

The Implications of Credit Creation by Banks on Economic Growth of Nigeria

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Abstract

This study investigates the implications of credit creation by banks on the economic growth of Nigeria. Data for the study spanning 1985 to 2015 were collected from the Central Bank of Nigeria's Statistical Bulletin and analysed using Ordinary Least Square (OLS), Augmented Dickey-Fuller Unit Root Test and Co-integration. The result of the OLS shows a positive and significant effect of credit creation of bank on economic growth of Nigeria. The unit root test results reveals that variables are stationary and does not have a unit root problem at 5%, first differencing and at lag 2 within the period considered. Based on the hypothesized number of co-integrated equation(s), it is revealed that both the Trace and Max-Eigen statistical test has four and two co-integrating equation because their p-value is lesser than the test of significance at 5%; we therefore reject the null hypothesis and conclude that there is four and two co-integrating equation between the variables. The paper notes that credit creation is germane to economic growth of Nigeria and therefore recommends that the banking sector should be strengthened to mobilize stable funds in other to facilitate the necessary funding of the real sector. Also, the regulatory authorities to monitor and execute designed policies adequately to achieve the set goals and objectives. Government should be able to keep inflation and interest rate particularly on lending at a pace that will stimulate economic growth in Nigeria

Keywords: Economic Growth, Credit creation, Banks.

Introduction

The main function of banks in economic sense is to facilitate operation of fund lending as much as possible in other to increase investments in economy. This is because the development of any economy of a nation depends on the nature of its thriftiness and increasing investments. Banks therefore assume an all important intermediary role in providing investment by money creation. By creation, to mean effective distribution and multiplication of money through quality flow of loans and accommodation to the economy. Quality credit creations by banks have its root in savings. The success of banking intermediation depends primarily on the success of deposit mobilization especially the stable funds. The interest here is in the wholesale benefits of getting as much cash as possible into the banking system to proactively facilitate the necessary funding of the productive sectors of the economy.

For an economy to attain meaningful growth, her financial system must be structured to ensure adequate flow of funds from the surplus units to the deficit units of the economy. The banking industry plays an important role in the development and growth of the economy through an efficient credit management. The banks provide credits to various production sectors of the economy for the expansion of their businesses and by extension expanding the aggregate economy. The quantity, quality, cost and availability of the credit have major role to play in achieving the primary target. In Nigeria, the financial sector has been hampered by poor quality of its credit assets brought about by decline in equity market indices, global oil prices and depreciation in her currency (Naira) (BGL Report, 2010). It is also worthy to note that bulk of credit transaction in Nigeria still take place in the informal sector and by so doing evade the regulation of the monetary authority. Usually financial services work through efficient recourses mobilization and credit expansion to raise the level of investment and efficient capital accumulation. The possible positive linkage between credit creation and economic growth is fairly obvious hence the advantage of developed countries monetary system.

The Nigeria economy which is currently in recession needs more credits for it to rebound back but banks are hampered by their poor quality of loan assets. Credit creation, is a vital way by which bank generates revenue. They are by this exposed to credit risk which in turns hampered their performance. Sound financial system is recognized as a necessary and sufficient condition for rapid growth and development for every modern economy (Sanusi 2012)

Despite various reforms ranging from interest rate liberalization, removal of ceilings and other control on credit allocation introduced by the government to facilitate the saving mobilization and credit creation process in the banking industry, there are still little to show for it as the level of growth in the economy still retarding, considering the level of credit to private and public sector of the economy. If banks can not grant loans to the deficit economic units within their immediate operational environment, the business sector will not grow, deposit will be limited and this will hinder the ability of the banks to generate income (Govac 2001, Honohan 1997)

The objective of this paper therefore, is to investigate the implications of credit creation by banks on the economic growth of Nigeria considering the widely acclaimed achievement of Deposit Money Banks, Bank of

industry and other credit agencies of government in the development of Nigeria economy.

Empirical Literature

Banking is strategic to the economic development of any nation and it underscores the rate of growth of all other sectors of the economy. Bola Ajibola (1990) observed that: “The banks without exaggeration constitute the hub on which our economic wheels rotate. Any defect in the hub renders the wheel wobbly while Hamilton (1781) argued that banks were the happiest engines that were ever invented for spurring economic growth. In the same direction, Oluwole Akanle held the view that the banking industry constitutes one of the pillars on which the economy of any nation can be erected ... the grease that lubricates the economic machine of any nation... when the banking industry sneezes, the entire economy catches cold.

The Nigerian financial system is firmly rooted to the banking sector and since 1892 when the African Banking Corporation opened up banking practices in Nigeria, the sector has withered series of storms and challenges to date. According to Somoye (2008), the development of banking activities in Nigeria can be classified into five stages, the era of free banking, the regulated era, deregulated banking era, consolidated banking and post consolidated era.

These eras had their prospects and challenges on the economy. The banking system undergone various amendments starting with the Banking Ordinance of 1952 which was replaced with Banking Decree of 1969. In 1986 Structural Adjustment Programme (SAP) was introduced thereby deregulating the banking sector. The deregulation led to upsurge in the number of banks from 55 to 125 with 275 branches of Peoples banks and over 1000 Community banks (CBN 1998). In the process, Banks and Other Financial Institution Act of 1991 was promulgated while a major reform was embarked upon by CBN in 2004 outlining a 13 point agenda with the objective of consolidating the banks in Nigeria. The outlines varied from raising the minimum shareholder capital of all banks from N2billion to N25billion which resulted into reducing the number of banks from 89 to 25 banks after consolidation.

The aftermath of the deregulation led to CBN establishing Assets Management Corporation of Nigeria in 2011 to acquire 1.7 trillion naira non performing assets of some Nigerian banks and a further review of the banking from universal banking introduced in 2001 to focus more on core banking business (Sanusi 2012)

The impact of the various deregulations no doubt have exposed banking in Nigeria to the international world and compliance, and since the purpose of strengthen the banking sector is developing of economic activities, there is need to examine the implication of the bank roles which is intermediation on economic growth of the country.

Credit creation is a mechanism through which banks make fund available to production sectors for the expansion of their business and by extension increases the level of economic growth.

Akano and Kazeem (2014) in their study of the impact of total bank credit on economic growth of Nigeria using ordinary least square technique and co-integration, revealed that total bank credit and inflation rate have a significant relationship with economic growth with inflation rate having a negative relationship and total bank credit having a positive relationship.

Ibrahim, Akano and Kazeem (2015) investigate the extent to which banks credit stimulate economic growth. They used Augment Dickey Fuller (ADF) and co-integration to analyze data spanning 1990-2013 and found that credit to both private and public sector have positive significant effect on GDP and inflation rate has a negative significant relationship with economic growth.

Ekpeyong and Ikechukwu (2011) investigate the contribution of banks in Nigeria to the growth of the economy using banks savings mobilization, credit to the real sector and GDP. The outcome of their result shows that between 1980 – 2008, banks contribution to the nations economic growth was insignificant. This points to the fact that improvement in education, power supply, political stability, human resource and other social infrastructure may be playing more important roles in growing the Nigeria economy.

Sebastian (2009) in his study of banking system credits to the domestic economy and national development adopted OLS time series in his analysis found that demand deposit liabilities had the most positive significant influence on direct banks credit allocations in Nigeria which other variables adopted such as balances with Central Bank of Nigeria, Maximum Lending Rate, bank investments in government securities shows negative influence on commercial banks credit to the domestic economy.

Shittu, (2012) in his study of financial intermediation and economic growth in Nigeria used adopted unit root test, error correction model and co-integration to analyze time series data from 1970 to 2010 and found that financial intermediation has a significant impact on economic growth in Nigeria.

Nwaeze, Michael and Nwabekee (2014) observed that credit exert a positive and significant impact on Nigeria’s economic growth in his study of financial intermediation and economic growth in Nigeria using ordinary least square regression technique to analyze the adopted variables.

Andrew and Osuji (2013) in their study of empirical analysis of trends in financial intermediation and output in Nigeria using regression estimation of data, found that there is a significant relationship between

financial intermediation and output in Nigeria and suggested that strategy adopted for the allocation of resources in form of credit facilities must be reviewed because lopsided distribution of banking credit to favour households in the economy do not influence gross domestic product as other factors of production do.

Aurangzed (2012) empirically investigates the banking sector contribution to economic growth in Pakistan by using data spanning 1981 to 2010 and 10 banks. The adopted variables have significant positive impact on economic growth of Pakistan. The unit root test confirms the stationary of all variables at first difference and therefore recommended that the policy makers should make policy to enhance the banking sector in Pakistan because banking sector is significantly contributing the economic growth in Pakistan.

Egbetunde (2012) assesses the relationship between commercial bank credit indicators and rural economic growth in Nigeria. The adopted data for the variables covered 1982 to 2009 were analyzed using co-integration. The result showed that commercial bank credit indicators and rural economic growth indicator are co-integrated. He recommended that the monetary authority in Nigeria should task the commercial banks to concentrate the resources of the rural areas in their domain in order to improve economic activities of the sector of the economy amongst others.

Model Specification

This model is designed to capture the research objective of the paper. This research work adopted a multiple regression model using ordinary least square (OLS) estimation and co-integration.

The model for the study is specified below:

$$GDP = F (PRIVCRT, PUBCRT, INTRT, INF).....(1)$$

Econometric transformation of (1)

$$GDP = \beta_0 + \beta_1 \log PRIVCRT + \beta_2 \log PUBCRT + \beta_3 \log INTRT + \beta_4 \log INF + \mu.....(2)$$

Taking the log transformation of equation (2) above we have:

$$\log GDP = \beta_0 + \beta_1 \log PRIVCRT + \beta_2 \log PUBCRT + \beta_3 \log INTRT + \beta_4 \log INF + \mu.....(3)$$

Where:

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ are parameters to be estimated

PRIVCRT = credit to private sector

PUBCRY = Credit to public sector

INTRT = Interest rate

INF = Inflation.

Analysis of Results

Descriptive Statistics of the Variables of the Model

The researcher computed the average value, standard deviation, values of skewness, and kurtosis including the Jarque-Bera statistics for the variables of the model. The computed values of these statistics are reported in Table 1 below:

Table 1: Result of Descriptive Statistics of the Variables

	LOGGDP	LOGPRIVCRT	LOGPUBCRT	LOGINTRT	LOGINF
Mean	8.497097	6.364516	6.506452	2.459355	2.621935
Median	8.810000	6.270000	6.800000	2.470000	2.440000
Maximum	11.450000	9.830000	9.090000	3.330000	4.290000
Minimum	4.900000	2.570000	3.330000	1.750000	1.690000
Std. Dev.	2.043584	2.363692	1.765530	0.398714	0.740529
Skewness	-0.256171	-0.028228	-0.363263	0.248687	0.936419
Kurtosis	1.953701	1.740239	2.089047	2.414131	2.690296
Jarque-Bera	1.753096	2.053989	1.753664	0.762888	4.654446
Probability	0.416217	0.358082	0.416099	0.682875	0.097566
Sum	263.4100	197.3000	201.7000	76.24000	81.28000
Sum Sq. Dev.	125.2870	167.6112	93.51291	4.769187	16.45148
Observations	31	31	31	31	31

Source: E-view Result

From Table 1, the mean and standard deviation of the variables respectively are approximately: GDP (8.50, 2.04), PRIVCRT (6.37, 2.36), PUBCRT (6.51, 1.77), INTRT (2.46, 0.40) and INF (2.62, 0.74). The mean values of the variables reveal that they all have positive averages over the study period, and the standard

deviation shows volatile GDP, PRIVCRT and PUBCRT. On the average, the GDP of approximate 8.50 is high with deviation of 2.04. The variables are negatively skewed except for INTRT and INF based on the descriptive analysis. Jarqua-Bera test accept the normality of the variables at 5% level since their values (1.75, 2.05, 1.75, 0.76 & 4.65) being lower than the X^2 value of 26.509 at 5% level. The variables suggest normality. The results are as depicted by skewness and kurtosis of the data.

Correlation Analysis of the Variables

Correlation matrix between independent variables is represented in Table 2:

Table 2: Correlation Matrix between the Variables

	LOGGDP	LOGPRIVCRT	LOGPUBCRT	LOGINTRT	LOGINF
LOGGDP	1.0000				
LOGPRIVCRT	0.9896	1.0000			
LOGPUBCRT	0.9938	0.9843	1.0000		
LOGINTRT	-0.6619	-0.6638	-0.6273	1.0000	
LOGINF	-0.2509	-0.2765	-0.2189	0.5366	1.0000

Source: E-view Result

As seen in Table 2, there are high data correlations among the variables. These high pair-wise correlation coefficients show the presence of multicollinearity among the variables. This implies the presence of a perfect or exact linear relationship among all the variables of the regression model.

Presentation of Regression Results

The regression result on the implication of credit creation of bank on economic growth of Nigeria is presented below:

Table 3: Regression Analysis

Dependent Variable: LOGGDP

Method: Least Squares

Date: 02/28/17 Time: 11:10

Sample: 1985 2015

Included observations: 31

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGPRIVCRT	0.267501	0.089671	2.983154	0.0061
LOGPUBCRT	0.768440	0.116254	6.609999	0.0000
LOGINTRT	-0.210657	0.132641	-1.588174	0.1243
LOGINF	0.005446	0.057390	0.094902	0.9251
C	2.298561	0.406752	5.651012	0.0000
R-squared	0.992630	Mean dependent var		8.497097
Adjusted R-squared	0.991496	S.D. dependent var		2.043584
S.E. of regression	0.188450	Akaike info criterion		-0.353273
Sum squared resid	0.923353	Schwarz criterion		-0.121985
Log likelihood	10.47573	Hannan-Quinn criter.		-0.277879
F-statistic	875.4655	Durbin-Watson stat		1.419300
Prob(F-statistic)	0.000000			

Source: Eview Result output

Table 3 shows the regression result of the research study. However, the significant high value of R^2 which is approximately 99.26% explains the true behaviour of the independent variables (PRIVCRT, PUBCRT, INTRT & INF) while 0.74% explains the disturbance error term in the model. The adjusted R^2 of approximately 99.15% explains the true behaviour of the R^2 . Hence, the model shows a good fit.

Based on the t-statistic test, it is revealed that only the calculated value of PRIVCRT and PUBCRT (2.98 & 6.61) as variable against it p-value (0.01 & 0.00) is lesser than the test of significance at 5%. This revealed the significant effect of credit to private and public sector on the economic growth of Nigeria within the period considered.

The overall test of statistic, the F-statistic, revealed that the p-value (0.00) of the calculated F-statistic (875.47) is lesser than the test of significance at 5%; we therefore reject the null hypothesis and conclude that there is significant implication of credit creation of bank on economic growth of Nigeria within the period considered.

Unit Root Tests Result: The Analysis

Table 4: Augmented Dickey-Fuller unit root test for the variables

Variables	ADF	5%	Differencing	LAGS
logGDP	5.3855	2.9678	1 st	2
logPRIVCRT	4.2973	2.9678	1 st	2
logPUBCRT	4.2568	2.9678	1 st	2
logINTRT	6.5686	2.9678	1 st	2
logINF	5.1714	2.9719	1 st	2

Source: Author computation from Eviews 7

Table 4 shows the Augmented Dickey-Fuller unit root test for the variables so as to verify if the variables are stationary or not. The findings of the results revealed that variables are stationary and does not have a unit root problem at 5%, first differencing and at lag 2 within the period considered.

Analysis of Co-integration Test Results

Table 5: Johansen's Multivariate Co-integration test

Hypothesized No. of CE(s)	Eigen-value	Trace Statistic	0.05 Critical Value	Prob.**	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None*	0.7583	108.1152	69.8189	0.0000	41.1785**	33.8769	0.0057
At Most 1*	0.6655	66.9367	47.8561	0.0003	31.7583**	27.5843	0.0137
At Most 2*	0.4829	35.1783	29.7971	0.0109	19.1283	21.1316	0.0932
At Most 3*	0.3667	16.0501	15.4947	0.0412	13.2487	14.2646	0.0719
At Most 4	0.0921	2.8014	3.8415	0.0942	2.8014	3.8415	0.0942

Source: Author computation from Eviews 7

The Table 5 shows the Johansen's Multivariate Co-integration test of the variables used in this research study. Details of the result are shown in the appendices section. Based on the hypothesized number of co-integrated equation(s), it is revealed that both the Trace and Max-Eigen statistic test has four and two co-integrating equation because their p-value is lesser than the test of significance at 5%; we therefore reject the null hypothesis and conclude that there is four and two co-integrating equation between the variables.

The Dynamic Analysis of Result

The findings revealed that the variables used in the research study are not spurious. The Augmented Dickey-Fuller unit root test and co-integration test was employed despite non-spuriousity of the variables. At first differences and lag 2, it is revealed that the variables are stationary and does not have a unit root problem. The co-integration test revealed five co-integrating equations among the variables. The dynamic effect of this is that the variables have a long and short run relationship.

Policy Implication of Results

The coefficient of the variables is positively signed except for INTRT. Only PRIVCRT and PUBCRT have a significant effect to the research study in a positive direction. As credit to private and public sector increases, it affects the interest rate negatively through an inflationary effect of approximately 0.55% on the economic growth of Nigeria.

Conclusion

The efficient performance of any economy is based on the effective transformation of the savings of individuals and business (surplus) sector into investments (deficit) increase in savings will support capital accumulation necessitating credit. The more the diversity of financial instruments are used in an economy the better its growth.

Arising from the regression result of the research study it was found that the credit to private sector has positively significant relationship with the economy growth and for every increase in credit to private sector will have relative nominal positive GDP. The likely reason which will not be far from the fact that privately owned business main objective is profit, thereby ensuring adequate utilization of any credit granted and by extension to increase the Gross Domestic Product.

There also exist a positive relationship between credit to public sector and the Nigeria economic growth thought not significant as neither increase nor decrease in the public sector will have effect on economic growth of Nigeria.

In conclusion, the relationship between interest rate inflation and economic growth are independently negative as long as rates are going higher. The economic growth will respond to the division of inflation and interest rates. In other words the higher the inflation and or interest rates the lower the economic growth and

other way round.

Recommendation:- Knowing fully the relevance of credit creation by banks on the economic growth of nations and that banks in Nigeria exhibit low level of activities in this area as a result of many factors which incapacitates the delivering of funds to the Nigeria economy, this study recommends the following:

- The banking sector should be strengthened to encourage savings mobilization of getting cash as much as possible into the system to generate necessary loanable funding to the production sector of the economy.
- The regulatory authorities should endeavor to monitor the fiscal and monetary policies and review them as necessary towards attaining the set objectives.
- Inflation and interest rate are important factors in the growth of any economy, government should be proactive in keeping inflation rate at a low ebb to avoid their negative impact on credit allocation to either the public or private sector.
- And lastly, banks should ensure that exposures to both private and public sector are applied for their purposes to avoid misappropriation and diversion of funds.

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