Full Length Research Paper

Commercial Bank Credit and Sectoral Growth in Sub-Saharan Africa: Evidence from Nigeria

Ajibola Joseph Olusegun[1], Ishola Rufus Akintoye[2], Samuel Olajide Dada[3],

[1]Babcock Business School, Babcock University, Ilishan-Remo, Ogun State, Nigeria, West-Africa
joeoluajibola@yahoo.co.uk
[2]Babcock Business School, Babcock University, Ilishan-Remo, Ogun State, Nigeria, West-Africa
Irakintoye@yahoo.com
[3]Babcock Business School, Babcock University, Ilishan-Remo, Ogun State, Nigeria, West-Africa
erinpe@yahoo.com

This paper reviewed the impact of commercial bank lending on Nigeria's aggregate economic growth for the period 1970-2011. It also reviewed the impact of commercial bank credit on the growth of Services and 'Others' sectors, their sub-sectors of transport/communication and public utilities; government and personal/professionals respectively for the same period. The paper relied on the official sectoral classification by the Central Bank of Nigeria and National Bureau of Statistics. Non-oil GDP was adopted as a measure of both the aggregate and sectoral economic growth. The research work borrowed from the theoretical underpinning of the role of commercial bank lending in economic growth based on the combination of the quantity theory of money and aggregate production function. A regression analysis was undertaken with a model that related the non-oil GDP as dependent variable to commercial bank credit for current and one year lagged period as the independent variables. The linear regression model showed that the previous year's loans and advances to services sector had more positive impact on economic growth compared with the current year's loans and advances. The results show that both previous and current year's credit to 'others' sector had inverse relationship with economic growth. In terms of the sub-sectors, the previous year's credit to public utilities and transport/telecommunications sub-sectors showed positive contributions to economic growth while the impact of that of current year was negative. From the results therefore, banks need to monitor more closely their lending to these two sectors of the economy who deal on intangibles. Monetary authorities also need to ensure tight regulations on lending to the sectors to enable them play their roles of providing ancillary services to the real sectors of the economy which ordinarily should be the drivers of the economy.

Keywords – *Economic Growth, Non-oil GDP, Services Sector , Commercial Bank, Credit*

INTRODUCTION

(Melanie, 2004) alluded to the salutary impact of a well functioning financial system on the growth and development of an economy. In performing the important role of financial intermediation, banks move loanable funds from surplus units to deficit units and also support the economy by serving the credit needs of their

customers and providing a safe place for the cash balances of individuals (Ebhodagbe, 1990). Commercial banks the world over, are established to mobilize and channel financial resources into appropriate areas of need for economic growth and national development. (United Nations Report, 1977).

In the Keynesian determination of equilibrium level of output, it is shown that an increase (decrease) in investment or expenditure (private or government) give rise to multiple increase (decrease) in output. The increase in output is a measure of economic growth. Thus, Keynes multiplier effect in terms of increases in investment or expenditure may bring about economic growth. Viewing this same issue, Kuznets (1974) defined economic growth of a nation as:

A long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands.

He summarised the features of modern economic growth in terms of inter-sectoral structural shifts whereby there will be a shift from agricultural to non-agricultural activities, a shift from industry to services; a shift away from small family and personal enterprises to the impersonal organisation of large-scale national and transnational productive units.

The controversial issue in economic literature is the link between the real and financial sectors of the economy. Following from this is the debate over the relationship between the financial system and economic growth in general and between commercial bank lending and economic growth in particular. This research is intended to contribute to the limited empirical studies in this area by ascertaining the causal relationship between commercial bank lending and economic growth in Nigeria. It is pertinent therefore to attempt to answer the following research questions:

(1) What is the impact of commercial banks' credit on economic growth in Nigeria?
(2) What is the impact of commercial bank lending on services and others sectors?
(3) What is the impact of distribution of commercial banks' credit to transportation/communication and public utilities sub-sectors on economic growth in Nigeria?

This study differed from the previous ones in many respects. Much emphasis has been devoted to the nexus between aggregate credit and real GDP in the previous works. This study deviated from this pattern in two ways.

- Emphasis was on non-oil GDP; hence the focus is on the impact of credit on the growth of the non-oil real sectors of the Nigerian economy.
- While still measuring the impact of aggregate credit on the overall economic growth, much emphasis was placed on the effect of sectoral
- credit on the growth of the various sectors of the Nigerian economy.

Commercial bank credit has been very popular

amongst Nigerian investors and this is why it is necessary to examine the impact of commercial bank credit policies and credit aggregates in Nigeria on economic growth over the years 1970 - 2011. This time frame of 42years is considered adequate to statistically analyse the effects of credit policies and credit aggregates of Commercial Banks on economic growth of the Nigerian economy. The year 1970 is chosen as the base year for this study since it is a landmark for the take-off of Nigeria's modern history of quantitative and qualitative monetary control. This was initiated by the Central Bank of Nigeria (CBN) in 1969, when it introduced new monetary policies meant to control sectoral distribution of credit.

This paper is subsequently divided into Literature Review, Methodology, Data Analysis and Interpretation, Summary of Findings and Recommendations.

Theoretical and Empirical Review

The theoretical development in the study of economic growth has moved with the times, moving from the physiocrats analysis of growth by natural law to the classicalists' value-theory and then to the neo-classical marginal analysis. Today, economic growth theories are caught within the unnatural web of the seventeenth and nineteenth-century liberal philosophy and the twentieth-century mathematical techniques. Within this web are two basic modern approaches to the study of growth.

The first approach is that theory which follows the neo-classical line of argument. These are referred to as the neo-classical growth theories. These are exemplified in general equilibrium theory of Walras (1954), Solow (1956), and others. In recent times, this approach has also borrowed from the works of Harrod (1934 a,b, 1939) and Domar (1947).

The second basic approach to the study of economic growth is the post-keynesian approach. This derives primarily from the works of Keynes (1936) and Kalechi (1939). The works of Harrod (1939), which provide the initial stimulus for the rebirth of interest in growth theory and those of Robinson (1956, 1962 and 1971); Kaln (1959 and 1972) represents Post-Keynesian theories. The remarkable characteristics of the neo-classical growth analysis are the dynamic and the long-run nature of study tools whereas the Post-Keynesian analysis is devoted to the short-run tools, stationary states and fixed coefficients.

Neo-Classical Growth Model:The Simple Malleable Capital Model:

The malleable capital model of the neo-classical as seen in the works of Solow (1956, 1962 and 1970), Swan (1956), Sen (1970) and others, assume factor

substitution along a production function in reworking Harrod's fundamental relation for growth. Solow's model is briefly presented below:

The technological possibilities can be represented by a standard production function:

Y   =   f(K,L)w

where

Y = Output: the only one commodity of the system

K = Capital

L = Labour

The Case of Cobb-Douglas Function:

The Cobb-Douglas function can be represented as:

$Y = K^a L^{1-a}$ ………………………………..

Or

$Y = K^a L^b$

Where Y = Output

K = Capital

b= (1-a)

a and (1-a) are elasticities

Recent Development in Growth Analysis

Recent researches and empirical works in the last two decades have given rise to some growth analysis, which is referred to as endogenous growth models. This new growth theory was developed in the 1980's as a response to criticism of the neo-classical growth model.   The endogenous growth theory holds that policy measures can have an impact on the long run growth rate of an economy.   The models show that growth is better generated endogenously as against the neo-classical's exposition of exogenously generated growth.   The Theory also tries to overcome the shortcomings of the neo-classical model by building macro-economic models out of microeconomic foundations. Of significance are production of new technologies and human capital. Growth can be explained through constant return to scale production function (the AK Model) or some more complicated set ups with spillover effects, increasing number of goods, etc.

    There is a growing support for the propositions that financial institutions in general and commercial banks in particular, contribute significantly to economic growth and development.

    Levine 2009) argues that the critical issue especially in developing countries is what the financial system does and what services it provides to the rest of the economy and not the size of banks, financial institutions or securities markets in those countries. He posits that the appropriate policy goal should be to construct laws, regulations and institutions that create a healthy environment in which financial institutions compete to provide the most useful credit, risk and liquidity services to the real sector of the economy.

    Cole (1995) and Ariff andKhalid (2000) have indicated

that the financial reforms in Malaysia have been relatively successful and have resulted in economic growth. This is supported by the findings of Jalilian and Kirkpatrick 2005; Kunbhakar and Maurotas 2008,Mavrotas and Son (2006) etc. The estimation results of the various works confirm that the effect of financial sector development in developing countries is more persistent and larger than those in developed countries.

    Thoma (2009) agrees that while developing countries needs small banks and even microfinance to meet basic financial needs there is far more need for sophisticated financial products and services to among others purchase farm equipment through pooling arrangements and manage seasonality problems.Haber (2004) expresses the fear that greater financial development may only succeed in channeling more capital to a select few. But Greenwood and Jovanoic (1990) had posited that at early stages of financial development, only a few relatively wealthy individuals have access to financial markets and hence higher-return projects with aggregate economic growth, however, more people can afford to join the formal financial system with positive ramifications on economic growth.Fields (2001) argues that much would be gained by developing credit and finance markets since an underdeveloped credit market contributes to continued poverty, higher income inequality and slower economic growth. Through better access to credit, the poor are given the opportunity to participate in more productive endeavours. According to Somoye and Ilo (2009) in 2004 Micco and Panizza measured lending behaviour as the growth rate of loans by banks in some selected countries. They found that loan growth is indeed correlated with macroeconomic shocks as measured by GDP growth.

METHODOLOGY

The production function of the Cobb - Douglas form is adopted with some modification based on recent empirical studies.

The adopted Cobb- Douglas function is:

$Y_{(t)} = A_{(t)} L^{\alpha}_{(t)} K^{\beta}_{(t)}$ ……………………………….. (3.1)

Where

Y =   output

$A_{(t)}$ = rate of technical progress.

L =   Labour

K =   Capital

t =   time; and

α and β are elasticities of output with respect to Capital and Labour.

To linearise equation (3.1),the logarithm is as follows:

$L_{(n)} Y_{(t)} = L_n A_{(t)} + \alpha L_n L_{(t)} + \beta L_n K_{(t)}$ …………….. (3.2)

Then the relative growth of output becomes:

$*Y_{(t)} = A_{(t)} + \alpha L_{(t)} + \beta K_{(t)}$

Where,

$$dL_nY_{(t)} = \frac{*Y_{(t)}}{dt} \qquad Y^1_{(t)} = \frac{Y^1_{(t)}}{Y_{(t)}} \qquad \dots \dots \text{(3.3)}$$

$$\frac{A^1_{(t)}}{A_{(t)}} = A_{(t)} \qquad \dots \dots \dots \text{(3.4)}$$

$$\frac{L^1_{(t)} =}{L_{(t)}} \qquad A_{(t)} \dots \dots \dots \text{(3.5)}$$

$$\frac{K^1_{(t)} =}{L_{(t)}} \qquad L_{(t)} \dots \dots \dots \text{(3.6)}$$

$$\frac{K^1_{(t)} =}{K_{(t)}} \qquad K_{(t)} \dots \dots \dots \text{(3.7)}$$

Let the relative rates of change of the variables obtained in equation (3.4 – 3.7) be represented as Y_r, A_r, L_r, and K_r and then substituted into equation (3.2) to obtain:

$$Y_r = A_r + \alpha L_r + \beta K_r \dots \dots \dots \text{(3.8)}$$

Equation (3.8) can be written as:

$$Y_r = A_r + \alpha L_r + \beta K_r + e \dots \dots \dots \text{(3.9)}$$

A_r, α, β, > 0

Where

Y_r	=	relative rate of growth of output
A_r	=	rate of technical progress
α	=	elasticity of output with respect to labour
β	=	elasticity of output with respect to capital
L_r	=	relative growth rate of labour
K_r	=	relative growth rate of capital
e	=	error term

Although the conditions of constant returns to scale (if $\alpha + \beta = 1$) was assumed in equation (3.1) and hence holds for equation (3.8), we further assume that increasing returns to scale (if $\alpha + \beta > 1$) and decreasing returns to scale (if $\alpha + \beta < 1$) could also hold for the model represented by the equation (3.8). This is to enable equation (3.8) accommodate the real life situation where ($\alpha + \beta$) may not necessarily be equal to one. There is a very high tendency for the sum of the output elasticities ($\alpha + \beta$) in Nigeria to be less than 1.

Model I

Economy Model:

With slight modification of equation (3.9), the model for this study is stated as follows:

$$Y_r = \alpha_1 + \alpha_2 L_r + \alpha_3 B_r + \alpha_4 B_{r-1} + e_1 \dots \dots \dots \text{(3.10a)}$$

where ;

Y_r	=	relative growth rate of output
α_1	=	A_r = rate of technical progress
α_2	=	elasticity of output with respect to labour
α_3	=	elasticity of output with respect to capital

(represented by commercial banks' credit)

L_r	=	relative growth rate of labour
B_r	=	the relative growth rate of commercial banks' credit which is taken as a proxy for capital.

$$\frac{B^1_{(t)}}{B_{(t)}} = B_r$$

B_{r-1}	=	one lag of the growth rate of Commercial banks' credit
α_4	=	elasticity of output with respect to one lag of the growth in Commercial banks' credit.
e_1	=	error term

In equation (3.10a), bank credit (implying commercial bank loans and advances) is used as a proxy for capital. The equation suggests that the growth in output is a function of growth in labour, current bank credit and previous bank credit of one lagged period.

Model II

Sectoral Models:

Two major sectors are identified as recipients of commercial banks' credit, namely services and others. The independent variables in these sectors respectively are:

B_{sr}	=	relative growth rate of CBC in services sector.
B_{or}	=	relative growth rate of CBC in 'others' sector.

Thus, the following equations are specified:

$$Y_r = f_1 + f_2 L_r + f_3 B_{sr} + f_4 B_{sr-1} + e_5 \dots \dots \dots \text{(3.10b)}$$

$$Y_r = g_1 + g_2 L_r + g_3 B_{or} + g_4 B_{or-1} + e_6 \dots \dots \dots \text{(3.10c)}$$

Model III

The two major sectors identified for this study are made up of sub-sectors which are included in the distribution of Commercial banks' credit.
The sub-sectors of services sector are:
(a)   Public utilities;
(b)   Transport and communications;
(c)   Credit and financial institutions.
The sub-sectors of the fourth sector 'others' are:
(a)   Government:
(b)   Personal and professional; and
(c)   Miscellaneous.

Sub-Sectoral Models

In each of the two main sectors two sub-sectors are adopted for analysis. This sub-division of the sectors is to enable a more detailed investigation of the impact of commercial bank credits on economic growth in Nigeria, so as to have better understanding about the impact. The sub-sectors are for services: **public utilities and 'transport and communications'**; for others: **government and 'personal and professional'**. The equations estimated follow the same pattern as in the sectoral analysis.

So the following equations are estimated in this regard:

$Y_r = q_1+q_2L_r+q_3B_{slr}+q_4B_{slr-1}+e_{11}$ ……………..... (3.10d)
$Y_r = t_1+t_2L_r+t_3B_{s2r}+t_4B_{s2r-1}+e_{12}$ ……………… (3.10e)
$Y_r = w_1+w_2L_r+w_3B_{olr}+w_4B_{olr-1}+e_{13}$ …………… (3.10f)
$Y_r = x_1 + x_2L_r +x_{3o2r}+x_4B_{o2r-1}+e_{14}$ …………… (3.10g)

DATA PRESENTATION AND STATISTICAL ANALYSIS

Table 1 has fifteen columns. Columns (1) and (2) show the model and equation to be estimated, Column (3) shows the method of estimation 4, 5, 6, 7 and 8 shown the dependent variable (growth in output Y_r), the intercept, and three reggressors respectively. Columns 9, 10, 11 and 12, indicate the goodness of fit measures namely R^2, F-statistics, Durbin Watson statistics (DW) and Schwarz Bayesian Criterion. Columns 13, 14 and 15 show the F-version diagnostic tests viz, Serial Correlation, Ramsey's Reset and Heteroscedasticity tests. t –ratios are reported in parentheses under the estimates.

Sources of Data

The data used for this research work were sourced as follows:

Commercial Bank Credit (CBC) from the Central Bank of Nigeria (CBN) and the annual reports of commercial banks

Non-Oil GDP: from the Federal Office of Statistics (now National Bureau of Statistics)

Available figures showed meteoric rise in both the non-oil GDP and both the aggregate and sectoral commercial bank credit over the years

Non-oil GDP rose from N3748million in 1970 to N296329million in 2007 and N37543654million in 2011

The sectoral non-oil GDP for Services was N150miillion in 1970, N2051231million in 2007 and N3160245 in 2011

Sectoral contribution by 'Others' to the GDP was N244million in 2007, N3055893million in 2007 and N686158mill in 2011

Aggregate CBC to the economy was N857million in 1970, N4813488million in 2007 and N7312726million in 2011

For Services sector, it was N22million in 1970, N85040million in 2007 and N2069659million in 2011

For 'Others' sector, it was N46million in 1970, N44012million in 2007 and N1325447million in 2011

Model 1

The results for the economy are as reflected in equation 3.10a as follows:

$Y_t = 1.7244 + 0.1007L_r − 0.0011B_r + 0.0021B_{r-l}$ ... (3.10a)

(1.7475) (0.3541) (-0.1099) (0.2744)
$R^2 = 0.0104$; $F(3,21) = 0.7335$

The above results revealed that CBC had more positive impact on economic growth in one year lagged period than current year. This could be attributable to the required gestation period for commercial bank loans to have the desired impact on the economy. The R^2 and F-Statistic confirm the possible correlation between the variable though their low values indicated the need for more explanatory variables to be introduced into the model.

Model II

Equations 10b and c are the sectoral results for Services and 'Others' Sectors respectively

$Y_r = 1.7446 + 0.0971L_r + 0.0448B_{sr} + 0.0387B_{sr-1}$……… (3.10b)

(1.9767) (0.3248) (-06249) (0.5838)
$\overline{R}^2 = 0.0316$; $F(3.21) = 0.2282$

$Y_r = 0.7506 + 0.5476L_r − 0.0749B_{or} − 0.0089B_{or-1}$…………….. (3.10c)

(0.5628)(1.0294) (-0.19608)(-0.2022)……
$\overline{R}^2 = 0.0502$; $F(3.21) = 0.3701$

The values in parenthesis are the t^* values.

The results revealed that the previous year's credit facilities to the services sector had less positive contribution towards economic growth compared to the current year's loans and advances.. This is quite explainable because most economic transactions in the services sector are short term in duration without any gestation period. Equation 3.10(c) indicates that both current year and previous year's loans and advances to the 'others' sector were inversely related to the growth rate of the economy. Their separate impacts on the economy were not so significant at 10 percent levels of significance. Their co-efficient of multiple determination (R^2) was very low and likewise the F-statistics.

Model III

The results of equation 3.10(d) and 3.10(e) shown below

Table 1. Nigerian Growth Factors (1970-2007) Regression Results

Model	Equation	Methods of Estimation	Dependent Variable	Constant	Independent Variable			Goodness of Fit				Diagnostic Tests F-Version		
(a) model I								R^2	F-Stat	DW	Schwarz Bayesian Criterion SBC	Serial Correction	Ramsey's Reset Test (14)	HeterosceDasticity
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		(15)
Result for Economy	3.10a	OLS	Y_r	a_1	L_r	B_r	B_{r-1}							
				1.7244	0.1007	-0.0011	0.0021	0.0104	F(3,21) 0.7335	1.7446	-52.5387	F(1,20) 0.2640	F(1,20) 2.2004	F(1,23) 0.0096
		t-ratio		(1.7475)	(0.3541)	(-0.1099)	(0.2244)							
	3.10b	0LS	Yr	f_1	Lr	Bsr	Bsr-1							
				1.7446	0.0971	0.0448	0.0387	0.0316	F(3,21) 0.2282	1.7156	-52.2681	F(1,20) 0.2836	F(1,20) 1.7772	F(1,20) 1.0976
				(1.9767)	(0.3248)	-0.6249	(0.5838)							
	3.10c	OLS	Yt	Gt	Lr	Ďor	Bor-l							
				0.7506	0.5476	-0.0749	-0.0089	0.0502	F(3,21) 0.3701	1.7986	-52.0808	F(1,20) 0.1868	F(1,20) 0.5665	F(1,23) 0.0348
		t-ratio		(0.5628)	(1.0294)	(-0.608)	(-0.2022)							
	3.10d	OLS	Yr	q1	Lr	Bs1r	Bs1r-1							
				1.4834	0.1059	-0.0016	0.0389	0.1517	1.1923	1.4490	-48.934	F(1,19) 1.1657	F(1,19) 0.5466	F(1,22) 2.3270
		t-ratio		(1.7529)	(0.3762)	(-0.715)	(1.7311)							
		Cochrane Orcutt AR(l)3 Interaction		1.5133	0.1570	-0.0328	0.0193	0.2466	F(3,20) 1.4728	2.1328	-46.9788			
		t-ratio		(1.7992)	(0.6257)	(-1.1363)	(0.7691)							
	3.10e	OLS	Yr	t1	Lr	Bs2r	Bs2r-1							
				2.0503	-0.1642	-0.0106	0.1351	0.1255	F(3,20) 0.9567	1.4533	-49.3486	F(1,19) 1.3521	F(1,19) 2.5072	F(1,22) 0.2417
		t-ratio		(2.3089)	(-0.4967)	(-0.1635)	(1.6084)							

rane Orcutt AR(l)3 Interaction			2.1602	-0.2433	-0.0102	-0.1413	0.1561	F(4,18) 0.8325	2.0723	-48.2827			
t-ratio	(2.3502)	(-0.7645)	(-0.1576)	(1.6501)									
3.10f	OLS	Y_r	W_1	L_r	B_{0lr}	B_{0lr-1}							
			1.4418	0.0933	-0.0148	0.0599	0.1776	F(3,20) 1.4390	1.9543	-48.6122	F(1,19) 0.0078	F(1,19) 0.0012	F(1,22) 0.1000
t-ratio			(1.702)	(0.3295)	(-0.2326)	(1.4733)							
3.10g	OLS	Y_r	X_1	L_r	B_{02r}	B_{02r-1}							
			0.5989	0.6184	-0.0544	-0.0186	0.0629	F(3,20) 0.4479	1.7599	-50.1775	F(1,19) 0.1428	F(1,19) 0.1762E^{-3}	F(1,22) 0.1837
t-ratio			(0.4294)	(1.1424)	(-1.0525)	(-0.6274)							

are those of public utilities and transport/communications sub-sector of the 'services' sector respectively. For public utilities, the previous year's loans and advances showed positive (0.0389) and significant contributions to economic growth compared with those of the current year which was negative (-0.0016). Likewise, in transport/communications subsector, the impact of the previous year's loans and advances is 0.1351 as against the current year value of 0.0106 at 10 percent level of significant. Specifically, a N100 million bank loan facility to this sub-sector would worsen the economy by N160,000 and N106,000 respectively in the current year compared to N3.89 million and N13.51 million economic expansion it brought about in the previous year.

$Y_r = 1.4834 + 0.1059L_r - 0.0016B_{slr} + 0.0389B_{slr-1}$
    (1.7529) (0.3762) (-0.715) (1.7311)
………………………… (3.10d)
    $\overline{R}^2 = 0.1517$; $F(3,20) = 1.4728$

$Y_r = 2.0503 - 0.1642L_r - 0.0106B_{s2r} + 0.1351B_{s2r-1}$
    (2.3089) (-0.4967) (-0.1635) (1.6084)
……………………. (3.10e)
    $\overline{R}^2 = 0.1255$; $F(3,20) = 0.9567$
Equations 3.20(a) and 3.21(a) are those of sub-sector denoted 'others' sector.
$Y_r = 1.4418 + 0.0933L_r - 0.0148B_{0lr} + 0.0599_{0lr-1}$
    (1.7020) (0.3295) (-0.2326) (1.4733)
…………………….. (3.10f)
    $\overline{R}^2 = 0.1776$; $F(3,20) = 1.4390$
In specific term, equation 3.10(f) shows that there is a positive correlation between previous year's commercial bank loans and advances and government sub-sector within the period 1970 – 2011 compared with those of the current year which is inversely related. This implies that the bank credit granted to the government sector makes visible positive effects on economic growth at lagged period. The impact is significant at 10 percent level.

$Y_r = 0.5989 + 0.6184L_r - 0.0544B_{02r} - 0.0186B_{02r-1}$
    (0.4294) (1.1424) (-1.0525) (-0.6274)…………………………... (3.10g)
    $\overline{R}^2 = 0.0629$; $F(3,20) = 0.4479$
As shown by equation 3.10(g) both current and lagged period's loans and advances have negative impact on the personal/ professional sub-sector. However, the current year's loans and advances have more negative effects even at 10 percent level of significance on economics growth. By implication, a N100 million loans and advances in the current year will reduce the national output by N5.44 million whereas the effect of the same amount in the prior year is a N1.86 million reduction.

Major Findings

Both the current and previous year's commercial banks' credit had positive impact on economic growth jointly or severally in one sector of the Nigerian economy

a) or the other. Commercial banks' credit to the economy therefore contributed to the economic growth of Nigeria during the review period.

b) The effect of commercial banks' credit on economic growth varied from sector to sector depending on the sector to which the loans and advances were made. The study showed that while the current year's commercial banks' credit was positively related to economic growth in others' sectors, the previous year's commercial banks credit impacted positively and significantly to economic growth in 'services' and 'others' sectors.

Likewise, the sub-sector to which the credit was made determined the extent to which the commercial banks' credit could affect the national economic growth. Of the four sub-sectors that were used for the study (public utilities, transportation, communications, government and personal/professional), the current year's commercial banks' credit had positive and significant effects on economic growth only in communications, and government. The previous year's commercial banks' credit had positive and significant impacts on economic growth in, public utility, transport/communications, government and personal/professional sub-sectors.

c) The study also revealed a functional relationship between commercial banks' sectoral credit and sectoral output growth rate. The relationship in most cases was such that as commercial banks' credit increased, sectoral outputs of services and 'others' sectors also increased.

Recommendations

1. Government should evolve more conducive legal and institutional framework that would encourage banks to lend the more to the various sectors of the economy

2. Banks should be more proactive in their lending behavior to avoid incidences of bad loans especially in their dealings with Services and Others sectors of the economy whose nature of business revolves around intangibility.

3. Policies and programmes that would improve the relevance and contributions of Services and Others sectors of the economy should be put in place by the monetary authorities and government. These two sectors provide the impetus for the real sectors of the economy to function well and need be well nurtured in the overall interest of the economy.

4. Commercial banks should put adequate measures in place to checkmate loan diversions and outright fraud given the fluid nature of the services and 'other' sectors. Indeed, the poor level of contribution of the two sectors could have arisen from credit infractions during the period.

5. Effective credit risk management framework should also be put in place to enhance good corporate governance practices in the area of credit administration and management.

REFERENCES

Adekanye F (1993). The elements of Banking in Nigeria, Graham, Burn: Bedfordshire.

Ariff M, and Khalid MA (2000). *Liberalisation, Growth and the Asian Financial Crisis: Lessons for Developing and Transitional Economies in Asia*. Edward Edgar

Cameron R, and Patrick A (1967). Banking and Development: Some Lessons from History,New York: OxfordUniversity Press.

Central Bank of Nigeria, (1958). Central Bank of Nigeria Acts, Lagos: CBN.

Central Bank of Nigeria, (2003). The Bullion, Vol. 27 No. 3; July/September.

Central Bank of Nigeria, (1985). Monetary Policy Circular for the 1985, 1987, 1988 Fiscal Year, Lagos: Central Bank of Nigeria.

Central Bank of Nigeria, (1990). Prudential Guidelines for Licensed Banks,Lagos: CBN.

Central Bank of Nigeria, (1989, 1993). Monetary and Credit Policy Guidelines for 1993 Fiscal Years,Lagos: Central Bank of Nigeria.

Central Bank of Nigeria, (1996). Statistical Bulletin, Dec. Issues, Lagos: CBN.

Central Bank of Nigeria, (1996). Monetary Policy Circular for the 1994, 1995 and 1996 Fiscal Years, Lagos: Central Bank of Nigeria.

Central Bank of Nigeria, (2006). Monetary Policy Circular for the 2004, 2005 and 2006 Fiscal Years, Abuja: Central Bank of Nigeria.

Central Bank of Nigeria, (2011), Statistical Bulletin, Volume 22, Dec. Issues, Abuja: CBN

Cole DC (1995). The Financial Sector Development in Southeast Asia. In *Financial Sector Development in Asia,* edited by Shadid N. Zahid: Asia Development Bank

Domar E (1947). "Expansion and Employment" American Economic Review, 37, March, pp. 34-35

Ebodaghe JU (1990). "The Nigeria Banks and Nigerian Deposit Insurance Corporation" Bullion Vol. 14, No. 3, 35-41.

Federal Government of Nigeria, (1991), "The Banking Decree" The Laws of the Federal

Republic of Nigeria, Decree No. 24, Central Bank of Nigeria Decree and Decree No. 25, Banks and other Financial Institutions Decree, Lagos: Government Press.

Habber SH (2004), Mexico's Experiments with Bank Privatisation and Liberalisation, 1991-2004. "Journal of Banking and Finance 24: 2325-53

Harrod RF (1934a). "A Rejoinder to Mr. D.H. Robertson" Economica,n.s., I, March.

Jalilian H, and Kirkpatric C (2005). "Does Financial Development Contribute to Poverty Reduction?" Journal of Development Studies 41(4); 636-56

Kahn RF (1959). Exercises in the Analysis of Growth,Oxford Economic Papers, XI, June.

Kahn RF (1972). Selected Essays in Employment and Growth, Cambridge: University Press

Kalechi M (1939). Essays in the Theory of Economic Flunctuations, London: Allen & Unwin.

Kunbhakar S, and Mavrotas G (2008), "Financial Sector Development and Productivity

Growth." in B. Guha-Khasnobis and G. Mavrotaseds; Financial Development Economics and Policy, Oxford: Oxford University Press.

Kuznets S (1973). Economic Growth of Nations: Total Output and Production Structure,Cambridge, Mass: HarvardUniversity Press.

Kuznets S (1974). "Modern Economic Growth: Findings and Reflections", in Kuznets, S. Population, Capital and Growth: Selected Essays, London: Heinemann Educational Books. P. 165.

Levine E (2009), "Lin Roundabout: Function, Not for Free Exchange", Economist.com blogs.

Levine R (1992). "Financial Indicators and Growth in a Cross Section of Countries", WPS 819, January.

Mavrotas G, and Son S (2006),"Financial Sector Development and Growth: Re-examining the Nexus," In M. Bagella, L. Becchetti, and I. Hasan, eds. Transparency, Governance and Markets. Oxford: Elsevier Publishers.

Melanie Feakins (2004). Commercial Bank Lending to SMEs in Poland. Small BusinessEconomics;Springer Netherlands;Volume 23, Number 1 / August,pp. 51-70

Robinson J (1956). The Accumulation of Capital, London: Macmillan.

Sen AK (1970). Penguin Modern Readings: Growth Economics, Harmondsworth : Penguin Books.

Sen AK (1962). Essays in the Theory of Theory of Economic Growth,London: Macmillan.

Solow RM (1956). "A Contribution to the Theory of Economic Growth" Quarterly Journal of Economics. LXX, Feb., Reprinted in A. K. Sen, Penguin Modern Readings: Growth Economics, Harmondsworth: Penguin Books, 1970.

Solow RM (1962). "Substitution and Fixed Proportions in the Theory of Capital", Review of Economic Studies, XXIX, June.

Somoye RO, and Ilo BM (2009), "The Impact of Macroeconomic Instability on the Banking Sector Lending Behaviour in Nigeria," Journal of Money, Investment and Banking @ EuroJournals Publishing Inc., http://www.eurojournals.com/JMIB.htm - Issue 7.

Somoye RO, and Ilo BM (1970). Growth Theory: An Exposition, Oxford: Clarendon Press.

Soyibo A, and Adekanye F (1992). "The Nigerian Banking System in the Context of Policies of Financial Regulation and Deregulation" AERC Research Paper, Final Report.

Swan TW (1956). "Economic Growth and Capital Accumulation", Economic Record, XXXII, Nov. Reprinted in G. C., Harcourt and N. F. Laing XXXII, Nov. Reprinted in G. C. Harcourt and N. F. Laing Penguin Modern Economics Readings: Capital and Growth, Harmonsworth: Penguin Books, 1971.

Thoma M (2009),"Lin Roundtable: Small Banks Need Help" Free Exchange.com

United Nations, (1977). Report of the Expert Group Meeting on the Role of Development Finance Institution in National Economic Development, New York: UNIDO

Walras L (1954). Elements of Pure Economics. Trans. And Ed., W. Jaffe, London. Allen and Unwin.