

Banks Domestic Savings and Capital Formation in Nigeria

Henry Waleru Akani
henryakani@yahoo.com

and

Charles Ibibe
Charlestony2010@yahoo.com

Department of Banking & Finance
Rivers State University, Port Harcourt.

Abstract

This paper re-examined banks domestic savings on capital formation in Nigeria. The objective of the study was to determine the relationship between savings nexus as broken down into different compartmentalization and its resultant effect on capital formation in Nigeria. To achieve this, we adopted the ex post research design to determine how the explanatory variables affects the dependent variable in retrospect. The study further adopted the ordinary least square regression analysis technique to estimate the functional relationship in the model. The empirical results predict that demand deposit has a positive yet insignificant relationship to capital formation in Nigeria, within the period covered in the study, this goes to show that while credit liquidates a society demand deposits due to their nature aren't focused on middle to long term loans to the real sector, and the regression result found out that savings deposit has a negative and insignificant effect on capital formation, while time deposit has a positive and significant relationship on gross fixed capital formation in Nigeria. We therefore suggest that banks should be more efficient in mobilizing and allocating funds to entrepreneurs in the real sector. The policy implication of this is that regulatory authorities should continue to take measures to liberalize the financial system to avoid any form of shock on the system.

Keywords: Financial intermediation, Banks Domestic Savings, Capital formation, private sector, time deposit

1. Introduction

Many countries round the world that have achieved fast paced development since world war II have two major features. First, they invested in education of men, women and in physical capital. Secondly, they attained high productivity from this investment by ensuring the provision of efficient and productive capital markets, competitive trade-lending roles, and an advanced level of economic efficiency fast paced by technological advancement, stable political environment, appropriate economic policy and economic system (World Bank, 2012). But unforeseen circumstances might arise such as market failure in the process of growth; it becomes precautionary not to leave the entire process of economic growth entirely to the market forces especially in developing economies like Nigeria. The reforms in

Nigeria have been directed towards financial intermediation, financial stability and boosting of confidence in the financial system, all these are geared at improving capital accumulation drive in the country (Central Bank of Nigeria, 2014).

One of the defining economic targets of most developing countries, of which Nigeria is inclusive is to attain high paced economic development through capital accumulation which would be used in the investment in the real asset of the economy and this would directly have a positive relationship towards reducing poverty from whatever theoretical angle that one may look at it, economic growth indicates the ability of an economy to increase production of goods and services with the stock of capital and other factors of accumulation with the right combination of other factors of production will bring about their higher output growth.

Capital accumulation as a component of economic growth and development in any society is the process of acquiring additional capital stock which is used in the productive process. Capital formation is been recorded at the income and expenditure part of the gross domestic product of a nation, it shows the level of income was invested rather than consumed. The foundation of capital accumulation is savings and it presents when some portion of present income is saved and invested. The level to which the savings can affect capital formation which thus would lead to economic growth, depends largely on the strength of the financial system and its ability to conduct its financial intermediation role effectively (Osundina & Osundina, 2014).

Higher savings should automatically translate to higher capital accumulation and hence, economic growth. Many attempts have been made to study the relationship between capital formation and economic growth in developing economies like Nigeria. But this study stands out as this study attempts to establish the relationship between savings nexus and its effect on capital formation in Nigeria. Classical economist thought that money was neutral in that it did not affect the real goods producing sector. Keynes, however in his seminar work “The General Theory”, showed that money was an important influence on real economic activity. Keynes in that same line underscored how important the banking sector was in achieving economic drive, by emphasizing the importance of bank credit, bank credit is sourced primarily from deposits. According to Keynes “bank credit is the pavement along which production travels”.

According to Galeh (2005), it may seem that given higher level of savings investment, the capital stock will grow faster and a higher growth in income will result, but it is instructive to note that the connection among savings, capital formation and growth is not as simple as it looks.

It has been observed that low level of savings has negatively affected capital formation which is critical for development taking cognizance of the Nigerian economic policies on economic stability, and based on statistical data, the effect of policies on Nigerian capital formation remains debatable. An examination of the growth of the Nigerian economy and the percentage of capital formation to gross domestic product can elucidate this fact. For instance, Nigerian gross fixed capital formation was 11.63%, 10.48% and 11.02% of gross domestic product, between 2016 to 2018 compared with 43% in Mauritania in 2017, 32% in India and 58% in Bhutan (Emecheta & Ibe, 2014). Nigeria like most developing economies is equipped with an abundance of both human and natural resources with a population of over 160 million, yet the economy is faced with a plethora of challenges. This is observed by having over 90% of national income from crude oil and the nation is massively under-performing in terms of agricultural performance, technological advancement and industrialization. Over the years there has not been any synergy between savings and capital accumulation in Nigeria, neither savings nor investment is encouraged. This study seeks to bridge the gap between savings and capital accumulation in Nigeria and armed with the benefits of an improved capital formation in the economy, thus this study aims to proffer suggestions to guide policy makers so as to position the economy towards attaining fast paced growth.

2. Literature Review

2.1. Overview of savings

The relationship between savings and general economic development has received massive popularity in recent years especially in developed and emerging economies. This relationship thus forms the basis of this section. Anyanwu & Oaikhenan (1995) defined savings as the amount of income per capital time period that is not consumed by economic units. While for household, it involves the part of disposable income that is not spent on domestically produced or imported consumption of goods & services for the firm, it represents undistributed business profits. Savings is a flow variable being measured overtime. Put succinctly, savings refers to after tax income not spent. Based on the above definition, most literature can refer to savings as disposable income less consumption. In developing countries and Nigeria in particular, private savings constitutes the main source of capital accumulation for investment purposes.

Following Mckinnon (1973) and Shaw (1973) argued that for the typical developing country, the net impact of a change in real interest on saving is likely to be positive. This is because, in the typical developing economy where there is no robust market for stocks and

bonds, cash balances and quasi-monetary assets usually account for a greater proportion of household saving compared to that in developed countries. In addition, in an environment where self-financing and bank loans constitute the major source of investment funds, accumulation of financial saving is driven mainly by the decision to invest and not by the desire to live on interest income. Given the peculiarities of saving behavior, in addition to the fact that bulk saving comes from small savers, the substitution effect is usually larger than the income effect of an interest rate change.

Lewis (1955) noted that people would save more if saving institutions were nearer to them than if they were farther. As a result, a negative relationship is assumed to exist between population per bank branch and household financial saving. However, whether increased financial intermediation itself significantly increases the overall propensity to save depends also on the degree of substitution between financial saving and other items in the household's asset portfolio.

The total supply of available savings is simply the sum of domestic savings and foreign savings. However, domestic savings could be further broken into two components, which include government or public sector savings and private domestic savings. Amongst other things, savings serve as the main source of financing investment and related economic activities.

Igbatayo & Agbada (2012) noted that higher level of national savings leads to higher investment and consequently higher output. This is so because the level of savings determines the magnitude of capital accumulation. On the other hand, the magnitude of total earnings depends on the level of total output, thus output also determines the level of savings (capital accumulation) and investments by households and business. Government savings originates from the surplus budgeting, but very few countries make part of their public sector savings from savings or profit of the government owned enterprises. There are also two aspects of private domestic savings. These include corporate savings and household savings. Again foreign savings also come into two basic forms such as foreign aid, and private foreign savings.

2.2. Forms of Savings

Savings in an economy can assume one of the several forms. These includes: Personal savings, corporate savings or business savings and Government savings.

Personal Savings: are household savings of individuals in the economy (Christopher, 2008).

Corporate Savings: are businesses savings as a component of the private savings which are re-invest by business owners, (Aron & Muellbauer, 1999).

Public Savings: are savings by the government due from increased tax or reduced spending (Eregba & Irugbe, 2009).

2.3.Sources of Savings in Nigeria

The Nigerian economy, like any other, comprises of the public and private sectors, with both engaging in investment expenditures. Both sectors have to save and to borrow in other to meet their investment requirements. The immediate source of funds is own savings. The government, which represents the public sector, collects revenue from both tax and non-tax sources. After meeting its expenditure requirements on purchases of goods and services, the government uses whatever surplus there is to increase its stock of capital i.e. investment. This is also true of economic agents in the private sector. When investment expenditure exceeds the level of savings, the private and the public sectors mainly borrow from financial institutions.

The financial institutions that actually engage in providing funds or credits for investment in Nigeria include deposit money banks, mortgage institutions and development financial institutions. Other sources include non-bank financial institutions like the insurance companies, the capital market, mutual trust funds, pension funds, equipment leasing companies, cooperative and thrift societies, etc. all these are regarded as formal sources of investment finance in Nigeria because they are well organized with appropriate records and their operations are relatively open and regulated. Altogether, they provide the largest portion of the domestic funds for investment.

There are a large number of informal providers of domestic funds for investment in Nigeria. They are termed informal because of their mode of operations and for lack of enough documented information about them. They provide investment funds for individuals and small enterprises operating in the informal sector of the economic. As a result of lack of information on their operations, it is difficult to know the exact proportion of the total domestic funds for investment that are made available by the so called informal providers of funds. However, for a country like Nigeria whose informal sector is adjudged to be large, the informal providers of investible funds are

playing a significant role in the process of capital accumulation in the country. The informal providers for investment funds in Nigeria include individuals, groups, town unions, occupational groups, “esusu”, religious organizations, etc.

3. Gross Fixed Capital Formation

Capital formation is a component of Gross Domestic Product by income together with consumption and net exports and services as an indicator of the level of investment in the economy. The concept means the society does not apply the whole of its current production activity to the needs and immediate desire of consumption but directs some part of it to the creation of capital goods (Jhingan, 2005). Capital formation promotes production and determines the speed of economic growth and development. It play important role in increasing the production potential of the economy and brings about balance growth of different sector. Gross Domestic Fixed Capital Formation is a macroeconomic concept used in official national accounts. The concept dates back to the studies of Simon Kuznets of capital formation in the 1930s, and standard measures for which it were adopted in the 1950s. Statistically it measures the value of acquisitions of new or existing fixed assets by the business sector, governments and "pure" households (excluding their unincorporated enterprises) less disposals of fixed assets. GFCF is a component of the expenditure on GDP, and thus shows something about how much of the new value added in the economy is invested rather than consumed. GFCF is called "gross" because the measure does not make any adjustments to deduct the consumption of fixed capital (depreciation of fixed assets) from the investment figures. For the analysis of the development of the productive capital stock, it is important to measure the value of the acquisitions less disposals of fixed assets beyond replacement for obsolescence of existing assets due to normal wear and tear. "*Net net fixed investment*" excludes the depreciation of existing assets from the figures for new fixed investment, and is called *net fixed capital formation*.

4. Empirical Review

Studies by Gavin, Hausmann, and Tavli (1997), Saltz (1999) and Agrawal (2001) revealed that economic growth rates preceded savings growth rates while Cullison (1993) and recently Lorie (2007) found the reverse causality. The vast empirical literature, though contributing immensely to explaining the savings-growth nexus, suffers from a number of shortcomings. These include reliance on cross section data, which may not satisfactorily address country specific issues, inappropriate econometric techniques and the concentration

mainly on the use of the bivariate causality test, and the likely omission-of-variable bias. In fact, many studies omitted the complementary role of foreign resources inflow, especially in emerging and developing economies.

A number of recent studies examine the dynamic relationship between savings and economic growth. Carroll and Weil (1994) used five-year averages of the economic growth rate and savings for OECD countries and found that economic growth Granger caused savings. However, when dummies were included in the estimation, the reverse was obtained. Also, addressing the relationship between domestic savings and economic growth for various economies with different income levels, Mohan (2006) concluded using cross section data from 1960 to 2001 and Granger causality methodology, that economic growth rate Granger caused savings growth rate in eight high income countries (HIC)–Sweden, Iceland, Finland, UK, Korea, Japan, Canada and Norway–except in Singapore; 3 lower-middle income countries–Algeria, Thailand, and Colombia–except Egypt and Ecuador; 2 low income countries–Nigeria and Senegal–except Indonesia. There was bi-directional causation in all upper-middle income countries–Chile, Argentina, Brazil, and South Africa–except Malaysia. Using the procedure developed by Toda and Yamamoto (1995) and Dolado and Lutkepohl (1996) and the inclusion of foreign resources inflow in multivariate systems, contrary to the reverse causation by Sinha and Sinha (2008), Alguacil, Caudros and Orts (2004) found evidence in favour of Solow’s model prediction that higher savings lead to higher economic growth for Mexico. The observed conflicting results for Sri Lanka and Mexico might be connected with data, methodology, and the important role of omitted variable(s).

However, a cursory observation of the literature reveals that research has been focused on developed and emerging economies. Despite the importance and the likely policy guidance for development strategies for African economies, empirical research on African countries has been very scanty. Further, with the exception of Adebisi (2005), available studies used cross section data. Using cross section data between 1960 and 1997 and Granger causality methodology, Anoruo and Ahmadi (2001) examined the causal relationships between the growth rate of domestic savings and economic growth for seven African countries–namely Congo, Cote d’Ivoire, Ghana, Kenya, Nigeria, South Africa and Zambia. Their study found that savings are co-integrated in all of the countries except for Nigeria and that economic growth Granger-causes the growth rate of domestic savings for all the countries considered except Congo where reverse causality was obtained. Further, for Cote d’Ivoire and South Africa, bi-directional causality was found.

According to endogenous growth models developed by Romer (1986) and Lucas (1988), higher savings and capital accumulation can achieve a permanent increase in growth. Empirical evidence shows that rapid development in many developed economies has been

because of an increase in investment, caused by a proportionate increase in savings. Theoretically, there is a corollary between the stock of savings and economic growth. A low level of savings, prolonged over an extended period, may lock a country into a vicious cycle of low investment, low economic growth and low real per capita income. In this way, the level of savings sets the limit to which investment and economic growth can be increased in a country over a given period of time (Kazmi, 2004). In an attempt to examine the relationship among foreign aid, domestic savings and economic growth in LDCs, Irandoust and Ericsson (2005) found that domestic savings and foreign aid were to enhance economic growth in all countries in the sample.

However, Mohan (2006) while examining the relationship between savings and economic growth in a number of countries, found the causal relationship between savings and economic growth to be sensitive to the income level. Overall, the author found economic growth to Granger-cause savings in 13 countries and savings to Granger-cause economic growth in only two countries. More recently, Sinha and Sinha (2008) examined the relationships among household savings, public savings, corporate savings and economic growth in India. The authors found that contrary to the conventional wisdom, higher savings in India were a consequence of higher economic growth and not the cause. Unfortunately, the majority of these studies are mainly based on the bivariate causality test. Yet, it is now clear that a bivariate causality test may be very unreliable, as the introduction of a third important variable can change both the inference and the magnitude of the estimates (see also Caporale and Pittis, 1997; Caporale, Howells and Soliman, 2004; Odhiambo, 2008).

While some studies maintain that foreign capital inflow positively affects economic growth, others argue that the relationship between the two variables may be negative. Chenery and Straut (1966), while relying on empirical evidence, argued that foreign capital has a positive effect on economic growth in developing countries. Shabbir and Mahmood (1992) arrived at similar conclusions. The authors argued that foreign capital inflow might supplement domestic savings and distort the composition of investment, thereby leading to a reduction in the rate of economic growth.

5. Methodology

The research design employed in this research is the *ex-post facto* research design. The choice of research design depends on objectives that the researcher wants to achieve. It is, therefore, the framework which specifies the type of information to be collected, the source of data and the data collection techniques (Baridam 2001).

This study utilized secondary data. The data is preferred in this study due to the nature of the study which is time series based. For the purpose of this study, secondary data will be sourced from Central Bank of Nigeria Statistical Bulletin, NSE fact book, journals, Textbooks and Seminar Papers.

Model Specification

The functional model is specified as follows:

$$\text{GCF} = (\text{SD}, \text{DD}, \text{TD},) \quad 1$$

It is empirically stated as

$$\text{GCF} = a_0 + \beta_1 \text{SD} + \beta_2 \text{DD} + \beta_3 \text{TD} + \mu_t \quad 2$$

A' priori Economic Expectation: $a_{1-3} > 0$

Where

SD = Savings Deposits

DD = Demand Deposits

TD = Time Deposits

a_0 = Intercept Terms

$\beta_1 - \beta_3$ = coefficients

A-prior Expectation of the Result

The explanatory variables are expected to have positive and direct effects on the dependent variables. That is a unit increase in any of the variables is expected to increase Capital formation. This can be express mathematically as $\beta_1, \beta_2, \beta_3, >0$.

Data Analysis Method

The technique used in this study is the Ordinary Least Square (OLS) estimation technique. The variables and the overall significance of the regression respectively. Other test instruments test instruments in the OLS are the T-statistics and F-test which were used to test the significance that will also be employed are the Durbin Watson test which will be used to test the presence or absence of autocorrelation between and among the explanatory variables and the adjusted R square to test the percentage variation of the dependent and the independent variables.

Unit Root Test for Stationarity of Series

This involves testing whether a stochastic process is stationary or non-stationary and the order of integration of the individual series under consideration. Currently, the most accepted method for the testing for unit root is Augmented Dickey-Fuller (ADF) test due to Dickey and Fuller (1979, 1981), and the Phillip-Perron (1988) and Phillips (1987). For the purpose of this study, the ADF unit root will be adopted.

Cointegration Test

For the cointegration test, the maximum likelihood test procedure established by Johansen and Juselius (1990) and Johansen (1991) will be used. In the test, if Y_t is a vector of n stochastic variable then there exist a P -lag vector auto regression with Gaussian errors.

6. Analysis and Discussion of Findings

Table 1: OLS Model Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-151.8558	233.3946	-0.650640	0.5197
DEMAND_DEPOSIT	0.104339	0.417212	0.250087	0.8040
SAVINGS_DEPOSIT	-0.165142	0.521796	-0.316487	0.7536
TIME_DEPOSIT	1.232239	0.230667	5.342067	0.0000
R-squared	0.960940	Mean dependent var		3365.672
Adjusted R-squared	0.957493	S.D. dependent var		5466.235
S.E. of regression	1126.982	Akaike info criterion		16.99178
Sum squared resid	43183037	Schwarz criterion		17.16415
Log likelihood	-318.8437	Hannan-Quinn criter.		17.05311
F-statistic	278.8168	Durbin-Watson stat		1.390266
Prob(F-statistic)	0.000000			

Source: Extract from E-view 10.0

The summary of the relationship between credit mobilization and its effect on capital formation in Nigeria using multiple regressions using the Ordinary Least Square analysis is as shown in the table 1. The coefficient of R_2 and adjusted R_2 measures the explanatory power of the multiple regression models. From the results there is a high coefficient of determination of 0.960940 R_2 and 0.957493 adjusted R_2 (96.1% and 95.7%). This implies that the variables in the equation are useful for explaining the level of capital growth to the power of 96.1% and 95.7% between 1981- 2018. The standard error of the estimate also known as the residual standard deviation has values stable for the analysis of the results. The F-statistics is found to 278.8168 with probability of 0.00000 implies that the model is significant at the 5% level, the Durbin Watson (DW) statistics of 1.390266 shows that there is no problem of serial correlation in the regression models. This is a case of positive serial correlation. The estimation results from the regression model indicate that Time deposit, and Demand deposit have positive relationship with Gross Fixed Capital Formation, while savings deposit have negative relationship with Gross Fixed Capital Formation.

Table 2: Summary of Descriptive Statistics

	GFCF	DEMAND_DEPOSIT	SAVINGS_DEPOSIT	TIME_DEPOSIT
Mean	3365.672	2085.938	1687.211	2904.073
Median	287.4900	285.1717	273.5768	315.6509
Maximum	16908.13	9451.091	6414.640	13936.34
Minimum	10.08000	6.050000	4.880000	5.796000
Std. Dev.	5466.235	3003.443	2306.399	4401.462
Skewness	1.372016	1.273605	0.998365	1.322202
Kurtosis	3.184595	3.267990	2.302195	3.243136
Jarque-Bera	11.97599	10.38682	7.083615	11.16565
Probability	0.002509	0.005553	0.028961	0.003762
Sum	127895.5	79265.64	64114.02	110354.8
Sum Sq. Dev.	1.11E+09	3.34E+08	1.97E+08	7.17E+08
Observations	38	38	38	38

Source: Extract from E-view 10.0

All the variables have positive skewness. However, the Jarque-Bera test shows that the variables are not normally distributed. The mean values are all positive. The minimum and maximum capital formation is 127895 and 11125677 respectively. Higher indicator signifies better soundness while lower indicator shows lower fragility. The mean capital formation is 47.60579 which signify that the average gross fixed capital formation level in Nigeria is 12.56. The high standard deviation of 5466.235 indicates that the data is widely dispersed.

Table 3: Summary of the Unit Root Test (p-values in parenthesis)

Variables	ADF test statistics @		Decision Rule	Order of integration
	Level	1 st difference		
GCF	1.69206 (0.7091)	-9.737297 (0.0175)	Stationary at First Difference	I(1)
DEMAND DEPOSIT	-1.162791 (0.3303)	-8.538313 (0.0000)	Stationary at First Difference	I(1)
TIME DEPOSIT	-2.430819 (0.1404)	-5.794551 (0.0000)	Stationary at First Difference	I(1)
SAVINGS DEPOSIT	-2.145494 (0.7614)	-8.437337 (0.0000)	Stationary at First Difference	I(1)
Critical Values	1%	-3.615588	-3.626784	
	5%	-2.941145	-2.945842	
	10%	-2.609066	-2.611531	

Source: Extracted from Eviews Output

The unit root test on each of the variables is summarized in the Table 3 above. The probability values are shown in parenthesis and we can observe that all the variables became stationary after first differencing. This is evident in the p-values at first difference which are all less than the 0.05 critical value. Thus, we conclude that Gross fixed capital formation (GFCF), Demand Deposit(DD), Savings Deposits(SD), and Time Deposits(TD) are stationary after first differencing and are said to be integrated of order one i.e. I(1). None of the variables were integrated at order zero.

Table 4: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
TIME_DEPOSIT does not Granger Cause GFCF	36	14.5837	3.E-05
GFCF does not Granger Cause TIME_DEPOSIT		0.02654	0.9738
SAVINGS_DEPOSIT does not Granger Cause GFCF	36	122.995	2.E-15
GFCF does not Granger Cause SAVINGS_DEPOSIT		7.31046	0.0025
DEMAND_DEPOSIT does not Granger Cause GFCF	36	23.3519	7.E-07
GFCF does not Granger Cause DEMAND_DEPOSIT		3.53365	0.0415
SAVINGS_DEPOSIT does not Granger Cause TIME_DEPOSIT	36	15.4681	2.E-05
TIME_DEPOSIT does not Granger Cause SAVINGS_DEPOSIT		0.54119	0.5875
DEMAND_DEPOSIT does not Granger Cause TIME_DEPOSIT	36	6.41432	0.0047
TIME_DEPOSIT does not Granger Cause DEMAND_DEPOSIT		6.86065	0.0034
DEMAND_DEPOSIT does not Granger Cause SAVINGS_DEPOSIT	36	1.28073	0.2921
SAVINGS_DEPOSIT does not Granger Cause DEMAND_DEPOSIT		5.53321	0.0088

Source: Extract from E-view 10.0

From the table above all of them, there is unidirectional causality from Gross Fixed Capital formation to Savings Deposit and from GFCF to Demand deposits, from Demand Deposit to Time deposit, From Time deposit to demand deposit and from savings deposit to demand deposit and the other variables have no causal relationship.

Table 5: Summary of the Max-Eigen Statistics for Co-integration

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.990458	281.6078	47.85613	0.0001
At most 1 *	0.920980	114.1337	29.79707	0.0000
At most 2 *	0.462432	22.76397	15.49471	0.0034
At most 3	0.011566	0.418789	3.841466	0.5175

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.990458	167.4741	27.58434	0.0001
At most 1 *	0.920980	91.36977	21.13162	0.0000
At most 2 *	0.462432	22.34518	14.26460	0.0022
At most 3	0.011566	0.418789	3.841466	0.5175

Source: Extract from E-view 10.0

The table 5 above summarises the max-eigen statistics which was used to determine the co-integrating vectors in the model. The test indicates that 2 co-integrating equations at 5% level thus satisfying the condition for the existence of long run relationship amongst the variables. This condition states that there must be at least one cointegrating equation for there to be a long run relationship in a model. The test shows that we reject the null hypothesis of $r = 2$ and accept the alternate of $r > 2$ which denotes the existence of 2 cointegrating equations in the model. Thus, we conclude that credit mobilisation has long run implications on capital accumulation in Nigeria.

7. Discussion of Findings

The objective of this model is to ascertain credit mobilization of banks and its effect at aiding the growth of capital accumulation. Credit mobilization is one of the important variables for economic development that has emerged as the central issue in developing countries. First, foreign aid inflow to the developing countries has declined during recent years. Second savings positively affects the growth and development (Mohammad & Mohammad, 2012). The estimated results found that the independent variables can explain 96.1% and 95.7% changes on credit mobilization variables on gross fixed capital formation. This implies that every percentage change in GFCF is as a result of the predictor variables. The model formulated was tested with the aid of F-statistics and F-probability which justified that the model was fit and justified as significant for the study.

The estimated regression results in this model found out that Demand Deposit has a positive yet insignificant effect on gross fixed capital formation in Nigeria, within the period covered in the study. The coefficient of 0.104339, t-statistics of 0.250087 justifies this assertion, and a probability of 0.8040 makes it insignificant at 5% confidence level. This can be ascribed to the work of Mohammad & Mohammad (2012), which depicts that deposits highly liquidate an economy and hence provides the needed credit drive to the real sector of the economy, and this thus justifies the positive relationship exhibited between demand deposit and gross fixed capital formation, but its insignificance can be adjudged by the poor credit facility experienced in Nigeria and the credit mismatch system which major reforms in the country are geared at solving.

The estimated regression results in this model found out that Savings Deposit has a negative and insignificant effect on gross fixed capital formation in Nigeria, within the period covered in the study. The coefficient of -0.165142, t-statistics of -0.316487 justifies this assertion, and a probability of 0.7536 makes it insignificant at 5% confidence level. In line with Okpala (2017) in his study of domestic savings on Nigerian economic growth his study points out that savings has positive relationship with economic growth. The study concluded however that the observed impact can only be made manifest when it is co-joined with other variables; namely per capita income and interest rate. So our findings though not in line with the findings of Okpala, but has given more room to further research to different researches that can make savings the needed drive to capital accumulation.

The estimated regression results in this model found out that Time Deposit has a positive and significant effect on gross fixed capital formation in Nigeria, within the period covered in the study. The coefficient of 1.232239, t-statistics of 5.342067 justifies this assertion, and a probability of 0.000 makes it significant at 5% confidence level. This can be ascribed to the work of Mohammad & Mohammad (2012), which depicts that deposits highly liquidate an economy and hence provides the needed credit drive to the real sector of the economy, and this thus justifies the positive relationship exhibited between demand deposit and gross fixed capital formation, time deposit high significance can be adjudged due to the fact that its kept for a longer stable time as compared to demand deposit and savings deposit which were used in the model that can be accessed almost immediately and doesn't have a fixed tenure like is experienced with time deposit.

8. Conclusion

The study re-examined the impact of domestic savings on capital formation in Nigeria. The study broke bank savings into different definition on gross fixed capital formation in Nigeria. It also emerged that, the dis-aggregate approach to the impact of credit supply to the real sector on capital formation in Nigeria gave an accurate picture of the sector specific link and impact to economic growth in Nigeria. Although banks are still deeply challenged on many levels, their ability to stimulate growth is not in question in Nigeria. This study strongly affirms that for there to be significant growth, financial intermediaries are needed to effectively bridge the gap between savers and borrowers that is inherent in direct financing or self-financing and by extension accumulate huge funds and efficiently allocate them to the real sector for their capital expenditure and production needs. Thus, this study on many levels invalidates Adam's 1781 and

Allen's 2001 theoretical position of the impotency and the hazardous nature of bank financial intermediaries to the wealth of nations due to their ability to propagate growth irrespective of the challenges in the system.

9. Policy Implication

Thus, the policy implication is for regulatory authorities and banks in particular, to correct all challenges identified in this study and continue to exact measures to liberalize the financial service sector to avoid any form of shocks that will impair economic progress.

References

- Adebiyi, M. A. (2005), Savings-growth relationship in Nigeria: Empirical evidence, *African review of money, finance and banking*, Milan, Italy. 4th Quarter, 159-178
- Agrawal, P. (2001), The relation between savings and growth: Cointegration and causality evidence from Asia. *Applied economics*, 33: 499-513
- Anoruo, E and Ahmad, Y (2001): *Causal Relationship between Domestic Savings and Economic Growth: Evidence from Seven African Countries*, African Development Bank, Blackwell Publisher, Oxford.
- Ayanwu, J.C. and Oaikhenan, H.E. (1995): *Modern Macroeconomics: Theory and Application in Nigeria*. Joanee Educational Publishers LTD. Onitsha.
- Caporale, G. M., P. G. Howells, and A. M. Soliman (2004), Stock market development and economic growth: The causal linkages, *Journal of economic development*, 29(1): 33-50
- Caporale, G. and N. Pittis (1997), Causality and forecasting in incomplete system, *Journal of forecasting*, 16: 425-437
- Carroll, C. D. and D. N. Weil (1994), Savings and growth: A reinterpretation, *Carnegie-Rochester conference series on public policy*, 40: 133-192

- Chenery, H. and A. Straut (1966). Foreign assistance and economic development, *American economic review*, 50: 680-733
- Cullison, W. E. (1993). Savings measure as economic growth indicators, *Contemporary policy issues*, Vol. 11, January
- Central Bank of Nigeria (2014): “CBN Statistical Bulletin.” Abuja, Nigeria.
- Emecheta, B. C., & Ibe, R. C. (2014). The impact of bank credit on economic growth in Nigeria: Application of reduced vector auto-regression (VAR) technique. *European Center for Research, Training and Development, UK*, 2(9), 111-121.
- Eregba P.B. and I.R. Irugbe (2009):“An Empirical Analysis of Short Run and Long Run Impacts Of Foreign Aid on Domestic Savings in Nigeria.” *Journal of Economic Theory*. 3 (3) 56
- Glahe R.G. (2005). *Macroeconomics: Theory and Policy*, Harcourt Brace Jovanovich Inc. 8, 79- 90.
- Gavin, M., R. Haussmann, and E. Tavli, (1997), Saving behavior in Latin America: Overview and policy issues, in Haussmann, R. and R. Reisen (Eds.), *promoting savings in Latin America*, OECD and inter-American development bank, Paris
- Igbatayo, Samuel & Agbada Andrew (2012). Inflation, Savings and Output in Nigeria: A Var Approach, *Journal of Emerging Trends in Economics and Management Sciences(JETEMS)* 3(5), 447-453.
- Jhingan, M.L., (2005): *The Economic of Development and Planning*, 38th Ed. New Delhi: Virade Publications (P) Ltd, India.
- Keynes, J.M., 1936. *General Theory of Employment, Investment and money*. London Macmillan Company Ltd.
- Lawrence E. U, Sunday A. E and Udonwa U, (2013): “Dynamic Analysis Of Savings And Economic Growth In Nigeria”, *Journal of Agriculture and Social Research*, Vol. 13.
- Mohan, R., (2006): Causal relationship between saving and economic growth in countries with different income levels. *Economics Bulletin*, 5(3): 1-12.

- Odhiambo, Nicholas M. (2008): "Financial Depth, Savings and Economic Growth in Kenya: A Dynamic Causal Linkage" *Economic Modelling*, Elsevier, 25(4), 704-713.
- Odhiambo, Nicholas M. (2009): "Savings and Economic Growth in South Africa: A Multivariate Causality Test," *Journal of Policy Modelling*, Elsevier, vol.31 (5), pages 708-718, September.
- Okpala C.S. (2017): "Domestic Savings and Economic Growth in Nigeria (1980-2015)", *World Applied Sciences Journal* 35 (6): 848-866
- Osundina K. C. & Osundina J.A. (2014): "Capital Accumulation, Savings And Economic Growth Of A Nation –Evidence From Nigeria" *Global Journal of Interdisciplinary Social Sciences G.J.I.S.S.*, Vol.3(3):151-155
- Saltz, I.S. (1999), An examination of the causal relationship between savings and growth in the third world, *Journal of economics and finance*, 23(1): 90-98
- Shabbir, T. and A. Mahmood (1992), The effect of foreign private investment oneconomic growth in Pakistan, *The Pakistan development review*, 31(4): 831-841
- Stephen Egoro A. & Obah Daddy Obah (2017) : "Impact of National Savings on Economic Growth in Nigeria (1990-2015)" *IIARD International Journal of Economics and Business Management* ISSN 2489-0065.
- Singh, T. (2010). "Does Domestic Savings Cause Economic Growth? A Time Series Evidence from India" *Journal of Policy Modelling*, .32, 231-253.

