



## LOAN REPAYMENT DETERMINANTS AMONG ENTREPRENEURS IN ABIA STATE, NIGERIA

C.I. Okpokiri, N.M. Agwu and O.C. Eluwah

Department of Agribusiness and Management, Michael Okpara University of Agriculture Umudike, Abia State, Nigeria

### ABSTRACT

Credit access and its repayments has been a challenge for both the lender and the borrower. It has been observed over time that repayment of borrowed funds has been an issue and this has made financial bodies skeptical in giving out loans to entrepreneurs. The study analyzed the loan repayment determinants in Abia state. Specifically, the study identified the credit sources available to the entrepreneurs; determined the factors affecting access to loan facilities and loan repayment among entrepreneurs in Abia state. Primary data were collected using a structured questionnaire administered to 60 entrepreneurs in the study area. Data were analyzed using descriptive statistics, probit and multiple regressions. Results showed that most of the respondents (65%) sourced for funds through the informal financial institutions like Esusu because of its limited protocols and requirements. The results further revealed that age, marital status, education, experience in business were significant at 10% respectively, value of collateral at 5% and cooperative membership at 1% were the statistically significant factors effecting on the entrepreneurs' access to loan. The factors influencing loan repayment were marital status (10%), experience (5%), repayment period (5%), availability of other credit source (5%) and income (10%). Based on the findings the study recommended that financial institutions should educate and enlighten entrepreneurs on what it entails to obtain loans and need to repay appropriately. This could come in the form of trainings, seminars, etc. this will go a long way in changing their perception on the issue.

**Keywords:** Loan; Repayment; Entrepreneurs

### INTRODUCTION

Entrepreneurs (innovators who take risk by investing scarce resources in ideas or new product with the aim of reaping future benefits) play a vital role in the growth and economic development of many developing countries, including Nigeria. Their roles span from innovation, job creation and economic growth. Despite these crucial roles of entrepreneurs, they continue to face a lot of challenges in the sourcing of funds. This is often times attributed to the problem of repayment, which seems to have exacerbated the problem of accessing loans.

According to Nwachukwu, Alamba, and Oko-Isu (2010), repayment of borrowed loans and its utilization for the purpose it was borrowed has been one of the numerous problems of agricultural development in the developing world and Nigeria is no exception.

Generally, loan is a type of debt, and like all debt instruments, a loan entails the redistribution of financial assets over time between the lender and the borrower. In a loan, the borrower initially receives or borrows an amount of money called the principal from the lender, and is obligated to pay back an equal amount of money to the lender at a later time. Typically, the money is paid back in regular installments or partial repayments in an annuity; each installment being of the same amount (Signoriello, 1991). However, loans from other financial institutions like the informal financial institutions may have a different repayment structure which might be better for the borrower in terms value of collateral disbursed, repayment period, customers service and otherwise.

Loan repayment has been a persistent bottle-neck in Nigeria over the years. There have been reported cases of high default rates (Njoku and Obasi 2001; Afolabi 2010; Oladeebo and Oladeebo, 2008). Delinquency in repayment has also been traced to inadequate income, sudden price decline, weak infrastructure, inadequate market, natural hazards, misapplication and illiteracy. Adofu, Shaibu, Yakubu (2013) have identified high cost of administering such loans and high default rate among farmers as some of the inhibiting factors against loan delivery to agribusiness entrepreneurs by banks. However, for agribusiness entrepreneurs to continue to play important roles in the economic development there is need to ensure easy access to loans and prompt repayment.

According to Onyeagocha, Chidebelu, Okorji, Ukoha, Osuji, and Korie (2012), one way to tackle the loan repayment challenges is to investigate the factors, which affect the loan repayment. Abia state is a major hub for entrepreneurs who have businesses and have borrowed at one time in the course of doing business and faced challenges in paying back the borrowed fund. Therefore, the study analyzed the loan repayment determinants in Abia state. Specifically, it examined the credit sources available to the entrepreneurs in the study area; analyzed factors affecting access to loan facilities in the area and estimated the determinants of loan repayment among entrepreneurs in Abia state, Nigeria.

## **MATERIALS AND METHODS**

### **Study Area**

This study was carried out in Abia state, Nigeria. Abia state was created out of former Imo state on August, 27th 1991. Abia state has a landmass of 700km<sup>2</sup> with seventeen (17) Local Government Areas. Abia State lies within approximately latitudes 4° 40' and 6°14' north, and longitudes 7°10' and 8° 00' east. It is bounded in the east by Cross-River state, on the west by Imo state, on the north by Enugu and Ebonyi and in the south by Rivers state. Abia state consists of three agricultural zones namely Aba, Ohafia and Umuahia (Chigbu *et al.*, 2015). Abia state has an estimated population of 3,896,583 million people (National Population Commission, 2015, Chigbu *et al.*, 2015).

### **Sampling Technique**

A multi-stage sampling technique was employed in sample selection. In the first stage, the three agricultural zones in the state were selected - Aba, Umuahia and Ohafia. In

the second stage two local government areas where entrepreneurs that are actively involved in agro-based were selected from each of the agricultural zone making it a total of six Local Government Areas. In the third stage two communities were randomly selected from each of the Local Government Areas. Five entrepreneurs were randomly selected from each of the communities to give a total of 60 respondents that were used for the study.

**Analytical Technique and Model Specification**

The study made use of descriptive and inferential statistics. The source of credit available to the entrepreneurs was analyzed using descriptive statistics. Multiple regression was used to analyze the factors affecting access to credit and probit model was used to analyze the determinants of loan repayment among entrepreneurs in the study area.

The ordinary least squares multiple regression model used in the study is specified as:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + \dots + b_nX_n + e_i \dots (1)$$

Where,

Y = amount of loan accessed (₦)

X<sub>1</sub> = age (years)

X<sub>2</sub> = sex (male=1, otherwise=0)

X<sub>3</sub> = marital status (married=1, others= 0)

X<sub>4</sub> = education (no. of years spent in school)

X<sub>5</sub> = household size (number)

X<sub>6</sub> = experience (years)

X<sub>7</sub> = value of collateral (₦)

X<sub>8</sub> = cooperative membership (yes=1, otherwise=0)

The model specification for probit is stated thus;

$$P_i = P(y_i^* < y_i)$$

$$P_i = P(y_i^* < \beta_0 + \beta_i x_{ji}) = F(y_i)$$

$$P_i = F(y_i) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{z_i} e^{-\frac{s^2}{2}} ds \dots \dots \dots (2)$$

Where;

P<sub>i</sub> is the probability that an individual will make a certain choice (ability to pay for loans collected or otherwise);

s is a random variable normally distributed with mean zero and unit variance;

y<sub>i</sub> is the dependent variable (ability to pay for loans collected or otherwise);

y<sub>i</sub>\* is the threshold value of the dependent variable.

Z<sub>i</sub> is the inverse of the cumulative normal function is used

The formula is explicitly stated as;

$$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots \dots \dots + \beta_k X_k \dots \dots \dots (3)$$

Where;

Z<sub>i</sub> = loan repayment (measured as a dummy, 1 for been able to pay at least 50% of borrowed fund and 0 for otherwise)

X<sub>1</sub> = age (years)

X<sub>2</sub> = marital status (married=1, others= 0)

X<sub>3</sub> = education (no. of years spent in school)

X<sub>4</sub> = household size (number of household members)

$X_5$  = experience (years in business)

$X_6$  = amount of loan obtained (₦)

$X_7$  = repayment period (years)

$X_8$  =availability of other credit source (yes=1, no=0)

$X_9$  =income (₦)

Given *a priori* expectation, the beta coefficients are expected to be signed as follows:

$\beta_1 < 0$ ;  $\beta_2 < 0$ ;  $\beta_3 > 0$ ;  $\beta_4 > 0$ ;  $\beta_5 > 0$ ;  $\beta_6 > 0$ ;  $\beta_7 > 0$ ;  $\beta_8 < 0$ ;  $\beta_9 < 0$

## RESULTS AND DISCUSSION

### Analysis of the Various Sources of Finance Available to Entrepreneurs

Table 1 shows the analysis the various sources of finance available to the entrepreneurs in the study area. The data were collected using a multiple responses where by the respondents can select more than one source of finance available to them.

Table 1: Sources of finance available to entrepreneurs

Sources of finance	Frequency	Percentage
Formal sources		
Financial institutions	20	33.3
Cooperative societies	29	48.3
Non governmental agencies	32	53.3
Micro finance institutions	12	20
Informal sources		
Esusu	39	65
Loans from individuals	22	36.7
Personal savings	58	96.7
Friends and relatives	27	45

Field survey 2016; multiple responses

The result as shown in Table 1, revealed the different sources of finance available to the entrepreneurs through which they fund their businesses. However, Entrepreneurs in the study area obtained finance through two major sources namely: formal and informal sources. Personal savings was the highest source of funding with (96.7%) under informal finance source for the entrepreneur. This implies that the majority of the entrepreneurs started their businesses with personal savings. Informal financial institutions such as “esusu” were indicated by 65% of the respondents as source for financing their businesses. This implies that besides personal savings, local informal financing institutions aide them with soft credit to run their activities. This goes to buttress the importance of grass root financing to the economic welfare of the people generally. Friends and relatives which is a form of informal financing were indicated by 45% of the respondents in the study area. Although it is an easy source of financing but the major disadvantage is that it is usually a soft and short term financing, meaning that most might not give the entrepreneur enough fund to carry out capital projects like building, machineries and Plant. Loans from Individuals received the lowest (36.7%) level of patronage under the informal source of finance in the study area. These are well to do individuals in the society who give out funds and soft loans to people. The Nigerian economy is under recession and this have reduced

the number of individuals willing to give out loans as the default rate is on the high side. Most time they scare away the entrepreneurs with high interest rate. Under the formal system, financial institutions, cooperative societies, non governmental agencies and micro finance banks were the main sources of finance under this category. Non governmental agencies had the highest patronage (53.3%) under the formal system of finance. Most non governmental agencies give subsidies, incentives, and loans with zero interest to entrepreneurs. This may have increased their popularity as well as entrepreneur's preference for sourcing loans through this medium.

Following this were 48.3% of the respondents who indicated co-operative societies as their source financing their business activities. Generally speaking, cooperative societies, offer loans to their members at a very low interest rates among other benefits and so, the result is expected. Financial institutions (commercial banks) and micro finance banks had the lowest patronage at 33.3% and 20% respectively. Most entrepreneurs do not source for funds from financial institutions because of the high interest rates and other cost requirements involved. Adewuyi, Taiwo, Adegbite, Oyeyinka and Akerele (2017) and Baah, Anchirinah, Badger and Badu-Yeboah, (2010) shared the same view. Few micro finance banks were located around the study area and this reduced their popularity and effectiveness.

From the result, it was observed that entrepreneurs in the study area preferred to finance their business through the informal sources of finance than the formal sources. This is might be hinged on the fact that most entrepreneurs in the area run small business outfit with limited capital requirements. Also, the requirements and paper work involved in the informal source might be limited when compared to the formal sources and the entrepreneurs can easily access the informal sources as they are readily available.

### Analysis of the Factors Affecting Access to Loan among entrepreneurs

The Table 2 below shows the ordinary least square results of the factors affecting access to loan among entrepreneurs in the study area

Table 2: Factors Affecting Access to Loan among the entrepreneurs

Variables	Coefficient estimates	T - value	Significance
Intercept	66.144	8.419	7.857***
Age	1.330	0.701	1.907*
Marital status	-2.023	-0.575	2.060*
Sex	0.2572	0.710	0.362
Education	-2.275	-0.259	1.806*
Household Size	-1.431	-0.906	1.579
Experience	-2.133	-1.142	1.868*
Value of Collateral	3.034	1.019	2.977**
Cooperative Membership	7.323	1.906	3.845***
R <sup>2</sup>	0.986		
Adjusted R <sup>2</sup>	0.972		
F- ratio	1030.395***		

Source: Field survey, 2016. \*, \*\* and \*\*\*implies level of significance at 0.10, 0.05 and 0.01 probability levels respectively

Table 2 revealed an F ratio of 1030.395 which was significant at one percent level showing goodness of fit of model for the analysis. The value of regression co-efficient ( $R^2$ ) shows that 98% of the changes in the dependent variable might be caused by the independent variables. The result shows that age, marital status, education, experience in business and value of collateral were significant variables having diverse effect on the entrepreneurs' access to loans.

The coefficient of age of the entrepreneurs was significant and positively related loan accessibility at 10 % probability level. This meant that as the age of the respondents increases, their ability to access loan also increases. Some studies have shown that older farmers tend to repay more in terms of loans than younger ones. Given this, the tendency to access loans regularly is plausible. These studies believe that the older farmers are wiser and responsible than the younger ones (Oladeebo and Oladedbo, 2008; Ezihe, Akpa and Ayoola, 2016).

The educational level of the respondents was positive and significantly influenced the access to loan at 10% probability level. An increase in educational attainment increases the farmer to access loan, *ceteris paribus*. Education has been known to increase knowledge and increase skills on issues, which may include management of loans. Therefore the result is plausible.

The value of the collateral used in acquiring the loan was also found to influence access to loan positively and significantly at 5% probability level. This is not farfetched due to the fact that most loan facilitators often demand for high collaterals which they would fall back to should in case there is a default. Therefore, increase in entrepreneurs' collateral value, the higher the probability of access to loans. This result runs contrary to Olalade and Olagunju (2013). However, agrees with Ezihe et al (2016).

Marital status was found to have a positive and significant effect on their loan accessibility at 10% probability level. It meant that married entrepreneurs tend to have more access to loans than their unmarried counterparts; this is because married entrepreneurs are viewed to be more responsible and focused than unmarried entrepreneurs. Entrepreneurs who are single have a higher chance of being distracted and chances of embezzling and diversifying the loan through unnecessary activities than the married ones who are family heads and are more disciplined. This assertion was supported by Oladeebo and Oladeebo (2008) and Ololade and Olagunju (2013). They were of the opinion that unmarried loan seekers had a high tendency to be turned down.

The result also indicated that cooperative membership have positive and significant association with the dependant variable. It is therefore significant predictor of loan accessibility at 1% probability level. Cooperative societies help their members in acquiring loan from the government, acts as agents of the entrepreneurs as well as attesting for them to the loan facilitators. Adewuyi *et al.* (2017) obtained a similar finding.

### **Analysis of Factors Influencing Loan Repayments among Entrepreneurs**

In the bid to realize the objective of ascertaining the factors that influenced loan repayments in the study area. Probit model was used to carry out the analysis and the results are shown Table 3.

## Loan repayment determinants among entrepreneurs in Abia State, Nigeria

Table 3: Factors influencing loan repayments among entrepreneurs

Explanatory variables	Beta coefficient	Standard error	Z –Value
Intercept	-2.226	0.658	-3.383***
Age	-0.023	0.019	-1.209
Marital status	-0.022	0.021	-2.026*
Education	0.275	0.234	0.767
Household size	0.012	0.015	.770
Experience	-0.113	0.044	-2.597**
Amount of loan obtained	0.241	0.183	1.321
Repayment period	0.050	0.000	3.255**
Availability of other credit sources	0.547	0.560	2.668**
Income	0.358	0.204	1.751*
Chi square	73.250*		
Df	50		

Source: Field survey, 2016. \*, \*\* and \*\*\*implies level of significance at 0.10, 0.05 and 0.01 respectively

Table 3 shows the result of the probit regression analysis used in determining the factors influencing loan repayments among entrepreneurs in Abia state. The result revealed a Chi-square of 73.250 which was significant at 10% level showing goodness of fit of model.

The result reveals that the availability of other credit sources affects the repayment level of the entrepreneurs positively and was significant at 5% level. This was against the a priori expectation of a negative relationship. This implies that increasing number of available credit source increases the likelihood of the entrepreneurs been able to repay his loan. This means that the more credit offers available to the entrepreneur, the better entrepreneurs' repayment abilities and vice versa. The entrepreneur has an array of options to choose from and he might find loan facilitator who can help tailor the repayment process to the convenience of the entrepreneur. This will motivate the entrepreneur to work harder in the bid to pay up his loan. Also, the interest rate charged might be reduced as there many institutions available to the entrepreneur to choose.

The result of the analysis indicated that marital status was significant at 10% level but with a negative sign. This meant that loan repayments among entrepreneurs in Abia State are likely to increase among married entrepreneurs and vice versa. This may be that married farmers are more likely to divert the loan for other purposes other than their business venture and will end up finding it difficult to repay. Anigbogu, Onugu, Onyeugbo, Okoli (2014) were in consonance with this assertion.

The coefficient of experience of the respondents was also negatively related to the farmers' loan repayment and significant at 5% level. The loan repayment of farmers basically depends on the level of business acumen and management skills of the entrepreneur regardless his experience in the business. The effect of experience on loan repayment is therefore ambiguous. Some of the entrepreneurs might stick to their old ways

of carrying out their business and might be unwilling to try improved methods; this might go a long way to affect their loan repayment abilities.

The result also showed that income was positive and highly significant at 10% level. Income is related to entrepreneurs' loan repayment. With growing commercialization and increasing income, entrepreneurs are able to repay their loan including interest. This also confirms the findings of Oladeebo and Oladeebo (2008) in their study of the determinants of creditworthiness among small-holder farmers in Ogbomosho agricultural zone of Oyo state, Nigeria.

Repayment period of the loan was found to influence positively and significantly the farmers' loan repayment rate at 5% level. The arrangements of suitable loan repayment period for entrepreneurs affect their chances of repayment; being that entrepreneurs are likely to pay off loans without default when the repayment period and arrangement is favourably to the them and likewise find it difficult when the repayment arrangement is not favourable.

### CONCLUSION

Access to loan and its repayment has been an issue world over and especially in developing countries. Loan granting agencies stand a chance of not getting their funds and as such takes prudent steps to ensure that those who they give loans will pay back. The study looked at the loan repayment determinants among entrepreneurs in Abia state.

Financial institutions should educate entrepreneurs on what it entails to obtain loans and need to repay appropriately. This could come in the form of trainings, seminars, etc. this will go a long way in changing their perception on the issue.

Entrepreneurs should seek for subsidies and incentives to reduce the amount they borrow from financial institutions and this will encourage many to be entrepreneurs.

The formation of cooperative society should be encouraged given its contribution in the accessibility of loans as well as its repayment by entrepreneurs.

### REFERENCES

- Adewuyi, S. A., Taiwo, O. T., Adegbite, D. A., Oyeyinka, R. A. and Akerele, D. (2017). Determinants of credit accessibility among cocoa farmers in osun state. *Nigerian Journal of Agriculture, Food and Environment*, 13(1):29-33.
- Adofu, I., Shaibu, S.O. and Yakubu, S. (2013). Economic impact of improved agricultural technology on cassava productivity in Kogi State of Nigeria. *International Journal of Food and Agricultural Economics*, 1(1):63-74.
- Afolabi J.A (2010). Analysis of loan repayment among small and medium scale farmers in Oyo state. *Journal of Social Science*, 22(2):115-119.
- Anigbogu, T.U, Onugu, C.U, Onyeugbo, B. N. and Okoli, M.I. (2014). Determinants of loan repayment among cooperative farmers in Awka North L.G.A of Anambra State, Nigeria. *European Scientific Journal*, 10(22):
- Baah, F., Anchirinah, V. M., Badger, E. and Badu-Yeboah, A. (2010). Report on the baseline survey of cocoa farmers in Cadbury international operational districts under the public private partnership cocoa extension programme. Tafo: Cocoa Research Institute of Ghana, 152pp



- Ezihe, J. A. C., Akpa, J. A. and Ayoola, J. B. (2016). Accessibility and Repayment of Agricultural Loan among Farmers in Benue State, Nigeria. *Journal of Agriculture and Veterinary Science*, 9: (8) 39-46
- Kiplimo, J.C, Ngenoh, E, Koech, W and Bett, J.K. (2015). Determinants of access to credit financial services by smallholder farmers in Kenya. *Journal of Development and Agricultural Economics*, 7(9): 303-313
- Njike, C, Nmeragini S, Chigbu, J; Onukaogu, D, Okoye, V.U, and Ape, M (2015). Harnessing the use of geo-spatial technologies in monitoring and mapping pastoral and migrant settlements in south eastern Nigeria (a review). Paper prepared for presentation at the “2016 World Bank Conference on Land and Poverty” The World Bank - Washington DC, March 14-18, 2016
- Njoku J.E and P.C. Obasi (2001) Loan Repayment AGF – Agricultural Credit Guarantee Scheme and its determinants under the (ALGS) in Imo State, *Nigeria, Africa Review of Money, Finance and Banking*, No. 201, 2001.
- Nwachukwu, I.N; Alamba, S.C and Oko-Isu, A. (2010). Determinants of institutional credit repayment performance among farmers in Afikpo North LGA of Ebonyi state, Nigeria. *AAB Bioflux*, 2(3):279-284.
- Ocholla, J. O. (2009). The Relationship between Credit Risk Management and Non-Performing Loans: The Case of Commercial Banks in Kenya, MBA, University of Nairobi
- Oke, J. T. O., Adeyemo, R. and Agbonlahor, M.U. (2007). An empirical analysis of microcredit repayment in Southwestern Nigeria. *Humanity and Social Sciences Journal*, 2 (1): 63-74.
- Oladeebo, J.O., Oladeebo O.E. (2008). Determinants of loan repayment among smallholder farmers in Ogbomoso agricultural zone of Oyo State, Nigeria. *Journal of Social Science*, 17(1): 59-62.
- Ololade R.A. and Olagunju F.I. (2013). Determinants of access to credit among rural farmers in Oyo State, Nigeria. *Global Journal of Science Frontier Research Agriculture and Veterinary Sciences*, 13(2): 1.0
- Onyeagocha, S. U. O., Chidebelu, S. A. N. D., Okorji, E. C., Ukoha, A. H, Osuji, M. N. and Korie, O. C.(2013). *Determinants of loan repayment of microfinance institutions in Southeast States of Nigeria. International Journal of Social Science and Humanities*, 1(1): 5-12