterprise. In poultry sub-sector, the issue of credit risks is of greater concern because of the higher levels of perceived risk resulting from some of the characteristics or nature of the business conditions that the poultry farmers find themselves in.

Credit risks is a serious threat to the performance of farmers as well as lending institutions; its management to an acceptable level has become a major concern for farmers particularly poultry farmers and financial institutions inclusive Abor (2005). In Nigeria, poultry farming is considered a high risk investment by most financial institutions due to high rate of poultry mortality, low productivity in many cases and low levels of loan repayments. This situation has led to disbelief on the part of lending institutions when considering credit requests for poultry production. At present a large proportion of the operators in small scale poultry industry in South Western Nigeria are in poverty due to poor financial standing and high business risk which reduces the level of accruable profit (Oludimu, Awojobi and Akanni, 2004; Effiong *et. al*, 2014). Banks face problems such as the probability of non-repayment of received loans at the due date or non-repayment that are called “credit risk” (Nazari & Alidadi 2013). Empirical studies have illustrated that credit risk is a widely studied topic in

bank lending decisions and profitability (Angelini, di Tollo and Roli, 2008). Efforts are being made by players in the financial sector to reduce the risk exposure of banks in lending to borrowers particularly the agricultural sector which is commonly prone to credit risks.

Credit risk is most simply defined as the potential that a bank borrower or counterparty (farmer) will fail to meet its obligations in accordance with agreed terms. It is the possibility that the actual return on a loan portfolio will deviate from the expected return (Conford, 2000). Credit risk management on the other hand is a structured approach to managing uncertainties through risk assessment, development of strategies to manage it and mitigation of risk using managerial resources.

However, the recent emphasis on credit risks and management cannot be fully appreciated without an understanding of the analysis of credit risks levels and management among poultry farmers in Imo State where most of the rural farmers are being provided with funds by banks to boast poultry production. This paper therefore attempt to evaluate credit risk levels and management among poultry farmers in Imo state, Nigeria. It specifically analyse the; (i) socio-economic characteristics of poultry farmers credit beneficiaries in the study area, (ii) risk levels associated with credit to poultry farmers in the study area and (iii) management techniques employed by banks and poultry farmers to avoid or minimize the adverse effect of credit risk in the area.

Materials and Methods

The study was carried out in Imo State. The state is located in the rain forest zone of South-Eastern Nigeria. It is bounded in the East, West, North and South by Abia State, Anambra State, Ebonyi State and Rivers State respectively. It has three distinct agricultural zones namely, Owerri, Orlu and Okigwe zones. According to the 2006 population census, the population of the state is 3,934,899 persons (NPC, 2006). The rainfall distribution pattern and the tropical equatorial climate of the area give rise to two distinct seasons namely; rainy seasons from March to September and dry seasons from October to February. The vegetation of the area is characterized by thick forest. The climate and rainfall distribution pattern makes the area suitable for agricultural production. The population is predominantly farmers who engage themselves in the rearing of livestock's and cultivation of crops. Apart from farming, some people also engage in other works such as civil service, teaching, trading and artisan.

A multi-stage sampling technique was used to select the sample for the study. Imo state was stratified into the existing three agricultural zones. In stage one, three LGAs were purposively

selected from each agricultural zone, making a total of Nine LGAs. In stage two, the list of banks in the 9 LGAs were collected from the Owerri office of Central Bank of Nigeria (CBN). From this list 12 bank branches were purposively selected based on having highest number of farmers' that benefited from their credit schemes and in stage three, the list of farmers that obtained credit from each of the banks was collected from the credit officers in the various bank branches. Proportionate random sampling technique was used to select 70 farmer loan beneficiaries, which is given as;

$$nh = \frac{Nh\ (n)}{N}$$

Where: nh = Sample size selected from each bank

Nh = Total Number of farmer loan beneficiaries in each bank.

n = Sample size of farmer loan beneficiaries selected

N = Total number of farmer loan beneficiaries in the 12 banks.

Data gathered for the study were analysed using descriptive statistics such as mean, frequency distribution and percentages.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of Poultry Farmers Credit Beneficiaries in Imo State

The distribution of poultry farmers' credit beneficiaries according to their socio-economic characteristics is presented in table 1.0

Table 1.0: Distribution of the Socio-economic Characteristics of Poultry farmers credit beneficiaries in Imo State.

Socio-economic characteristics	Frequency	Percentage	Mean
Gender			
Male	53	75.7	
Female	17	24.3	
Age			
28-35	9	12.9	
36-43	20	28.6	
44-51	32	45.7	
52-59	8	11.4	
60-67	1	1.4	44.3

Level of Education			
1-6	18	25.7	
7-12	46	65.7	
13-18	6	8.6	8.4
Marital Status			
Single	12	17.1	
Married	58	82.9	
Household Size			
1-4	20	28.6	
5-8	42	60.0	
9-12	7	10.0	
13-17	1	1.4	5.9
Farming Experience			
5-10	27	38.6	
11-15	34	48.6	
16-20	7	10.0	
21-25	2	2.8	11.7
Farm income			
101-200	8	11.4	
201-300	20	28.6	
301-400	39	55.7	
401-500	3	4.3	303.35
Social Organization membership			
Member	46	65.7	
Non-member	24	34.3	

Field Survey Data, 2015

Results of the analysis indicated that majority (75.7%) of the farmers were male while 24.3% of them were females. This implies that the male poultry farmers have more access to banks

credit than their female counterpart. About majority (45.7%) of the farmer credit beneficiaries falls within the age bracket of 44 -51years while 28.6% of them are within the age group of 36 – 43 with an average mean age of 44.3years. This implies that these farmers are within their active working age bracket and are therefore expected to use the credit for farm production. Again, majority (65.7%) of the farmers spend 7 – 12 years in school while 25.7% spent 1-6years in school. The mean level of education was found to be 8.4years implying that farmers credit beneficiaries had attended secondary school that could help them in harnessing and handling resources particularly credit facilities to enhance their production and reduce credit risks in the form of default or delayed repayment. More so, majority (48.6%) percent of the poultry farmers had within 11 to 15 years of farming experience while the mean years of was found to be 11.7 years. This implies that the poultry farmers in the study area have acquired enough farming experience that can earn them opportunity in accessing bank's credit and utilizing these credit facilities effectively for its intended purpose. Majority (60%) of the poultry farmers have household sizes within 5 - 8 persons while 28.6% of the farmers have household sizes of 1-4 persons and only 1.4% had household sizes of 13 – 17 with a mean household size of 6 persons. This implies that the poultry farmers have 6 persons in their household which serves as a source of cheap labour for the poultry farms in terms of cost savings. This cost saved in turn enhances the farmer's performance in loan repayment. This result corresponds with the findings of Iheke and Igbolina, (2016). In addition, the table shows that majority (55.7%) of the farmers earn between N301,000 and N400,000 as income per year while 28.6% of them earn between N201,000 and N300,000 as income. The average income earned by the farmers in the study area was found to be N303,350. Thus implying that the farmers income is relatively small as expected of small scale farmers and this could affect the amount being accessed by the farmer from the lending institution as well as their repayment capacity. The result also shows that majority (65.7%) of the poultry farmers are members of a social organization while are non-members of a social organization implying social organization membership can gain farmers easy access to banks credit and can serve as security for advancing credit to farmers to guide against credit risks. This is in line with the findings of Ejike, (2012).

Credit Risk Levels Associated with Poultry Farmers Credit Beneficiaries in Imo State

The credit risks levels types that were identified in the study area are presented in table 2.0.

Table 2.0: Distribution credit risks types common with poultry farmers in Imo State

Risks Identified	Frequency*	Percentage
Default	9	75.0
Delayed Repayment	10	83.3
Credit Mismanagement	8	66.7
Poor returns to investment	6	50
Loan Diversion	7	58.3
Fraud	4	33.3
Project Failure	3	25.0

*Multiple responses were recorded

Field survey data, 2015

The table shows that 83.3% of the banks reported that the risk od delayed repayment is the major type of risk associated with bank credit to poultry farmers. Also, 75%, 66.7%, 58.3%, 50% and 33.3% of the banks reported that default; loan mismanagement, loan diversion and poor returns to investment respectively are other major risks common with credit to poultry farmers in the area. Other types of risks identified by the lending institutions include fraud and project failure as reported by 33.3% and 25% of the banks respectively.

These findings imply that credit lending to poultry farmers is not without risk which in many cases are above 50 percent as recorded by lending institutions.

Management Techniques Employed by Banks to Manage Credit Risk in Imo State

The management techniques adopted by banks to guide against credit risks by poultry farmers in the study area were investigated.

Table 3.0: Management Techniques Employed to guide against Credit Risks among Poultry Farmers

Management techniques Identified	Frequency*	Percentage
Monitoring/Supervision	11	91.7
Demand for appropriate collateral	9	75
Agricultural insurance	7	58.3

Timeliness in credit disbursement	8	66.7
Demand for a guarantor	6	50
Investment in information on loan applicant	3	25
Enforcement of loan repayment obligation	6	50
Investment in market research	4	33.3
Proper/adequate evaluation of project	8	66.7
Proper credit appraisal	7	58.3

*Multiple responses were recorded

Field survey data, 2015

The table shows that monitoring/supervision which is closely followed by demand for appropriate collateral are the major management techniques employed by lending institutions to guide against credit risks among poultry farmers as reported by 91.7% and 75% of the selected banks respectively. This could be because the lending institutions place a lot emphasis on collateral or security in giving credit facilities to farmers as well as to ensure that these credit facilities are used as planned to minimise risks of default and thereby enhancing the repayment of agricultural loans. Also, 66.7%, 66.7%, 58.3% and 53.3% of the banks reported that timeliness in credit disbursement, evaluation of project, credit appraisal and agricultural insurance respectively are other strategies employed in dealing with credit risks by poultry farmers in the study area. The table further showed that 50%, 50%, 33.3% and 25% of the banks reported that demand for a guarantor, enforcement of loan repayment obligation, investment in market research and investment in information on loan applicant respectively are the other management techniques used by banks in the study area.

The implication of this finding is that credit risks in the poultry sub-sector can be managed in different ways depending on the type or level of risk.

Management Techniques Employed by Poultry Farmers in Imo State

The management techniques adopted by poultry farmers to guide against credit risks by poultry farmers in the study area were investigated.

Table 4.0: Management Techniques Employed by Poultry farmers to guide against Credit Risks

Management techniques Identified	Frequency*	Percentage
Production Strategies	62	88.6
Diversification of Enterprise	42	60
Marketing strategies	58	82.9
Risk coping	18	25.7
Agricultural Insurance	2	2.9
Financial Strategies	14	20

*Multiple responses were recorded

Field survey data, 2015.

The table indicates that production and marketing strategies which were 88.6% and 82.9% respectively are the major techniques adopted by the poultry farmers in the study area to manage credit risks. This implies that the farmers tend to increase their production capacity and expand their distribution channels from areas of surplus to areas of deficit which encourage increase prices for their produce in other to make up for production losses and enhance income. These in turn enhances their chances of repayment and reduces the risk of default. Also, 60% of the poultry farmers adopted enterprise diversification as a strategy to prevent credit risks in terms of default and delayed repayment. This is an indication that farmers tend not to depend solely on poultry farming but tend to engage in other related enterprise to increases their chances of income generation in the case of eventuality or enterprise failure and to enable them have something to fall back and avoid drawback in the servicing of their credit facility. In addition, 2.9% of the poultry farmers adopted agricultural Insurance as a management technique in credit risks management. This suggests that majority of the farmers has poor knowledge on agricultural insurance which could be responsible for the poor performance of the sector resulting in high credit default rate recorded in the agricultural sector thereby making it difficult for lending institutions to extend credit facilities to farmers as they perceived the sector as highly risky which in turn makes it difficult for farmers to access credit facilities from financial institution.

Conclusion and Recommendation

The findings of the paper have shown that credit risks levels in the poultry sub-sector in Imo is not without risk as there is high rate of default and delayed repayment as recorded in the study to the tune of 75% and 83.3% respectively. It was also observed that poultry farmers adopt several measures in the management of risk with agricultural insurance recording the least measure of 2.9% in the study area. This therefore calls for adequate educating of the farmers as well as training, constant vigilance and effective credit processing, evaluation and disbursement and other internal controls on the part of the banks which can greatly benefit both the farmers and lending institutions. Adoption of these strategies in credit risks and management is likely to reduce both risks involved in agricultural lending particularly poultry farming in Nigeria and Imo state in particular. The study recommends that proper education of the farmers is necessary for the farmers to learn to use credit for productivity and development as well as the best practices on credit risks management techniques in order to enhance timely repayment and create bright conditions for future credit advances and, effective loan supervision and monitoring as well as the demand for appropriate security/guarantor before granting credit facility to farmers be undertaken to reduce credit risks inherent among poultry farmers in the study area.

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