

# Financial Intermediation and Economic Growth in Nigeria: Long Run Analysis and Test of Demand Following Hypothesis (Nigerian Experience)

Edori Iniviei Simeon<sup>1,\*</sup>, Edori Daniel Simeon<sup>2</sup>, Needam Best Baridam<sup>2</sup>

<sup>1</sup>Department of Finance and Banking, Faculty of Management Science, University of Port Harcourt, Port Harcourt, Nigeria

<sup>2</sup>Department of Accountancy, University of Science and Technology, Port Harcourt, Nigeria

## Email address:

Olatundebusayo19@gmail.com (E. I. Simeon)

\*Corresponding author

## To cite this article:

Edori Iniviei Simeon, Edori Daniel Simeon, Needam Best Baridam. Financial Intermediation and Economic Growth in Nigeria: Long Run Analysis and Test of Demand Following Hypothesis (Nigerian Experience). *Journal of World Economic Research*.

Vol. 5, No. 6, 2016, pp. 101-107. doi: 10.11648/j.jwer.20160506.12

**Received:** June 9, 2016; **Accepted:** June 17, 2016; **Published:** February 24, 2017

---

**Abstract:** This paper set out to empirically investigate the relationship between financial intermediation and economic growth in Nigeria using time series data spanning from 1986 to 2014. The output of our empirical analysis reflect that all the data used in the process of research are stationary after first differencing in the order of 1 (1), the output of the OLS shows that M2 and IIR has a positive and significant influence on the growth of the Nigeria economy while other variable are negatively significant. Mine while, the result of the granger causality test shows that there exist a causality flow between RGDP, IIR and, PSC with causality flowing from RGDP to financial Intermediation indicators (IRR and PSC) respectively. Judging by the output of this research, it show that in the Nigeria context, economic growth determine financial sector development. This suggest that financial Intermediation activities in Nigeria is demand following while the economy is leading. The economic implication of this is that the financial sectors out-rightly rely on the growth of the economy.

**Keywords:** Financial Intermediation Ratio, Granger Causality, Economic Growth

---

## 1. Introduction

Larger percentage of the Nigeria citizen still leave a barbaric world of informal savings. These may be due to lack of orientation, illiteracy, and asymmetry information about how some bank customer's losses their savings during bank distress and failure. This place a limitation on intermediation process as a large sum of fund remains in the informal sector of the economy. mine while, financial sector of an economy comprise of institution, market and regulators that deal in financial instruments under the large framework within which the activities of the various participant are regulated. Put separately, the Nigerian financial system apart from the central bank of Nigeria and some other bodies who serve as regulators comprises of the "bank financial intermediaries, non-bank financial intermediaries and the financial market" (monogbe, 2015). A whole lots of scholar has written on the topic financial intermediation and how it affect the economic

in their respective countries. Intermediation process involve mobilization of funds from surplus economic unit to the deficit economic unit who has the business ideas but lack financial capacity. This intermediating function is not only restricted to the banking financial institution only. However, non-banking financial institutions like insurance company, pension and administrative institution also intermediate. The term financial intermediation has created a great puzzler in the literature as some authors argue that financial intermediation is a catalyst to economic growth while some opted that financial intermediation is demand following. This argument has degenerate into what we refers to "supply leading hypothesis and demand following hypothesis. The first theory of financial intermediation is seen in the work of goldsmith" (1969). Mackinnon and Shaw attributed the role of economic development to financial market. To them, they argue that the effectiveness of the financial market through the quality and quantity of financial services render will

serve as a stimuli to economic development. Hence, there argue that financial intermediation stimulate economic development. Mine while, "Levine (2010), beck, et al (2000) in there empirical research also support the view of MacKinnon and Shaw by stating that financial intermediation has a positive and significant impact on economic development. However in the Nigeria context, Nwaeze (2014) also support the fact that financial intermediation has a positive and significant impact on the Nigeria economic development but did not specify the direction of causality flows. On the other hand however, Robinson (1953) was of the contrary opinion, he led the supply leading hypothesis and argues that economic development is a catalyst to financial development". His born of contention here is that increase in the economic development through increase in the real national income of the economy and per capital income of household in the economy will stimulate the morale of the general public towards new investment ideals which will help in improving the financial market. Furthermore, Mushin and Eric (2008) in there empirical work discovered a causality flow between economic development and financial development with causality flowing from the economy to the financial market hence there conclude that economic development drives financial market.

Consequently in the Nigeria context, there has not really been a justifying ground to conclude whether financial development stimulate economic growth or not. The major challenges intermediation process is facing in Nigeria is the informal sector. Larger percentage of the citizens are yet to be expose to the intermediation services due to lack of trust, confidence and convenience. For financial intermediation to be efficient and glamorous in Nigeria, the three C's of financial intermediation must be well managed. This study tends to capture the financial system and test how the services in the market drives the economy. However, it must be noted that the Nigeria financial system comprises of financial institution, financial market and the regulators. "The scope of this study is restricted to the banking, non-banking financial institution and the financial market harms of the financial system using granger causality test in identifying the direction of causality flow"

### 1.1. Statement of Problems

Larger percentage of the Nigeria citizen still leave a barbaric world of informal savings. These may be due to lack of orientation, illiteracy, and asymmetry information about how some bank customer's losses their savings during bank distress and failure. This place a limitation on intermediation services as the quantum of fund in the informal sector is on the increase.

However, MacKinnon and Shaw (1973) argues that one of the major challenges faced by the developing countries is the excess intervention and interference of the government in the financial system which is mitigating against the expected growth trend of the financial sector. He explained that irrespective of the saving and investment, the developing countries are experiencing poor performance due to financial

repression, high level of regulation and financial control. Mine while, there has been an argument that elimination of financial repression through financial liberalization, deregulation and privatization is essential so as to extirpate the ill-effect of financial repression and on the other hand stimulate saving and investment which is capable of promoting economic growth and encouraging foreign investors.

According to history, Nigeria banking system is faced with some challenges majorly lack of confidence on the side of the customers due to the bank failure recorded in the past decade mostly in the early 40's. moreover, the recent instability and bank failure in the Nigeria financial institution has really deteriorate the confidence of the customers and hence depositors prefer to save their money in the corner of their bed than to save in the bank which is really affecting the intermediation processes as large quantum of money are still in the informal sector.

Despite the enormous rate of merger that took place in the Nigerian banking institutions recently due to increment capital base policy implemented by the CBN to solidified the Nigeria banks, can we practically say that the operation of the financial institution has really stimulate the economy or nor? Sequel to the above observation, this research work tends to find out the causal flow between the activities of the financial sector and growth of the Nigeria economic laying emphasis on the activities of the banking, non-banking financial institution and financial market as proxy for financial development indicator in Nigeria.

### 1.2. Research Objectives

This research work tends to investigate the direction of causality flow between the activities of the intermediation services of the financial system and growth of the Nigeria economic laying emphasis on the activities of the banking, non-banking financial institution and financial market as there are proxy for financial sector indicators in Nigeria. The specific objectives are stated below

- To empirically investigate how effective is the credit allocated to the individual own enterprise ("private sector") and its impact on growth of the Nigeria economy.
- To statistically investigate the effect of insurance intermediation ratio and it influence on the Nigeria economic performance
- To test the Effect of broad money supply on the growth of the Nigeria economy

### 1.3. Research Question

In an tempt to actualize the objectives of this research work the following research question is noted

- How effective does credit allocated to the individual enterprise ("private sector") stimulate the growth of the Nigeria economy?
- To what extent does insurance intermediation ratio promoting the growth of the Nigeria economy?

- To what extent does broad money supply influence the growth of the Nigeria economy?

#### 1.4. Research Hypothesis

We formulate our research hypothesis in their respective null form thus

Ho1: allocated credit to the individual enterprise ("private sector") does not significantly stimulate the growth of the Nigeria economic

Ho2: Insurance intermediation ratio does not significantly promote the growth of the Nigeria economic

Ho3: Broad money supply does not significantly relate to economic growth in Nigeria

## 2. Literature Review

Basically, there are series of argument in the literature, but the two major argument that transpire between "Robinson (1952), MacKinnon and Shaw (1973) as to whether economic growth drives financial development or the other way round can be classify into two different hypothesis which include the supply leading hypothesis and demand following hypothesis. However, the postulation that financial development stimulate economic growth was first referenced in the work of Schumpeter 1912, follow by (goldsmith 1969), (McKinnon 1973) and (Shaw 1973) and many more"

### 2.1. Financial Development and Intermediation Theory

"Supply leading hypothesis" as led by Robinson (1952), he however argues that "financial market are essentially hand maiden of domestic industry, and respond passively to other factors that produce cross country different in growth. Robinson school of thought therefore believes that economic growth will lead to the expansion of the financial sector". According to him, economic development is a catalyst to financial development. This implies that increase in the real national income of an economy flowing down to house hold per capital income will bring about increase in consumable income and saving which will however trigger the interest of household to invest in financial instrument which hence lead to development and promoting the financial services. On the other hand, "financial intermediation theory was first formalized in the work of goldsmith (1969), MacKinnon (1973) and shaw (1973) who attributed the role of economic growth to the efficacy and vibrancy of the financial market". There however attributed the growth of the economy to the quality and quantity of financial service rendered by the financial institution. "Goldsmith (1969) attribute a positive nexus between the level of par capital gross national product and financial development to the positive effect that financial development has in encourage more efficient use of capital stock. Moreover, the process of growth has feedback effect on financial market by creating incentive for further financial development"

According to Reed et al 1980, as cited in Torbira 2014, he outline the three basic approach targeted toward analysing

the behaviour of financial institution in respect to financial intermediation. The first approach is called pool of fund approach with anchor on a premises that fund should be pooled and allocated to various investment whose expected rate of return is promising and higher without giving consideration to the source of such funds. There born of contention here is that investors are interested in investing on project with high returns hence, rate of returns determines the quantum of fund allocated to each investment.

The second theory is called the conversion of funds or asset allocation approach. This approach anchor on the premises that different sources of fund should put be into consideration when making allocation decision. This approach regard the sources of funds in the process of allocation decision and hence make rational decision. The third approach is the linear programming theory. This approach requires an explicit statement of objective to be optimized and the specific constrain facing the optimizer. The first and the last approach agree with the doctrine of unconstrained and constrained profit maximization. The overall approach is targeted towards ensuring that financial institutions asset are primarily related to and distribution of goods and services in the economy. "According to Shaw (1973), he propose the debt intermediation hypothesis, whereby expanded financial intermediation between the saver and investors resulting from financial liberalizations (high real interest rate) and development increase the incentive to save and invest, stimulate investment due to an increase supply of credit, and raises the average efficiency of investment. This view stress the importance of free entry into and competition within the financial market as prerequisite for successful financial intermediation". Mine while, some school of thought suggested that the nexus between "financial development and economic growth" depend on the nature and process of economic development. It is also believe that an economy with well-structured financial system could respond and stimulate economic expansion through financing the effort of the entrepreneur (Schumpeter 1912). Schumpeter lay much emphasis on the development of new technology through innovation and invention, discovery of new technics, practical application of new technics coupled with the capacity of the financial institution to financial the new discovery will definitely promote economic growth hence, "financial development and economic development are positively interdependent and their nexus could lead to feedback causality (Luintel and Khan, 1999)"

### 2.2. Empirical Review

Shittu Ayodele (2012), investigate the financial intermediation and economic growth in Nigeria using time series data spanning from 1970 to 2010. The output of his investigation reveals that there exist a positive relationship between economic growth and financial intermediation in Nigeria. Out of the two financial intermediation indicator used in the process of research, only broad money supply was positive and has significant impact on the economic

growth.

Unlike Mina Balamoune (2001) uses vector error correction mechanism to investigate the nexus between financial liberalization and economic growth in morocco using time series data spanning from 1970 to 1999. Output of his econometrics result reveals that there exist a weak relationship between economic growth and financial liberalization while he finally concluded that there exist a demand following view of financial reform which simply means that economic growth is a catalyse to finance.

Mine while, kings and Levine (1993 a), beck et al (2000), bencivenga and smith (1991) argues that finance takes the lead in the process of development. They opted that the process of growth is a determinate of productivity improvement also economic development.

An empirical evidence was provided by Levine and zervos (1998) that financial development and market liquidity are both significantly and positively associated with future trends of economic development. "They explained that well developed and established stock market is capable of mobilizing capital funds and risk diversification between marketing agents, provide diverse form of financial services than banking sector and finally stimulate economic performance"

Demirguoc-kunt and Levine (1996) carried out a statistical investigation using polled data of forty four industrial and LDC's for a period of 1986 and 1993. They found that stock market development goes in a sequential manna with financial intermediary development. They finally concluded thus, that a well- structured stock market will bring about a well-developed banking and non-banking financial intermediaries.

According to the traditional growth theorist, they strongly argues that there exist no link along economic expansion and equity market development. Moreover, the stock market is view as an instrument that can damage economic development as a result of its instability (Stiglitz 1985). Mine while, quite a number of writers such as Pagano (1993), Atje and Jovanovich (1993), Rousseau and Wachel (2000) in their various empirical research work discovered that there is a very strong causality flow along "stock market development and economic growth".

Monogbe et al, (2016) investigated financial development and economic performance in Nigeria using time series data from 1986 to 2014. There introduce financial intermediation ratio into their model to capture the non-banking financial institution, output of their result reveals that there is a long run causality between financial development ratio and economic performance with causality flowing from the economic to the financial development indicators which suggest that Nigeria economic promote financial system hence there concluded that economic is leading while fiancé is following in the Nigeria context.

Arestis and Demetriades (1997) justify the fact that the stock market has a direct and significant link to the development of the US economic while in Germany,

insignificancies prevail. Judging by this, it implies that the significant influence of stock market to economic development depend on individual countries. However, Okuda highlighted some determinant of causality link between economic development and financial sector which includes policies and market persuade by individual countries followed by the pattern of operation in the financial institution of each country.

In a thesis research work carried out by Folorunsho Oladele (2012) titled "financial development and economic growth in Nigeria" using vector error correction model and granger causality estimator to justifies the causality direction. Result reveals that "there exist a long run relationship between financial development and economic growth as specified by the result of the Johansson co-integration test while the granger causality test reveals that there is a unidirectional relationship between economic growth and financial development with causality flowing from the financial development indicator to economic growth". This implies that finance lead and hence canvass support for supply leading hypothesis. It is glaring that empirical argument about financial development and economic development is far from been settled while contribution in the Nigeria context is very minuet.

Monogbe, (2105) studied the impact of insurance sector development on the growth of the Nigeria economy sourcing data from the central bank of Nigeria statistical bulletin spanning from 1981 to 2013. The major intension of the research work was to identify the extent to which the non-banking has promoted the economy overtime. In actualizing the objective of the research three variable were used as proxy for insurance sector and judging by the output of the granger causality test, we found that the direction of causality flow between insurance sector development indicator and economic growth are bidirectional in nature and hence there causality nexus is symbiotic.

### 3. Research Methodology

This paper recognized the fact that financial sector of an economy comprise of institution, market and regulators that deal in financial instruments under the large framework within which the activities of the various participant are regulated. Put separately, the Nigerian financial system apart from the central bank of Nigeria and some other bodies who serve as a regulators comprises of the "bank financial intermediaries, non-bank financial intermediaries and the financial market" (monogbe, 2015). However, three major variable are commonly used in the literature as proxy for financial intermediation indicators which include broad money supply (M2), credit to the private sector (CPS), and stock market ratio (SMR). But, for the purpose of this research work, we added insurance intermediation ratio (IIR) which is an indicator of non-banking financial institution to the existing variable specified in the literature so as to capture the holistic view of financial intermediation in Nigeria.

### 3.1. Data and Operational Measure

This study uses time series data sourced from the central bank of Nigeria statistical bulletin and stock exchange market spanning from 1986 to 2014. It must however be noted that the break-down of the total asset of insurance company data was only available from 1996 to 2011 hence, insurance intermediation ratio is captured using total asset of insurance company divided by nominal gross domestic product. The variable used in this research work are operationalized thus: "RGDP is captured using real gross domestic product, Broad money supply M2 is captured using total money supply divided by nominal gross domestic product, Credit to the private sector ratio (CPS) is operationalized using absolute value of credit to the private sector divided by nominal gross domestic product, IIR is captured using insurance total asset divided by nominal gross domestic product". All the exogenous variable used in this process of research is captured as the ratio of NGDP.

### 3.2. The Model

Sequel to the theoretical and empirical review stated above, we formulate our model in a log linear form and hypothesising that gross domestic product per capital income is a function of financial development indicator.

$$\text{Log(RGDP)} = \beta_0 + \beta_1 \log(\text{M2t}) + \beta_2 \text{LOG}(\text{CPSt}) + \beta_3 \log(\text{IIRt}) + \mu_i \quad (1)$$

Where

PCGDP=Real capital gross domestic product

M2=Broad money supply

CPS=Credit to private sector

IIR=Insurance intermediation ratio

Mi=Error term

$\beta_0$ =Intercept

### 3.3. Apriori Expectation

Sequel to the above empirical review and theoretical justification, independent variable is expected to have a direct and positive nexus with the regressand criterion variable which is mathematically stated thus:

$$\beta_1, \beta_2, \text{ and } \beta_3 > 0.$$

### 3.4. Definition of Variable

RGDP is the measure of total economic output of goods and services produce in an economy

M2 show the degree of monetization in the economy and it comprises of both narrow money supply (M1) and quasi-money. It however captures the financial capacity of the bank to mobilize fund for investment purposes

CPS is the quantum of loan allocated to the private sector from the commercial bank. It however measure the financial opportunities available to private firm.

IIR it is define as the ratio of insurance total asset to nominal gross domestic product. This tends to capture the non-banking financial institution as there are part of the

financial system

## 4. Data Presentation and Analysis

We are pleased to start the empirical result and analysis by testing for stationarity of the data used in the process of research to avoid having spurious result.

### 4.1. Phillip Peron Test of Normality

Since time series data usually have the problem of stationarity, it is statistically ideal for us to test for stationarity of the data used for the research work using PP test.

Table 1. Unit root test.

VARIABLE	PP Test	5% critical val	Prob	Remark	Order
Log (RGDP)	-3.9699	-2.9762	0.0053	stationary	1 (1)
M2	-5.2303	-2.9762	0.0002	stationary	1 (1)
CPS	-6.3227	-2.9762	0.0000	stationary	1 (1)
IIR	-3.3646	-3.1199	0.0330	stationary	1 (1)

Author's computation

From the above output, we discovered that all the data used in this process of research has a unit root at level and hence, there are not stationary at level. Further test reveal that the data became stationary after fist differencing in the order of 1 (1) which justifies the fact that all the data used in this process of research are stationary hence, we proceed to test for long-run nexus between all the variable using Johansson co-integration tests.

Table 2. Johansson co-integration test.

Date: 06/06/16 Time: 21:06				
Sample (adjusted): 1998 2011				
Included observations: 14 after adjustments				
Trend assumption: Linear deterministic trend				
Series: LOG (RGDP) M2 CPS IIR				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized	Trace		0.05	
No. of CE (s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.991736	119.1433	47.85613	0.0000
At most 1 *	0.873218	52.00124	29.79707	0.0000
At most 2 *	0.750989	23.08725	15.49471	0.0030
At most 3	0.228045	3.623614	3.841466	0.0570
Trace test indicates 3 cointegrating eqn (s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized	Max-Eigen		0.05	
No. of CE (s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.991736	67.14210	27.58434	0.0000
At most 1 *	0.873218	28.91399	21.13162	0.0033
At most 2 *	0.750989	19.46364	14.26460	0.0069
At most 3	0.228045	3.623614	3.841466	0.0570
Max-eigenvalue test indicates 3 cointegrating eqn (s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

From the output above, we found that there exist a long run relationship between all the variable used in the process of research as the result justifies the fact that there are three co-integrating equation. The existence of the long run nexus depict that all the variable used in the process of research share mutual stochastic trend and are linked in common long-run equilibrium.

**Table 3.** Ordinary lease square output.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.895891	0.058538	100.7183	0.0000
M2	0.019497	0.007612	2.561258	0.0249
CPS	-0.023877	0.00828	-2.88391	0.0137
IIR	1.33E-06	1.35E-07	9.842726	0.0000
R-squared	0.951374	Mean dependent var		6.255968
Adjusted R-squared	0.939218	S. D. dependent var		0.272725
S. E. of regression	0.067238	Akaike info criterion		-2.348839
Sum squared resid	0.054251	Schwarz criterion		-2.155692
Log likelihood	22.79072	Hannan-Quinn criter.		-2.338949
F-statistic	78.26057	Durbin-Watson stat		1.03963
Prob (F-statistic)	0.000000			

Author's computation

From the out-put above, we found that of all the variable used in the process of research, only (IIR) and (M2) with probability value of 0.0000 and 0.0249 has a positive and significant Influence on the growth of the Nigeria economy. This justifies the fact that the services of the non-banking financial institution is really contributing to the growth of the Nigeria economy. M2 has a probability value of 0.0248 which is positive and significantly influence the growth of the economic. This suggested that financial intermediary services promoting the growth of the Nigeria economic. The output of the result is in consonant with the work of shittu Ayodele (2012) However, CPS has a significant probability value of 0.0137 with a negative coefficient of -0.0238 suggesting inverse relationship. i.e. a percent increase in credit allocated to the private sector will bring 0.02% decrease in economic growth. On this note, it is difficult to conclude that financial intermediation services promote economic growth in Nigeria prior the fact that OLS estimation tools only captures the short run effect. From the global utility, the value of the adjusted R square stood at 0.93% which implies that 93% fluctuation in the dependent variable is captured and explained by the exogenous variable. The value of the Durbin Watson is 1.039 which shows presence of auto correlation while the F statistic and the corresponding probability is significant.

#### 4.2. Diagnostics Test

In order to check the adequacy of a chosen model and the data for analysis, researchers are advised to apply some range of diagnostic tests. However, In accordance with some of the assumption of classical linear regression model, it is essential to carry out some diagnostic test so as to be save from spurious result.

**Table 4.** Breusch –Godfrey Serial Correlation LM Test.

F-statistic	1.665478	Prob. F (1, 11)	0.2233
Obs*R-squared	2.36695	Prob Chi-Square (1)	0.2639

Lagrange multiple (LM) test is a diagnostics test use in identifying the present or absence of serial correlation to prevent model from spurious result. The output of the Godfrey serial correlation LM test is discussed thus. From the result above, we observed that the Obs R-square value is 0.26 hence, greater than the probability level of 0.05 which suggest that we accept the null hypothesis meaning that there is absence of serial correlation. This result nullifies the previous result obtain from the Durbin Watson statistic value which suggest present of serial correlation in the ordinary lease square model output.

**Table 5.** Heteroscedasticity test out-put.

F-statistic	1.861053	Prob. F (5, 12)	0.1753
Obs*R-squared	7.861662	Prob. Chi-Square (5)	0.164
Scaled explained SS	3.777999	Prob. Chi-Square (5)	0.5818

Author's computation

This test is conducted in other to identify whether there exist the presence of Heteroscedasticity or not. From the output, the value of the Obs R-square is 0.1573 which is greater than the 5% level of significant. This suggested that we accept the null hypothesis. That is, there is absence of Heteroscedasticity problem but rather there exist the present of homoscedasticity judging by 5% level of significant.

**Table 6.** Pairwise Granger causality tests.

Null Hypothesis	F-Statistic	Probability
M2 does not Granger Cause LOG (RGDP)	0.9968	0.3276
LOG (RGDP) does not Granger Cause M2	2.6371	0.1169
CPS does not Granger Cause LOG (RGDP)	0.8160	0.3750
LOG (RGDP) does not Granger Cause CPS	4.9682	0.0350
IIR does not Granger Cause LOG (RGDP)	2.0308	0.1796
LOG (RGDP) does not Granger Cause IIR	6.5649	0.0249

Source: Author's computation

Judging by 5% alpha level, The output of the granger causality test report that this is no causality flow between RGDP and M2 has justify by their various probability value respectively. However, we record a unilateral causality flow between RGDP, CPS and IIR with causality flowing from the RGDP to the financial Intermediary indicators (CPS and IIR) respectively. Judging by the output of this research, it is obvious that in the Nigeria context, economic growth determine financial sector development. Hence, the output of our result is in consonant with the work of Robinson (1952), Monogbe, et al (2016) and Mushin & Eric (2000). Sequel to this, we conclude that economic growth is a catalyst to financial sector development in Nigeria.

## 5. Summary and Conclusion

This research work set out to empirical investigate the relationship between financial intermediation and economic

growth in Nigeria using time series data spanning from 1986 to 2014. The output of our empirical analysis reflect that all the data used in this process of research are all stationary after first differencing in the order of 1 (1) while, the result of the co-integration test reveals that there exist three co-integrating equation which indicate that there is a long run relationship between all the variable used in this research work. However, on the major findings, we observe that (M2) and IIR has a positive and significant influence on the growth of the Nigeria economy while CPS is negative but significant in promoting economic growth. Based on the OLS empirical justification, one cannot confidentially say that finance is leading in the Nigeria context using the short run estimator. Consequently, all the diagnostic test conducted indicate that our variable are all in good shape while the result of the granger causality test shows that there exist a causality flow between RGDP, IIR and, CPS with causality flowing from RGDP to financial Intermediation indicators respectively. This suggest that financial sector in Nigeria is demand following while the economy is leading. The economic implication of this is that the financial sectors out-rightly rely on the growth of the economy i.e. the speedy the economic growth, the rapid the development of the financial sector in Nigeria. This result is in consonant with the work of Robinson (1952), Monogbe, et al (2016), Mushin and Eric (2000).

From the output of our empirical findings, we recommend thus: financial sector of the economy should be standardise, emphasis should be lay on the stock market by expanding its transaction network as this will help in supporting the government effort and allow them concentrate on the major fundamental and basic infrastructures needed in the economy. Furthermore, we advise that the comprehensive analysis of the private sector be carried out with the view of justifying the rationale behind the inverse relationship between credit allocated to the private sector and its unproductive ability in the economic.

## References

- [1] Atje, R. and Jovanovich, B. (1993). "Stock Markets and Development," *European Economic Review*, April 1993, 37 (2/3), 632, (640).
- [2] Bencivenga, V. R. and Smith, B. D. (1991) "Financial Intermediation and Endogenous Growth, RCER Working Papers 24, University of Rochester- Center for Economic Research.
- [3] Bernanke, B. and A. Blinder (1988): "Credit, money, and aggregate demand", *American Economic Review*, 78, (2), Papers and Proceedings of the One-Hundredth Annual Meeting of the American Economic Association, May, 435, (39).
- [4] Demiguc-Kunt, A. and Levine, R. (1996). "Stock Market Development and Financial Intermediaries: Stylized Facts, *World Bank Economic Review*.
- [5] Goodfriend, M. and B. McCallum (2007): "Banking and interest rates in monetary policy analysis: A quantitative exploration", *NBER Working Papers*, no 13207, June.
- [6] Levine, R. and Zervos, S., (1996). Stock Market Development and Long-run Growthl, Policy Research Working Paper 1582, *World Bank Economic Review*, 10, 323-339. <http://www.worldbank.org/fandd>
- [7] Levine, R., Loayza, N. and Beck, T., 2000. "Financial Intermediation and Growth, Causality and Causes". *Journal of Monetary Economics*, (46) 31-75.
- [8] Mckinnon, R., 1973. Money and Capital in Economic Development. The Brookings Institute, Washington.
- [9] Monogbe, T. G (2015). Impact of insurance sector development and the growth of the Nigeria economy: *International Journal of Advanced Academic Research - Social Sciences and Education* | 1 (2), Nov.2015 | [www.ijaar.org](http://www.ijaar.org)
- [10] Monogbe et al, (2016): financial development and economic performance in Nigeria. *journal of business and Africa economy*.
- [11] Nwaeze. C, Michael. O and Nwabekee. C. financial intermediation and economic growth in Nigeria (1992-2011). *The Macrotheme Review* 3 (6), summer 2014.
- [12] Robinson, J., 1952. "The Generalization of the General Theory" in the *Rate of Interest and Other Essays*. London: Macmillan, (67) 146.
- [13] Rousseau and Wachtel (2000) —Equity Markets and Growth: Cross-country Evidence on Timingand Outcomes, 1980-1995. *Journal of Banking and Finance*, 24, 1933 -1957.
- [14] Shittu Ayodele (2012), financial intermediation and economic growth in Nigeria *British Journal of Arts and Social Sciences* ISSN: 2046-9578, 4, (2). (2012) ©British Journal Publishing, Inc. 2012 <http://www.bjournal.co.uk/BJASS.aspx>