Analysis of Default Risk of Agricultural Loan by Some Selected Commercial Banks in Osogbo, Osun State, Nigeria

Adedapo K.D.

Department of Agricultural Economics and Extension Ladeoke Akintola University of Technology, Ogbomoso, Oyo State.

Abstract

This study examines the default risk involved in agricultural loan and determines the effect it has on the level of loan given to farmers in Osogbo agricultural zone of Osun State. Relevant data were collected from selected commercial banks in the study area through the use of questionnaire. The data collected were analyzed using descriptive statistics, multiple regression as well as risk analytical techniques (default risk and default rate). It was discovered that both the default rate and default risk were high with an average of more than 50% and 1.3 respectively. This has led to the unwillingness of the banks to grant loan for agricultural purposes. It was therefore recommended that banks should give revolving loan to farmers cooperative societies to reduce default rate and loan diversions since members can serve as watch dog to each

other. Banks should also prevent unnecessary delay in loan disbursement to allow for timely use of the loan.

Banks should also explore the Agricultural credit guarantee scheme (ACGS) to offset part of the risk in case of default.

Keywords: Loan Default, Risk, Default rate

Introduction

No nation can break out of the vicious cycle of underdevelopment without giving agriculture a pride of place (Obasanjo, 2002). To a large extent Nigerian economy is agrarian (Lawal 1977). Agriculture plays an important role in the economy of Nigeria. Apart from providing the necessary food, it employs a great percentage of the inhabitants. Although government and service industries are important sources of employment and income, these are only secondary to agriculture (Obasanjo, 2002).

The bulk of agricultural produce in Nigeria is produced by small holder farmers. A characteristic feature of these small holder farmers is the relatively small scale of operations, little or no capital is employed, methods are crude and primitive and often laborious and productivity per worker is low.

Agricultural credit to these group of farmers can help to boost the productivity of the agricultural system both in the subsistence level and commercial agriculture. Credit is required to purchase improved technology, which is vital for increased output as well as overall expansion of the farm. Also, consumption credit to farmers before and after the planting seasons can provide the necessary impetus to increasing labour productivity on farms and hence increase agricultural

Adedapo 25

productivity. In essence,-the potential demand for credit is high especially in small farmers community mainly because the farm is a socio-economic entity. The credit is required for agricultural production and for other purpose which though not directly related to farm production, indirectly influenced it (like consumption).

Despite the high potential demand of credit by farmers, few farmers succeed in securing loan from the organized sector. This is due to a number of problems associated with the supply of credit to the farmers. Farmers usually have little or no collateral to secure the loans. The organized sector is either non-existent in local areas or the process of obtaining loan is very inconvenient and sometimes repulsive to farmers. Farmers operating traditional and primitive form of farming system are considered inefficient and so must change to a new and more modern and efficient system.

This study therefore seeks to analyze the default risk involved in agricultural loan and to determine the effect it has on the level of loan given to farmers.

Conceptual Framework

Loan default can be defined as the inability of a borrower to fulfill his or her loan obligation as and when due. Credit institutions owe it as an obligation to secure savers' funds. Hence, credit agencies attempt to prevent loan delinquency and default. If an institution loans are not repaid, the lender's capital is lost and the institution will have no incentive to remain in business. The real situation is that small farmers have little or no tangible assets, which can serve as collateral for loans received. They may and often fail to meet repayment obligations. An overdue loan obligation usually includes that part of the principal (unpaid) and accrued interest payment stipulated in the

loan agreement schedules, which were entered into during loan negotiations.

Generally, default have been known to contribute to failure of small farmer credit programmes. Infact, with the exception of Japan, the Republic of Korea and Taiwan where default rates were found to be less than five percent, majority of small farmers credit programmes in Africa, the Middle East and Latin America have commonly experienced high rates of default ranging between 50 to 90 percent (Sanderatne 1978). High default rates are however not peculiar to small-farmer credit programmes alone. The World Bank for example, has cited Bangladesh, Bolivia, Colombia, Costa Rica and Ethiopia as some countries where largescale farmers have poorer repayment records.

High default rates in small-farmer credit programmes should be of major concern to policy makers in developing countries because of its unintended negative impact on agricultural financing and output. According to Von-Pischke (1980), some of the impact generally associated with default include: the inability to recycle funds to other borrowers, determent of other financial intermediaries from serving the needs of farmers and the creation of distrust.

Various factors have been identified as major determinants of loan delinquency. Empirical evidence from Balogun and Adekunle (1988) showed that high default rates in the region of 55 to 90 percent crippled the small-farmer credit programme. Among the major causes of default are loan supply shortages, delay in time of loan delivery, poor supervision, non-profit ability of farm enterprises, misallocation of funds, poor farmers' attitudes towards repayment, and undue government intervention with the operations of credit programmes. Sacay et al (1985), identified some mutually related factors which influence loan delinquency in

small farmers credit programmes to include low income due to poor production and low prices which might in turn be related to misuse of loan proceeds, lack of technical supervision, inefficient government policies and small farm size. In particular, Sacay et al (1985) identified sheer poverty due to poor farm incomes as being the primary root of default and that the level of indebtedness, misallocation of loans, low sales proceeds, low educational attainment and tenurial status might be associated with the low level of incomes. Sacay et al (1985) also showed that about 30 percent of farmers surveyed admitted using the loans for family expenses and only 41 percent of the 71 percent of those who reported applying the loans for production actually used them for farm expenses.

Methodology

The study was carried out in the two local government areas in Osogbo, the capital of Osun state namely Osogbo and Olorunda Local Government areas. Primary data was collected from selected Commercial Banks in the study area. The questionnaires which were used to collect the relevant data were administered on the senior officers in the banks. Purposive sampling technique was used to select the commercial banks that grant credit to farmers. The banks selected were First Bank of Nigeria Pic (FBN), Union Bank of Nigeria (UBN), Cooperative Bank Pic (CBP), Trans International Bank Pic (TIB). Afribank Nigeria Pic (ANP) and Wema Bank Pic (WBP) all in Osogbo.

Analytical Technique

Descriptive statistic, risk analytical techniques and multiple regression were employed in this study. The risk analysis involved the use of default rate and default risk where default rate is given by

$$d = \frac{RR - ARD}{AD}$$

RR - Repayment (Amount disbursed + interest rate)

ARD - Amount paid back

AD - Amount disbursed.

d - Default rate

Default risk is given as:

<u>d</u> (1+f+k) r - d (by Wa

(by Warren and Baker 1982)

Where r - risk premium / default risk

d -default rate

f- administrative cost

k - transaction cost

Implicitly, the regression equation is given as

 $Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, U_i)$

Y - default risk

X_i- interest rate

X₂ - amount disbursed

X₃- Administrative cost

X₄- Transaction cost

X₅-Amount repaid

X₆- Amount released

X₇- Timeliness of released of fund

X₈ - Project gestation

U_i - error term.

Theoretically, it is expected that X_2 (which is the amount of loan disbursed) is positive with respect to default risk i.e. the higher the amount of loan disbursed the higher the default risk and X, (interest rate) is positive with respect to default risk i.e. the higher the interest rate the higher the default risk. Also, Default risk is expected to increase with an increase (Administrative cost), X₄ (Transaction cost), X₆ (Amount released), X₈ (Project gestation). But is expected to decrease with an increase in X_5 (amount repaid) and X_7 (Timeliness of release of fund).

Adedapo 27

Result and Discussion Agricultural Loan Processing Procedure and Selection of Borrowers

According to Table 1, the agricultural loan processing procedure of the commercial banks in the area of study are similar. This include proper opening of account with the bank which must be operating for at least six months before loan can be granted. The banks also require filling of form, appraisal of project, visitation of farm or site of the project and above all provision of collateral security without which a loan can not be granted.

Table 1, the criteria for selection of borrowers are credibility of borrower as determined by their credit officers, active operation of account, viability of the project, security and integrity of guarantors. All these are strictly adhere to in order to reduce the risk of default.

Loan Operation

On the interest rate charge by the banks, it is evident from Table 2 that nearly all the banks charge higher interest rate in non-agricultural ventures than agricultural sector with the exception of CBP that charge flat rate.

This is seen as one of the obstacles which reduce the willingness of commercial banks in giving loan for agricultural purposes coupled with the fact that agricultural production has a long gestation period. The commercial banks consider the policy of lower interest rate for agriculture as discouraging because it reduces their profit. This is because when the costs of administration are incorporated, the banks will be running at a loss. Hence, charge cost extra to administrative cost, which range from one to one and half percent of loan given. This increases the burden of farmers in making

efficient use of the loan and to be able to repay it

Also from Table 2, the percentage number of people granted loan and percentage of amount granted showed that only one bank (FBN) is above 50% and this indicate the unwillingness of the commercial banks to lend money for agricultural purposes and the strict formalities before the loan can be disbursed which most farmers can not meet thereby reducing the number of people granted loan. The amount requested which cannot be met by the banks also show that either the banks want to reduce risking huge amount for agricultural sector or the borrowers can not provide enough security to cover the value of the loan requested.

Loan Defaults

Table 3 shows the rate of default and the default risk for a period of (11) eleven years that is 1991-2001. The default rate in percentage shows that Wema Bank has the highest with the range 29%-72% and an average of 51.8% and default risk of 0.413 to 2.705 with an average of 1.307 Union Bank of Nigeria has a default rate ranging from 11.6% to 67.55 with an average of 37.4% while the default risk shows a range of 0.75.

The table further shows that First Bank has an average default rate of 39.3% and an average default risk of 0.872. Trans International Bank and Afribank has an average default rate of 41% and 45.3% respectively while their average default risk are 0.894 and 0.976 respectively.

Majority of the loan granted by the banks have high probability of been default. This is evident from the high figure of the default rate and default risk, which is mostly experienced with small-scale farmer. Hence the reluctance of the banks in granting unsecured loan for agricultural purposes.

The reason for the high figure include weather fluctuation, pest and disease, pilfering, price fluctuation, yield uncertainty, lack of adequate storage facilities which make the farmer to sell the produce cheep during the harvest period and loan diversion by farmers.

The result of the regression analysis shows that in all the banks with the exception of ANP, the default risk has a positive and significant relationships with amount disbursed and the higher the amount disbursed and the interest rate the higher the default risk.

Conclusion And Recommendations

The study revealed that the interest rate for non-agricultural sector is higher than that of agricultural sector. This partly contributes to the banks' unwillingness to finance agriculture because they consider other sectors as more profitable than agriculture and of shorter gestation period. The long period before which loan is granted from the date of request and the series of operations involve also contribute to the untimely and less efficient use of the loan. Essentially, the banks should endeavour to prevent unnecessary delay in loan disbursement in order to ensure timely use of the loan by the farmers.

The bank should have a good knowledge of the prevalent environment and management also strategies before giving out loan to the farmers. Also, proper monitoring and supervision should be given to farmers after disbursement of loan. Effort should also be made to give out loan in kind rather than in cash in order to reduce the incidence of loan diversion

It is also recommended that banks should give a revolving loan to farmers' cooperative society to reduce default rate and loan diversion. The farmers in the same cooperative society can serve as watch dogs on themselves and also call themselves to order since any loan default or diversion from any one of the farmers can prevent others from enjoying the benefit.

Lastly, commercial banks should also explore the Agricultural Credit Guarantee Scheme of the federal government, which can take care of some of the risk in terms of default.

It is hoped that if all the above measures are taken into consideration and implemented, default risk and rate will be reduced drastically.

References

Balogun E.D and Adekunle A. (1988)

Loan delinquency among small farmers in developing countries; a case study of the small-farmer credit Programme in Lagos state Nigeria. CBNEconomic and Financial Review vol. 26 No. 3, September 1988.

Lawal O.A. - 'A' Level Economics of West

<u>Africa.</u> Onibonoje Press Ibadan,
Nigeria Pp 154-165

Obasanjo O. (2002) - Presidential Media Chat on NTA Network Service June, 2002,

Sacay, O J. Agabin, M.H., Tanchoco C.I.T (1985) - Small farm credit Dilemma Saving and Development: vol iii No. 1 pp 35-47, 1985.

Saderatne, N. (1978) "An Analytical Approach to small Farmer Loan Default" Savings and Development: Vol. 11 No 4 pp 290-304.

Von-Pischke, J.D (1980), Rural Credit Project Design Implementation and Loan collection performance" Saving and Development: Vol iv No. 2 pp 81-91,1980. Adedapo 29

 Table 1: Agricultural Loan Processing Procedures and selection of borrowers

Procedure & condition	FBN	UBN	СВР	TIB	ANP	WBP	Remark
Account Opening	✓	✓	✓	✓	√	✓	6
Provision of collateral	✓	✓	✓	✓	✓	✓	6
Appraisal of Project	✓				✓	✓	3
Filling of Form	✓	✓	\checkmark	✓	✓	✓	6
Purpose of Loan	✓	\checkmark	✓	✓	✓	✓	6
Visitation of Farm			✓		\checkmark		2
Guarantors	✓	✓	\checkmark	✓	✓	✓	6
Criteria for Selection of Borrowers							
Base on Security	✓	✓	✓	✓	✓	✓	6
Credibility of Borrower	✓	✓	✓	✓	✓	✓	6
Active Operation of Account	✓	✓	\checkmark	\checkmark	\checkmark	✓	6
Viability of Project	✓	✓	✓	✓	✓	✓	6
Recommendation by Credit Office	er 🗸	✓	✓	✓	✓	✓	6
Integrity of Guarantors	✓	✓ ✓	✓	✓	✓	✓	6

Table 2:

Table 2:						
Rate of Interest Charge	FBN	UBN	CBP	TIB	ANP	WBP
Higher in Agriculture than in non Agriculture						
Higher in non- Agriculture than in Agriculture	✓	✓		✓	✓	✓
The same			✓			
Loan Request & granted						
No. of people request for loan	182	399	543	84	286	119
No of people granted	108	127	127	32	52	37
% No. of people granted loan	59.3	31.8	41.8	38.1	18.2	31.1
Total amount requested (Nm)	137.99	34.58	223	32.25	84.34	63.17
Total amount granted (Nm)	855	7.992	75.95	7.64	12.7	15.4
% amount of loan granted	62.0	23.1	34.1	23.7	15.1	24.4
Period of loan disbursement form date of request (month)	1-2	3	2-5	1-2	-	2

Field Survey 2002