AGRICULTURAL CREDIT GUARANTEE SCHEME AND THE GROWTH OF AGRICULTURAL BUSINESS PRODUCTION IN NIGERIA

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Abstract

This study is examined the impact of Agricultural Credit Guarantee Scheme (ACGS) on growth of agricultural business production in Nigeria for the period 1981 to 2016. Secondary data of Agricultural Credit Guarantee Scheme (ACGS) loans to Individual Farm Producers (LIP), loans to Informal Group (LIG), loans to Co-operative Farm Producers (LCP), and loans to Commercial Farm Producers (LCFP) as explanatory variables to capture Agricultural Credit Guarantee Scheme (ACGS) and Agriculture production share in Gross Domestic Product (ABP) as dependent variable and measure of agric business production were used for the study. These data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin of various publications. The data was analyzed using Ordinary Least Square method of regression analysis. The study revealed that ACGS loans to Informal Groups (LIG), ACGS loans to Cooperative Farmers (LCP) and ACGS loans to Commercial Farmers (LCFP) do not have significant impact on growth agric production. On the other hand, the variable, ACGS loans to individual farmers (LIP) as revealed by the regression result proved to have significant impact on growth of agric production (ABP). It was recommended that more loanable funds should be made available to individual farmers (for commercial purposes), as ACGS loans to individual farmers can be used to formulate policies that can impact significantly on agric production and economic growth in Nigeria. Further recommendation made was that, all economic stakeholders, monetary and regulatory authorities; both at the public and private sector of the economy should combine efforts and formulate policies aimed at improving financial inter-mediation, in the area of providing adequate credit to farmers in Nigeria. This will eventually lead to the achievement of a favourable productive-based economy and viable growth of GDP in the country.

Keywords: Agricultural Credit Guarantee Scheme, Agric Business Production, Individual Farm Producers, Co-operative Farm Producers, Commercial Farm Producers

Introduction

In contemporary times, credit for developing the agricultural sector in the economy has become increasingly demanding. This is because finance plays an essential role and is a major factor for growth of agricultural business production in any given economic system especially the economies of developing countries like Nigeria. Beck and Demirguc-Kunt (2006) advocate that special financing mechanism can better provide greater access to agricultural finance.

The Nigerian government in the 1970s has introduced some policies and initiatives in an attempt to attract finance in order to enhance agricultural productions in the country. While most of these initiatives have failed, it appears that the surviving ones are not really fulfilling the purpose for their establishment, given that rural poverty is still on the rise with a significant number of Nigerians still involved in agricultural production.

Over the years, several studies have revealed that the impediment in the process of accessing finance by farmers is not particularly because of the unavailability of credit but the refusal of credit institutions to give loans due to uncertainty of payback. However, credit institutions such as banks are in business to maximize profit for their owners; hence they are not to be blamed as they are not a non-profit (charity) organization. However, this does not favour the rural agricultural farmers as they are abandoned by these credit institutions for lack of collateral.

This refusal by banks over the years to grant credit to farmers has been a major setback in agricultural production. It is in the light of the above; the government thought it fit to establish the Agricultural Credit Guarantee Scheme (ACGS) to act as intermediary between credit providers such as banks and producers in the agrarian sector of the economy. The scheme's main purpose is to mitigate the risk of agricultural credit.

This act of government as a guarantor is not unconnected with the fact that agriculture contributes in no small measure in the supply of raw material to the industrial sector, provides employment, is a source of exchange earnings, and provides food for the teeming population of Nigerians (Food and Agriculture Organization, 2006). Central Bank of Nigeria (2010), noted that the agricultural business production is constrained to contribute significantly to the growth of the Nigerian economy as a result of poor funding.

The important role played by finance as a factor of production to promote agric business production, and the need to adequately channel credit to rural areas for development of the poor farmers in the agricultural sector cannot be over-emphasized. Rhaji (2008) and Shepherd (2002) opined that credit supersedes other resources like land, labour etc., and that it helps farmers to access of all other resources.

State of Problem

Central Bank of Nigeria (2003), noted that oil still accounts for about 60% of Government revenue and almost 100% of our export earnings. Although Agriculture accounts for significant portion of economic activities in Nigeria, it is rather appalling that it is still at a subsistence level for majority of farmers as a result of lack of finance. ACGS funds are one of the major sources of Agricultural financing option in Nigeria. The components of ACGS are ACGS loans to Individual Agric producers (LIP), ACGS loans to Informal Groups (LIG), ACGS loans to Cooperative Farm producers (LCP) and ACGS loans to Commercial Farm producers (LCFP). Against this backdrop that this study seeks to explore the impact of ACGS category based loans on the growth agric business production in Nigeria.

Generally, this research no doubt will form bases for formulation of sound credit policies that will promote growth in the agricultural business production in the Nigerian economy at large.

Research Questions

i. What is the impact of ACGS Loans to Individual Agric producer (LIP) on total agric business production (ABP) in Nigeria?
ii. How has ACGS Loans to Informal Groups (LIG) impacted on total agric business production (ABP) in Nigeria?
iii. What impact has ACGS Loans to Cooperatives Farm producers (LCP) made on total agric business production (ABP) in Nigeria?
iv. What is the impact of ACGS Loans to Commercial farm proddducers (LCFP) on total agric business production (ABP) in Nigeria?

Objectives of the Study

The broad objective of this research is to determine the impact of Agricultural Credit Guarantee Scheme (ACGS) on Agricultural Business Production (ABP) in Nigeria. The specific objectives of this research are to:

i. Find out whether ACGS loans to Individual Farm Producers (LIP) has impact on Agricultural Business Production (ABP) in Nigeria;
ii. Determine the impact of ACGS loans to Informal Groups (LIG) on Agricultural Business Production (ABP) in Nigeria;
iii. Find out whether ACGS loans to Cooperative Farm Producers (LCP) has impact on Agricultural Business Production (ABP) in Nigeria; and
iv. Determine the impact of ACGS loans to Commercial Farm Producers (LCFP) on Agricultural Business Production (ABP) in Nigeria.

Hypotheses

The following four null hypotheses are put forth to address the research questions.

HO_1: There is no significant impact of ACGS loans to Individual Farm Producers (LIP) on Agricultural Business Production (ABP) in Nigeria.

HO_2: There is no significant impact of ACGS loans to informal Groups (LIG) on Agricultural Business Production (ABP) in Nigeria.

HO_3: There is no significant impact of ACGS loans to Co-operative Farm Producers (LCP) on Agricultural Business Production (ABP) in Nigeria.

HO_4: There is no significant impact of ACGS loans to Commercial Farm Producers (LCFP) on Agricultural Business Production (ABP) in Nigeria.

Literature Review

Government and Agricultural Financing in Nigeria

Agricultural Credit Policies in Nigeria

Several efforts have been made by the Nigeria government since the 1970s in an attempt to revive the agricultural sector in order to make the country self-sufficient in the area of food production Government's credit policies were geared towards achieving growth and development of agriculture. The main aim was the attainment of self-sustaining growth for the agricultural sub-sectors with a view to improve the well-being of Nigerians.

According to the Central Bank of Nigeria (2007), the main reason for agricultural financing initiatives and policies was to ensure that there is an effective and sustained system that carters for the credit schemes. Such a system will also cover other programmes and institutions that provide credit both at the macro and micro level to small, medium and large scale producers.

The government of Nigeria in her successive administrations in the past has initiated several policies and programmes towards restoring agriculture back to its lost glory; and tackle the daunting challenges of inadequate credit financing faced by farmers in the economy. Nigeria's policy for agriculture is surrounded with government's work-plan and frame work designed to attain an overall agricultural growth and sustainable development.

In the light of the above, Nzota and Okereke (2009), noted that Nigerian agricultural policies affected the level and relevance of financial deepening on economic development. These policies appear to have been very instrumental to the performance of the Nigerian agricultural sector. Akiri and Adufu (2007) noted that the Nigerian financial system and the government's effort encourage agricultural growth incentive in their services and functions as they act as intermediaries.

However, according to the Central Bank of Nigeria in 2007, some of these government policies and initiatives have failed over the years due to the following reasons; commercial banks reluctance to support small enterprises, no effective skills to deliver service, farmers poor management ability, management inability, non-availability loanable funds etc.

Government has been involved in a number of policy initiatives on the provision of agricultural finance services in Nigeria from the 1970s to date in order to facilitate finance for growth in the agricultural sector. These policies include schemes, initiatives, programmes and institutions; some of which are extinct (or operating in the same name and structure).

They include sectoral allocation of credit (1970-1996), People Bank of Nigeria (1990-2002), Nigerian Family Economic Advancement Programme (1997-2001), Small and Medium Enterprise Equity Investment Scheme (2001-2008), rural banking programme (1977-1991), lending as a percentage for savings mobilization in rural areas to rural dwellers (1977-1996), and concessionary interest rate (1980-1987). However, the policies which are still in operation in Nigeria are discussed below.

Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) now Bank of Agriculture (BOA) (1972-Date)

The bank is designed to actively participate in the encouraging agricultural savings mobilization and provision of credit, while inculcating banking habits in rural farmers with a view of reducing poverty. Its operational financial activities are micro in nature focusing on agricultural finance markets. The bank covers the gap created by the conventional banks (commercial banks) with its special banking focus on rural development.

It was formed from the Nigerian Agricultural and Cooperative Bank (NACB).Anyanwu (2004) noted that NACB (now BOA) accept deposits as well as, offer loans and advances with small amount of interest with respect to purpose.

Agricultural Credit Guarantee Scheme (1977 to date)

This scheme has been in existence since 1977 and it is the scheme under study with respect to its impact on economic growth in Nigeria.

The ACGS is geared towards strategic development with the aim of making available required specific finance to farmers to promote small and medium establishments (enterprises) in the agricultural sector. The ACGS promote sustainable growth by making available credit facilities (finance) to a significant number of farmers of the rural population (Olaitan, 2006).

The scheme makes access to finance easier as it guarantees 75 percent of credit from commercial banks to farmers without collateral (security). The CBN regulates and stipulate the guidelines as it handles the overall operations of the scheme. The Agricultural Credit Guarantee Scheme (ACGS) is one of the key schemes responsible for the promotion and facilitation of agricultural financing in the agricultural sector of Nigeria.

Community Banks (CBs)/Microfinance Banks (MFBs) (1990 to date)

The concept of Community Banks (now Micro Finance Banks) came into operation in an attempt to establish a financial institution that will take the form of conventional banking at the micro level in the rural areas of Nigeria. Community bank's main focus is on the development of rural economies and they provide structured credit facilities to the rural people.

The establishment Community Banks was due to bridge the gap that existed in financial intermediation between the rural and urban populace, which is as a result of the marginalization of the rural area by conventional financial intermediaries. The banks provide finance and other credit related services to her members (community) with a view of reducing poverty by empowering the people through the increased access to factors of production.

Onugu (2000), observed that CBN's monetary credit guideline of 1996 directed that a statutory allocation of 18 percent of the bank's credit should be given to agricultural activities.

Nigerian Agricultural Insurance Corporation (1996 to date)

The Nigerian Agricultural Insurance Corporation (NAIC) was established at a time that there was a serious need for insurance cover for farmers in the agricultural sector.

The need for a specialized agricultural insurance companydue to the unwillingness of conventional insurance companies to cover agricultural activities (where they were considered as risky) was what informed its establishment by government. NAIC's specific function is to provide insurance cover for farmers against natural disaster and other risks associated with agricultural production activities in Nigeria.

One key function carried out by this corporation is the mandatory insurance cover for all loans granted by banks to the sector under the Agricultural Credit Guarantee Scheme (ACGS). This insurance cover has a special socio-economic impact on farmers who benefits from any Agro-allied credit by certified lending institution. NAIC is the only surviving insurance company owned by the Federal Government of Nigeria.

Refinancing and Rediscounting Facility (2002 to date)

This is a financing mechanism through which the Central Bank of Nigeria (CBN) assists Deposit Money Banks (DMBs) to provide short-term loan facilities at a preferential interest rate. The Rediscount and Refinancing Facility (RRF) is a credit system that is available specifically for the support of agricultural exports.

It is a facility that is meant to improve and develop agribusiness through export channel in order to enhance production unit. One key objectives of RRF is to encourage medium and long-term bank lending to the productive sector so as to expand Nigeria's production system.

Agricultural Credit Support Scheme (2006 to date)

The Central Bank of Nigeria and the Ministry of Agriculture are the two government agencies that initiated the Agricultural Credit Support Scheme (ACSS).

The apex bank and the Ministry of Agriculture collaborated to finance the scheme and allow banks to participate under the ACSS in order to encourage agricultural enterprise in the country. Funds in this scheme are provided strictly for agricultural purpose (by concession) with particular focus on small scale farmer and credit support services to them.

The CBN (2007) stated that the scheme was set up to fast-track agricultural development with the provision of loans at a single digit interest rate to enhance commercial agriculture.

Agricultural Credit and Finance in Nigeria

Ugwu (2010) stated that one of the inputs required for agricultural development is finance; the reason is that it is the vehicle that facilitate (purchase) other inputs for effective agricultural production.

There has been so many studies and analysis dealing with the role of commercial banks finance and agricultural development in Nigeria.Many scholars have argued that the agrarian sector cannot be developed without adequate availability of credit to finance its activities. In most countries, there is agricultural lending market.

This market is made up of organizations that are called participating financial institutions and systems that can lend financial resources to promote agricultural farm produce productions. Predominant in this market are the Deposit Money Banks (DMBs). Also participating in this market are other specialized institutions such as the Nigerian Agricultural Cooperation and Rural Development Bank (NACRDB) now (Bank of Agriculture). The banks have been playing prominent role and will continue to do so under a package of incentives.

The life insurance companies can find useful avenues to invest their long-term funds by buying equipment for hire. The informal financial market which includes the cooperatives, family and friends who can also make funds available to interested farmers will continue to be active as before. The informal financial market had grown out of the financial assistance that farmers received from their different groups (Kehinde, 2012).

The size of the borrower is of great importance in negotiating the terms and cost of credit. Gurdenson, Glory and Due (2003) believe that this represents a cost in agricultural delivery, because farmers in Nigeria cannot access available credit. Since the Nigerian banker is not oriented toward development financing, the Government must provide incentive for the process. For the lenders in the market, the most significant risk is agricultural credit, which has been noted, could arise from a number of factors ranging from bad harvest to poor market prices. However, underwriting or guarantee can adequately address this. Other risks faced by lending in agricultural market are liquidity, price, strategic and interest.

Current Credit Methods:

Guarantee, Insurance and Underwriting Schemes Guaranteeing credit in the agricultural sector has in no small way motivated lenders to grant loans to borrowers, who ordinarily would not have been able to access credit on their own due to lack of security (collateral) to cover the loan repayment (Navajas, 2001).

With the coming on board of the Nigeria Agricultural Insurance Corporation (NAIC), farmers can now be indemnified for likely losses of production during the period of harvest. On the other hand, underwriting facilitates the process of guaranteeing farm produce prices, which in turn assures the stability of farmers' income. With guarantors, lenders now lend comfortably to prospective borrowers; while the guarantors takes the payment responsibility in case of default on the part of the farmer(s).

However, Kehinde (2012) noted that the credit guarantee scheme is definitely not without some challenges, but obviously has the merit of assisting farmers that would not have been able to access credit facility.

Sources of Agricultural Credit in Nigeria

Aside the personal finance (owners capital) of the farmers, there are quite a number of other sources of credit available to the agricultural sub-sector in Nigeria. These sources are broadly classified into formal and informal sources of credit.

Formal Sources of Credit

These are sources of financing that comes from formal financial institutions that are backed by law. They are also referred to as formal lenders who have the legal permission to carry out the function of intermediation (generating deposits from the surplus unit and lending to the deficit unit) in the economy.

They includes commercial banks (now Deposit Money Banks), Merchant Banks (before universal banking system), Insurance Companies, Nigerian Agricultural and Cooperative Bank (now Bank of Agriculture), Community Bank (now Microfinance Banks), Cooperative Societies and so on.

Informal Sources of Credit

These are direct opposite of a formal credit system. They do not require any strict rules and conditions before granting the credit. They are called informal because their activities are not formal in the eyes of the law. They includes; farmers personal income, friends, relatives and neighbours, money lenders (Osusu), farm associations / Cooperatives etc.

Agricultural Financing and Agric Production Contribution to Economic Growth

The growth and development of agriculture in any society would enhance economic growth. Here in Nigeria, Emeka (2007) noted that agriculture has contributed about 30 to 42 percent to the country's Gross Domestic Product (GDP) and is responsible for 65 percent employment of the entire labour force in the country.

In similar development, the World Bank (2007) and Abdulahi (2002) stated that the agricultural sector has contributed to the Nigerian economy in the provision of agricultural products, raw materials and foreign exchange. In the same vein, he noted that Development Economists have asserted that agriculture is the major source of economic growth in any nation, especially Africa countries (Nigeria inclusive).

The view of the development economists (the pysiocrats) is that agriculture productivity is largely responsible for the regulation of the economy through the diffusion of its surplus via a transaction network. They see the agrarian sector as the only real sector that generate surplus that other sectors depend on in the general economy.

Philip, Nkonya, Pender and Oni (2009) observe that, agriculture is the Propeller of the economy and the largest employer of labour. Given these assertions, we may conclude that agriculture is a key driver of economic growth and development in Nigeria. However, to play this significant role, farmers must have access to cheap funds to enable them purchase the requisite capital inputs and to make the needed revenue expenditures.

It is therefore expedient to state that agricultural credit is key development ingredients that can fast-track agricultural investment and application of advanced technologies that are required to create rapid growth in Nigeria. Mallik (2008) noted that saving gap, trade balance gap and fiscal gap have been pinpointed as hindrances to growth in many African countries; including Nigeria.

Agricultural Credit Guarantee Scheme (ACGS) Loans and Economic Growth The use of credit to stimulate the growth and development of cannot be over emphasized because of the essential role finance play in any given economic system.

Musa, Afolami and Adebayo (2014) noted that farmers demand for credit has out grown the credit supply abilities of the conventional banks in Nigeria.

Enya and Alimba (2008) emphasized that the above reason was largely responsible for farmers in the agrarian sector to seek for credit from the informal set of creditors such as money lenders and others to meet their financial needs. Other militating factors against farmers loans acquisition from banks in their inability to provide collateral (security) to guarantee repayment (Awoke, 2004 and Isiorhovoja, 2013).

He further stated that other studies by Jovanovish (1990), and Bencivenga and Smith (1991) have posited that financial development enhances economic growth. According to the above studies as stated by the researcher, this is made possible through channeling of savings to high productive activities which eventually reduce the risk of liquidity. Also, Shittu (2012) established that financial intermediation has a significant impact on economic Growth in Nigeria.

Empirical Review

According to Olowu (2011), agricultural credit (financing) has a positive relationship with economic growth in Nigeria. This disposition was made in his study on agricultural financing and performance in Nigeria, the study used of Agricultural Credit Guarantee Scheme (ACGS) loans by size alongside other variables.

The conclusion of the study is that the ACGS has been effective in enhancing agricultural production and it should be continued for agricultural financing in Nigeria. The study also reveals that ACGS has a significant effect on aggregate agricultural output, crop and fishery subsector outputs. The study however noted that the effects of the scheme on livestock and forestry were not significant due to long gestation of those subsectors.

Thus, it is evident that the ACGS plays an important role in stimulating agricultural production in Nigeria. Also, Nwankwo (2013) examined the relationship between agricultural financing and growth in the economy. The study focused on the relationship between the size of the Nigeria Agricultural Co-operative and Rural Development Bank (NACRDB) (now Bank of Agriculture (BOA)) loan to farmers and economic growth. The study found that the size of NACRDB agricultural loan has significant impact on the growth of Nigerian economy.

The study of Olajide, Akinlabi and Tijani (2012) covers an extensive period of thirty six years (1981 – 2016) of the Agricultural Credit Guarantee Scheme (ACGS), this stuay no doubt cover the gap of previous studies. This is so because no other study has been extensive enough to covered such a period of the ACGS since inception.

Research Methodology

Research Design

The study made use of correlational research design. The purpose of correlational research is to determine the relationship among two or more variables. The design is appropriate because of its convenience in the study and it predicts a statistical relationship between two or more variables such that systematic changes in the value of one variable are accompanied by systematic changes in the other.

Data and Method of Data Collection

Secondary source of data was used in the study because of the nature of the study which is an analysis of the contribution of the Agricultural Credit Guarantee Scheme (ACGS) to the national economy, taking

Agriculture share in GDP as proxy for agric business production. Data that had been generated are required for this type of study. The time series data cover 36 years ranging from 1981-2016. The purpose of choosing this period is to empirically test the significance or the extent to which ACGS loans contributes to the agric business production and ultimately economic growth after the sector suffered several years of neglect, and the renewal of effort by Government towards stabilizing the agricultural sector through the scheme. The data was obtained from various publications of Central Bank of Nigeria (CBN).

Techniques of Data Analysis

The method of data analysis is the Ordinary Least Square (OLS) Multiple Regression Model (MRM). Data estimation was carried out using IBM Statistical Package of Social Sciences (SPSS), version 20 and results analyzed using the values of the Pearson correlation coefficients, coefficient of determination (R^2), and the coefficients of the independent variables – the t-test or t-statistics.

Model Specification

Our specified independent variables for the study are the various components of the credit guarantee funds under the Agricultural Credit Guarantee Scheme (ACGS) in Nigeria. Agricultural business production is proxy by agriculture share in Gross Domestic Product (GDP), which is our study's dependent variable. This study made use of Multiple Regression Model (MRM) and the general model is thus stated as follows:

Thus the functional form of our model is specified as:

$ABP = \beta o + \beta_1 LIP + \beta_2 LIG + \beta_3 LCP + \beta_4 LCFP + \mu$

Where: GDP = Gross Domestic Product; LIP = ACGS Loan to Individual farm producers

LIG = ACGS Loan to Informal Group; LCO = ACGS Loan to Co-operative farm producers

LCY = ACGS Loan to Commercial farm producers

β_1, β_2, β_3, β_4 = coefficients of independent variables,

βo = Intercept; μ = Random or error term

The apriori expectations with respect to signs are $\beta_o >< 0$, $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$ and $\beta_4 > 0$

Data Presentation and Analysis

Data Presentation

Data presented in this chapter are secondary source of data. The time series data cover 36 years ranging from 1981-2016. Table 4.1 below shows that out of the total value of N100,724,241.2 loans given to the sector, Individual farmers received N94,051,900.6, Informal Group N1,832,535.8; Co-operative N3,260,257.4 and Company N1,579,547.4. In other words, Individual Farmers received 93.4%, Informal Group 1.8%, Co-operative 3.2% and Company 1.6% respectively.The data were obtained from the Central Bank of Nigeria (CBN) statistical bulletin of various years and are presented in table 4.1 below.

Table 4.1: Cumulative Loans Guaranteed under ACGS Operations from 1981 to 2016 – category basis [AMT: = N = ('000)]

Year	Agric Business Production Value (NB)	Loans under Agricultural Credit Guarantee Scheme (ACGS) to:			
		Individual Farm	Informal Groups	Cooperative Farm	Commercial Farm

		Producers (LIP) X_1	(LIG) X_2	Producers (LCP) X_3	producers (LCFP) X_4
1981	2364373.15	17,813.4	-	796.1	17,032.9
1982	2425960.89	16,117.7	-	474.0	15,172.2
1983	2409081.92	14,197.8	-	609.9	21,449.8
1984	2303505.42	9,853.9	-	377.0	14,424.0
1985	2731062.47	19,407.7	-	702.0	24,133.9
1986	2986835.38	25,643.3	-	1,099.1	41,675.0
1987	2891672.33	54,897.2	-	4,379.0	42,876.3
1988	3174567.62	80,078.9	-	4,166.3	34,365.8
1989	3325947.09	104,329.0	-	4,677.8	20,293.5
1990	3464716.26	86,213.3	-	5,933.5	6,347.6
1991	3590837.44	69,932.9	-	5,338.7	6,835.8
1992	3674792.83	75,549.1	-	6,858.3	5,624.4
1993	3743665.81	68,257.9	-	9,048.5	3,538.4
1994	3839675.45	86,451.9	-	9,000.1	7,734.0
1995	3977381.94	132,778.3	-	19,285.8	12,098.0
1996	4133548.21	179,824.7	-	34,425.4	11,252.4
1997	4305679.63	184,686.0	7,516.5	34,379.0	15,456.7
1998	4475241.38	190,305.2	1,705.0	8,960.0	14,727.0
1999	4703643.68	193,501.0	1,351.0	42,325.5	8,905.0
2000	4840971.20	324,187.4	9,995.0	22,928.0	4,340.0
2001	5024542.11	727,945.4	-	100.0	500.0
2002	7817084.50	1,025,575.8	10,594.0	14,170.0	1,250.0
2003	8364832.10	1,106,456.4	30,774.0	16,230.0	11,000.0
2004	8888573.40	2,017,344.7	21,180.0	31,620.0	13,600.0
2005	9516991.54	2,969,096.7	20,036.5	38,537.3	19,068.0
2006	10222474.98	3,984,895.5	82,661.0	171,963.8	23,540.0
2007	90958469.13	4,145,410.5	228,200.0	27,751.3	24,500.0
2008	11645370.98	6,157,288.4	289,219.0	165,475.0	109,092.2
2009	10330325.55	7,495,288.3	128,674.0	586,992.0	138,555.0
2010	13048892.80	7,370,945.6	43,274.0	249,703.1	76,585.0
2011	13429378.77	9,375,403.9	384,641.0	305,171.4	124,388.0
2012	14329705.62	9,128,295.3	27,987.0	267,309.5	283,169.3
2013	14750523.21	8,673,464.9	181,535.0	372,810.0	196,640.0
2014	15380389.34	9,977,834.2	160,872.0	400,860.0	130,600.0
2015	15952220.14	11,299,659.2	41,082.4	41,860.0	59,377.2
2016	16607337.33	4,579,390.8	13,038.4	287,080.0	11,200.0

Source: Central Bank of Nigeria (CBN) statistical bulletin of various years

Analyses of Data

Data were analyzed using the Pearson correlation coefficient which serves to measure the strength of linear relationship between variables, the t-test coefficient of the independent variables which attest to the individual significance of the independent variables and the coefficient of determination, otherwise referred to as adjusted R square (R^2). The respective results and their interpretation are shown.

Table 4.2 Pearson Correlation Coefficient Matrix of Variables

	ABP	LIP	LIG	LCP	LCFP
GDP	1.00				
LIF	.835	1.00			
LIG	.418	.669	1.00		
LCO	.661	.788	.581	1.00	
LCY	.529	.778	.522	.743	1.00

Dependent variable: ABP

Source: Researcher's computation using IBM SPSS Statistics 20; 2016.

The table 4.2 shows that the correlation coefficients of all the variables are high. This indicates that there exists a strong linear relationship between them. In other words, there is the existence of strong linear relationship between ABP and the independent variables; ACGS loan to individual farmers (LIP), Informal Group (LIG), Co-operative (LCP) and Company (LCFP). Also, there exists a strong relationship between the independent variables (LIP, LIG, LCP and LCFP). The least between the dependent and independent variables is that of ABP and ACGS loan to Individual Group (LIG) which stood at .418; and between the independent variables is LIG and LCFP which stood at .522; this represent a linear relationship of 42% and 52.1% between ABP and independent variables; and between independent variables respectively.

On the other hand, the highest linear relationship viz-a-viz ABP and the independent variables is .835, indicating an 83.5% linear relationship. This relatively high correlation coefficients between the variables above, indicate that a strong linear relationship exist between ACGS loans and Economic Growth (ABP) in Nigeria.

Test of Hypotheses

The hypotheses were tested using the t-test coefficients which attests to the significance of each of the independent variables and the coefficient of determination, otherwise referred to as adjusted R square (R^2) which measures the proportion of variation explained by the independent variables in the regression model. The decision whether to accept or reject the null hypotheses were based on the rule of thumb; that is, if the null hypothesis is more than 2 ($H_O > 2$), reject H_O. On the other hand, if the null hypothesis (H_O) is less (<) 2, accept. The empirical results which were employed to explain and test the Null hypotheses formulated are presented in Tables 4.3, and 4.4 below.

Table 4.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2049869.763	3026205.782		.677	.503
	LIP	9.334	1.354	1.162	6.892	.000
	LIG	-85.869	36.257	-.271	-2.368	.024
	LCP	34.154	29.288	.171	1.166	.252
	LCFP	-168.704	66.726	-.361	-2.528	.017

a. Dependent Variable: ABP

Source: Researcher's computation using IBM SPSS Statistics 20; 2016.

Table 4.4 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.883[a]	.779	.751	14488253.07570156300000	1.054

a. Predictors: (Constant), LCFP, LIG, LCP, LIP

b. Dependent Variable: ABP

Source: Researcher's computation using IBM SPSS Statistics 20; 2016.

Discussion of Findings

The findings from the regression estimation revealed that the co-efficient of ACGS loan to individual farmers (LIP) stood at 6.892 in the model. The figure of the LIP coefficient is in conformity with apriori expectation (greater than zero) and significantly, is more than 2. Based on rule of thumb, the null hypothesis (HO_1) is rejected. This indicates that there is a significant impact of ACGS Loans to Individual Farmers (LIP) on Agric Business Production (ABP) in Nigeria. This also asserts that ACGS loan to individual farmers is required and plays an important role in the production of agricultural products (goods and services) both for subsistence and commercial purposes respectfully. However, this impact is not unconnected with the concentration of ACGS loans to individual farmers (see table 4.1); that is, the cumulative size of loans received by the group within the period of study (94.3% out of 100%). In this regard, this finding agrees with the conclusion of Nwankwo (2013) that the size of loans to the agricultural sector has significant impact on Agric Business Production (ABP) in Nigeria.

The results reveal that coefficient of the variable of ACGS loans to Informal Groups (LIG) from the empirical result gave negative figure of -2.368. Also, the figure (-2.368) is less than 2%;hence, we accept the null hypothesis (HO_2) based on the rule which state that if HO is less than 2, accept or order wise reject. This means that there is no significant impact of ACGS loans to informal Groups (LIG). Also, the findings revealed that the variable did not conform to apriori expectation as -2.368 is less than (<) zero (0). This therefore asserts that, there is no significant impact of ACGS loan to Informal Groups (LIG) on Agric Business Production (ABP) of Nigeria.

The findings with respect to the variable, LCP, did conform to apriori expectation (1.166 > 0). However,1.166 which is the result of the t-test from the regression analysis is less than (<) two (2), Like the case of hypothesis two (HO_2) above, the coefficient of the variable is less than 2; which indicates that, ACGS Loans to Cooperative Farm Producers (LCP) does not have any significant impact on Agric Business Production (ABP) in Nigeria. Therefore, the null hypothesis (HO_3) of no significant impact is accepted

The finding of this variable is not different from hypothesis two above. The figure of the estimation from the t-test which stood at -2.528 indicates that it is less than 2, and countered apriori expectation as well (-2.528 is less than zero). This means that ACGS Loans to Commercial Farm Producers (LCFP) does not have significant impact on Agric Business Production (ABP) in Nigeria. Hence, we accept the null hypothesis (Ho_4) as stated above.

The poor performance of the variables (LIG, LCP and LCFP) is not unconnected with the effect of underfunding or lack of proportionate channeling of ACGS loans to these affected categories. Olaitan (2006) reiterated that the lack of access to credit (finance) impedes growth amongst farmers in Nigeria, making them to be endangered species. He therefore, called for transformative efforts to address the problem.

Conclusion

In conclusion, the empirical findings (t-test) shows that only ACGS loans to individual farm producers (LIP) has significant impact on Agric Business Production (ABP); which means that only loans to individual farmers are relevant in formulating policies that can boost growth in Nigeria's economy.

The other variables of Agricultural Credit Guarantee Scheme (ACGS); LIG, LCP and LCFP have no significant impact on Agric Business Production as their coefficients were less than 2; though LCP conform to apriori expectation. However, the Pearson correlation coefficient reveals that the variables have strong linear relationship; this means that there is a positive relationship between the variables [between Agricultural Credit Guarantee Scheme (ACGS) loans represented by LIP, LIG, LCP, LCFP and Agric Business Production proxy by Agric contribution or share in GDP.

This therefore affirms that Agricultural Credit Guarantee Scheme (ACGS) is a relevant tool for Economic Growth in Nigeria. These findings though are limited to Nigeria but have implication for global economy.

Recommendations

Based on the above findings, we strongly recommend that more loanable agric funds should most conveniently be made more available to individual farm producers (especially commercial farmers), as ACGS loans avaliable to individual farm producers impact significantly on Agric production and generally on economic growth (GDP) in Nigeria.

Also, the researcher noted that the poor performance of the three variables (LIG, LCP and LCFP) cannot be unconnected with the reflection of poor funding or inadequate financing by the ACGS (see table 4.1 above). In this regard, more funds should most conveniently be made adequately available and more easily accessible to especially categories of Cooperative Farm Producers (LCP), and Commercial Farm Producers (LCFP) as this will increase the loan sizes of the affected categories to impact significantly on GDP in the long-run.

Furthermore, all economic

stakeholders, be it monetary or regulatory authorities; whether at the public or private sector of the Nigerian economy should synergize efforts and formulate cogent policies aimed towards improving financial inter-mediation especially in the aspect of providing adequate and sustainable credit to agric farm producers in Nigeria in order to enhance growth of Nigerian productive-based economy and influence viable growth of GDP.

Policy formulation in this regard should be carried out with more effective implementation, constant monitoring, and control measures which should ensure the use of very strict sanctions on erring operators particularly with respect to credit allocation. This will encourage more farmers to delve into commercial agriculture which will in no small measure improve export earnings for the sector, as well culminate to growth in the sector's contribution to GDP in Nigeria.

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