

IMPACT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH IN NIGERIA

OKONKWO GLADYS .O. (Ph.D)
gladysokonkwo47@gmail.com
DEPARTMENT OF BANKING AND FINANCE
FEDERAL POLYTECHNIC, OKO
ANAMBRA STATE

AND
PROFESSOR ISU, H.O
ABIA STATE UNIVERSITY, UTURU,
ABIA STATE NIGERIA

AND
PROFESSOR OGBULU, O.M
ABIA STATE UNIVERSITY, UTURU,
ABIA STATE NIGERIA

Abstract

This study examines the impact of financial deepening on economic growth in Nigeria over the period 1986-2017. Data for the study were obtained from secondary sources (Central Bank of Nigeria Statistical Bulletin). The explanatory variables used are ratio of broad money supply to GDP (MSGP) and ratio of private sector credit to GDP (CPGD). The study was carried out using Ordinary Least Square, Augmented Dickey Fuller unit root test, the Johansen approach to co-integration analysis and granger causality approach. This study found that money supply has a positive and insignificant impact on the economic growth. The past credit to private sector to gross domestic product at lags 1 has a negative and significant impact on the economic growth in Nigeria. There is uni-directional causal relationship running from ratio of money supply to economic growth. However, the result of granger causality test revealed that ratio of broad money supply to gross domestic product and ratio of private sector credit to gross domestic product has bi-directional causal relationship with economic growth. The results highlight the importance of the Nigerian financial intermediary sector in resource mobilization and allocation and in stimulating economic activities. The development of financial sector intermediation could therefore be the right strategy lessening the dominance of the oil sector in the Nigerian economy. The Financial system reforms should be continued to ensure efficient allocation of resources and management of money supplied in the economy. Conclusively, the results show that financial deepening has significant impact on economic growth, therefore, the assertion is that financial deepening drives economic growth. The study recommended that part of government resources should be spent towards the reduction of risks which inhibits investments in Nigeria. These include provision of adequate security to stem increasing kidnapping, assassination and terrorism as well as the provision of inadequate public power supply and efficient transportation infrastructure. These will boost and enhance the establishment of new investments as well as expansion and efficiency of the old ones.

Keyword: Financial deepening, Economic Growth, Broad money supply, Bank credit to private sector, co-integration.

Introduction

Financial deepening is a process that attracts the reservoir of savings and idle funds and allocates same to entrepreneurs, businesses, households and governments for investments/projects and other purposes with a view of returns which forms the basis for economic growth. Financial deepening improves economic conditions through increased competitive efficiency within financial markets thereby indirectly benefiting non-

financial sectors of the economy. The growing importance of stock market and banks around the world has recently opened a new avenue of research into the relationship between financial deepening and economic growth (Arestis, Demetriades and Luintel, 2001; Akinlo and Akinlo, 2007; Nwaogwugwu, 2008; Levine and Zervos, 1996; Abu-Bader and Abu-Qarn, 2005). Schumpeter (1911) was the first to highlight the economic theory suggesting that financial sector is an engine of growth.

The main alternative view to the supply-leading hypothesis is the demand-following hypothesis which posits that financial markets develop and progress following the increase demand for their services from the growing real economy. Evolution in the financial markets is simply seen as a passive response to a growing economy. As the real sector expands and grows, the growing real sector will generate increased new demands for financial services which in turn will exert and intensify pressures to establish larger and more sophisticated financial institutions to satisfy the new demand for these services and in this way, financial deepening is merely a by-product or an outcome of growth in the real sector of the economy (Robinson, 1952; Patrick, 1966; Ireland, 1994; Demetriades and Hussein, 1996; Darrat, 1999). Other studies that found negative impact of financial development on economic growth are Era and Srivisal (2013) using cointegration and granger causality found no long-run impact of financial deepening on real GDP in Asian while Awang and Halee (2013) employed province-level data to explore the relationship between financial deepening on economic growth in Turkey. They found strong negative relationship.

Economic growth, on the other hand, refers to a sustained and positive change in the level of aggregate production of goods and services by over certain and given period of time. When measured over the population of a given country, then economic growth can be stated in terms of per capita income according to which the aggregate population of goods and services in a given year is divided by the population of the country within the given period. Economic growth can also be stated in nominal or in real terms. Hence, when the increase in the aggregate level of goods and services is deflated by the rate of inflation, we have real economic growth otherwise when measured without deflating; it is called nominal economic growth. Point of interest to scholars is the empirical debate between financial deepening and

economic development. The empirical debate has been on the direction of causality and the measurement of financial deepening. Four basic hypothesis have been proposed to address the question relating to the direction of causality: (i) Does the deepening of the financial system cause growth (supply-leading hypothesis), (ii) Does growth in economic activity cause a deepening of the financial system (demand – following hypothesis), (iii) Is there bi-direction causality between financial deepening and growth (feedback hypothesis), and (iv) Is there no casual relationship between financial deepening and economic growth (neutral hypothesis)?

For over five decades, the direction of causality between financial deepening and economic growth has remained a contentious and unresolved issue, Akintola and Akintola, 2007; Agu and Chukwu, 2008; Adelokun, 2010; Odeniran and Udejaja, 2017) and studies on the subject matter have produced mixed results across countries and periods. The debate is still on-going. The controversy is still there. It has not been settled. In the light of the above viewpoints and controversy, this research work seeks to contribute to the on-going debate by examining empirically whether there is any functional long-run relationship between financial sector activities and economic growth and secondly, to determine the direction of causality between financial sector and economic growth within the Nigerian context.

It is against this background that this study intends to examine the impact of financial deepening on economic growth in Nigeria and to assess the impact of the ratio of money supply and the ratio of private sector credit to GDP.

This study is guided by research hypotheses:

H₀₁: The ratio of money supply to gross domestic product does not exert any significant impact on economic growth in Nigeria.

H₀₂: The ratio of private sector credit to gross domestic product does not exert any significant impact on economic growth in Nigeria.

This study focused on the impact of financial deepening on economic growth in Nigeria. The work was limited to 30 years (1986-2017).

1.0. Review of Literature

2.1. Conceptual Framework

Financial deepening can also be used to refer to development of financial system. For it is only a developed financial system that can broaden access to funds, whereas in an undeveloped financial system, access to fund is limited and people are constrained by the availability of their own funds and have to resort to high cost informal sources such as money lenders (Mohan, 2014). Levine (2005) defined financial development as a combination of depth (size and liquidity of market), ability of individual to access financial services and the efficiency of the institutions to provide financial services at low cost and with sustainable revenue, and the level of activity of the capital market.

Gross Domestic Product (GDP)

Gross domestic product connotes economic growth in the research. Real gross domestic product (GDP) was used as proxy for economic growth. Real GDP is an inflation-adjusted measure that reflects the value of all finished goods and services produced by an economy in a given year as base year prices. Real GDP accounts for changes in price level and provide a more accurate figure of growth as well as gives better performance for output changes.

Broad Money Supply (MSGD)

Broad money supply is a proxy for money supply the total amount of money issued by a Central bank plus any new money created by Commercial Bank through lending. The ratio of broad money supply to GDP (MSGD) is the M_2 to nominal GDP and is often called the monetization ratio as used by King and Levine (1993). It reflects the depth of financial market relative to the overall economy. Increases in this ratio indicate further expansion in the financial sector relative to the rest of the economy.

Bank Credit to Private Sector

Credit to private sector refers to financial resources provided to the private sector such as loans and advances, purchases of non-equity security, trade credit and other accounts receivable, which establish a claim for repayment (Olowofeso, Adeleke and Udoji, 2015). This measures the economic volatility. It is a financial institutions services to the non-financial sector as a share of GDP. The ratio of bank credit to private sector to GDP (CPGD) is bank-based activity level. Past research showed that credit to the private sector is the most comprehensive indicator of the activity of financial intermediaries (Levine, Loayza and Beck, 2000). According to Onwumere, Ibe, Ozoh and Mounanu (2012) the use of this measure is because it is more inclusive than other measures of financial development and also captures an important activity of the financial sector.

2.2. Theoretical Framework

This study is anchored on the theory of financial liberalization McKinnon (1973) and Shaw (1973). The McKinnon and Shaw theory of savings was developed by McKinnon (1973) and Shaw (1973). It states that financial market should be liberalized and that developing economies allow demand for real money balances, real interest rates and investment rates to be determined by market forces. McKinnon (1973) and Shaw (1973) argue that the rate of return on savings, as measured by interest rate would have a positive effect on saving rates and that policies that lead to financial repression reduce the incentives to save.

2.3. Empirical Studies

A good number of empirical studies have emerged on the relationship between financial development and economic growth following the pioneering work of McKinnon (1973). Some of these empirical studies especially those that have much relevance to our study were Ndebbio (2004); Nnanna (2004); Osuji and Chigbu (2012); Ogbulu, (2009); Adedokun (2010) Odeniran and Udeaja, (2010); Victor and Samuel, (2014); Shaw (1973) and Levine and Zervous (1996) and are reviewed in this work.

Ogbulu (2009) investigated whether there is a long-run relationship between capital market activities and economic growth in Nigeria. The author explores further the direction of causality between some selected capital market indicators of performance and economic growth. The author employed the method of Johansen co-integration and the Granger causality tests using data spanning the period 1970-2008. The results show that the value of new issues (VN) and foreign exchange rate of naira (FXR) are positively and significantly related to GDP while degree of openness of the country (EMR) and degree of government regulation (DGR) impact negatively and significantly on GDP. Market capitalization (MC), number of listed securities (NL), Turnover ratio (TOR), value of transaction (VT) and minimum rediscount rate (MRR) are not significant variables in the model. However, in his second Granger causality model, the author found that, the direction of causality between the capital market measures and economic growth is mixed: uni-directional from economic growth to market capitalization, value of new issues and value of transactions; uni-directional from number of listed securities and turnover ratio to economic growth and bi-directional between economic growth and value of new issues.

Victor and Samuel (2014) empirically examined the implications of financial development on economic growth in Nigeria covering the period 1990-2011. The authors adopted co integration technique with its implied Error Correction Mechanism. The variables included Real Gross

Domestic product, ratio of money supply to Gross Domestic product, liquidity ratio, interest rate and credit to the private sector. The Johansen co integration test suggests a long-run relationship among the variable and the significant ECM which is negatively signed supports the long run relationship among the variables and indicates a satisfactory speed of adjustment.

Osuji and Chigbu (2012) investigated the impact of financial development variables on economic growth in Nigeria using three variables: gross domestic product (GDP), money supply (M2) and credit to the private sector (CPS). Granger causality testing and the Error Correction Method (ECM) were employed on time series data from 1960 to 2008 and the results revealed that Money Supply (MS) and credit to private sector (CPS) are positively related to economic growth in Nigeria. The Johansen and Granger tests show that Money Supply and credit to private Sector (CPS) are co-integrated with GDP in Nigeria within the study period and the Granger tests indicated that all the exogenous variables Granger-cause GDP and GDP Granger-cause other variables in Nigeria.

Isu and Okpara (2013) examined financial deepening and economic growth in Nigeria over the period, 1990-2009. Using Johansen and Granger causality test the result of the granger causality test showed that with the exception of market capitalization which granger causes real GDP at lag 2 and 3 without feedback effect, causation runs from the growth indicator (RGDP) to other variants of financial deepening namely economic volatility, market liquidity, money market diversification and broad money velocity. Thus, financial deepening in Nigeria follows demand following hypothesis.

Ndubuisi (2017) investigated the relationship between capital market activity and economic growth index in emerging market economics in Nigeria from 1985 to 2014. The result revealed positive and statistical significant relationship between capital market activities and economic growth and also there is a long-run relationship between stock market activities and growth short index and that the speed of adjustment due to short-run shock is approximately 55.76 percent per annum.

Akpasung and Babalola (2014) examined the relationship between banking sector credit and economic growth in Nigeria from 1970-2008. The causal link between the pairs of variables of interest were established using Granger Causality test while a Two-Stage Least Square (TSLS) estimation technique was used for the regression models. The results of Granger causality test showed evidence of unidirectional causal relationship from GDP to private sector credit (PSC) and from industrial production index (IND) to GDP. Estimated regression models indicate that private sector credit impacts positively on economic growth over the period of coverage in this study.

3.0 Data and Methodology

The study investigates the effect of financial deepening on economic growth for national development in Nigeria using annual times series data for the period of 1986-2016. The data used in this study were collected from various secondary sources. The data were analyzed using computer based E-view software.

3.1 Model Specification

In an attempt to determine the impact of financial deepening and economic growth in Nigeria, we developed a model to justify the relationship that exists between the variables. The model specified the real GDP as a function of broad money supply and credit to private sector. The model specified the endogenous variable where the dependent variable is Gross Domestic product (GDP). This is regressed (as the regress and) against the selected financial sector (deepening) indicators described above (i.e. ratio of credit to the private sector to GDP(CPS/GDP), ratio of broad money supply to GDP(M2/GDP). They are the explanatory variables and will serve as the regressor or independent variables.

If we are to assume proximately a linear relationship between the dependent and the explanatory variables, we can represent this implicit relationship functionally as:

$$Y = f(X_1, X_2) \quad (1)$$

$$GDP = f(MSGP, CPGD)$$

Where,

Y= Real Gross domestic product (GDP) (proxy for economic growth)

X_1 = Ratio of broad money supply and economic growth in Nigeria

(proxy for money supply).

X_2 = Ratio of credits to private sector and economic growth in Nigeria ((proxy for

credit to private sector).

Therefore, the growth model is specified as follows:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu_t \quad (2)$$

The statistical model adopted was predicted on the presumed relationship between the dependent variable and the independent variables.

3.2 Method of Data Analysis

In this study, Ordinary Least Squares regression, co-integration, Parsimonious Error Correction Model (ECM) and Granger causality tests were employed to overcome the problem of spurious regression. Data collected were analyzed following an econometric approach based on the computer software E-view 10 that allows for co-integration and causality relationship between the variables to be revealed.

The first and foremost step after the OLS is to transform all the data to logs and proceed with the testing and confirmation of the presence of unit roots (stationary test) in the series in table I. This is vital for all empirical testing that follows afterwards and shall be carried out under the Augmented Dickey-Fuller (ADF) test. The ADF test is a modification of the Dickey-Fuller (1979) test and is used when the series is higher than an AR (1) process. The next stage involves the lag specification tests where the number of lags in the vector auto regression model (VAR) is determined by employing the Akaike Information Criterion (AIC) procedures. The third step involves the co-integration tests among the three series. This paper adopts the trace and maximum Eigen value test statistics proposed by Johansen and Juselius (1990) to determine the number of co-integrating relationships amongst the three series.

3.3. Johansen and Juselius Co integration

The Johansen co-integration equation which starts with the vector autoregressive regression (VAR) of order p which is given by:

$$y_t = \mu + A_1 y_{t-1} + \dots + A_p y_{t-p} + \varepsilon_t \quad (1)$$

Where y_t is a $(n \times 1)$ vector of variables under consideration in log form that are integrated at order one- commonly denoted $I(1)$, $n=4A_p$ are the parameters to be estimated, ε_t are the random errors. This (VAR) can be re-written as:

$$\Delta y_t = \mu + \Pi y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + \varepsilon_t \quad (2)$$

$$\text{Where, } \Pi = \sum_{i=1}^p A_i - 1 \text{ and } \Gamma_i = -\sum_{j=i+1}^p A_j \quad (3)$$

The above equation is a pure Johansen Co integration test. Gregory and Hansen (1996) noted that the Johansen test is a test for co-integration that allows for more than one co-integration relationship. If the coefficient matrix Π has reduced rank $r < n$, then there exist $n \times r$ matrices of α and β each with rank r such that

$$\Pi = \alpha\beta' \quad (4)$$

Where r is the number of co-integrating relationship, the element is α is known as the adjustment parameters in the vector error correction model and each column of β is a co integrating vector. It can be shown that, for a given r , the maximum likelihood estimator of β define the combination of y_{t-1} that yield the r largest canonical correlations of Δy with y_{t-1} after correcting for lagged differences

and deterministic variables when present. The two different likelihood ratio test of significance of these canonical correlations are the trace test and maximum Eigen value test, shown in equation 5 and 6 respectively below:

$$\lambda_{trace}(r) = -T \sum_{i=r+1}^n \ln(1 - \hat{\lambda}_i) \tag{5}$$

and

$$\lambda_{max}(r, r + 1) = -T \ln(1 - \hat{\lambda}_{r+1}) \tag{6}$$

Here, T is the sample size and $\hat{\lambda}_i$ is the i^{th} ordered eigenvalue from the Π matrix in equation 3 or largest canonical correlation. The trace tests the null hypothesis that the number of r co-integrating vector against the alternative hypothesis of n co-integrating vector where n the number of endogenous variable. The maximum eigen value tests the null hypothesis that there are r co-integrating vectors against an alternative of $r + 1$ (Brooks 2008).

3.4. Pairwise Granger Causality Test

This is used to prove the direction of influence. The test assumes that the information relevant to the prediction of the variable are contained solely in the time series data on these variables.

4.0: Empirical Results

Table 4.1: STATIONARY TEST

ADF AT 1ST DIFFERENCE						
Variable	Lag	t-statistic	1%	5%	10%	Remark
log(GDP)	1	-5.0912	-3.6793	-2.9677	-2.6229	Stationary
log(CPGD)	1	-4.52227	-3.6793	-2.9677	-2.6229	Stationary
log(MSGD)	1	-5.1541	-3.6793	-2.9677	-2.6229	Stationary

Source: Author's estimation using E-view 10

Table 4.2: VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-756.8389	NA	7.86e+15	50.78926	51.02280	50.86397
1	-671.0309	137.2929*	1.40e+14*	46.73539	48.13659*	47.18365*
2	-649.9535	26.69793	2.12e+14	46.99690*	49.56576	47.81870

Source: Author's computation using EViews

It is essential to appropriately specify the lag length k for the cointegration and if k is too small the model is misspecified and the missing variables create an omitted variable bias, while over-parameterizing involves a loss of degree of freedom and introduce the possibility of multicollinearity (Hosking, 2006). The optimal lag length test based on the three commonly used criteria, namely Akaike information

criterion (AIC), Schwarz information criterion (SC) and Hannan-Quinn information criterion are presented in Table 4.2. From the three criteria, the optimal lag length in one (1). Therefore, lag 1 will be used in this study.

The result of table 4.3 shows that there are two co-integrating equations in the series which invariably suggest the existence of long run relationship between the financial deepening variables and economic growth. The existence of co-integrating equations formed the basis for the researchers' use of the error correction model in other to know how these variables adjust in response to a random shock. In other words, the short run disequilibrium dynamics of the model is analyzed to determine each variable in the cointegration corrects itself to the error from the co-integrating vector. The parsimonious result of the error correction model is shown in table 4.4.

**Table 4.3: Johansen Cointegration Test
LOG (GDP), LOG (CPGD) LOG (MSGD).**

Trend assumption: Linear deterministic trend

Series: LOG(GDP) LOG(CPGD) LOG(MSGD)

Lags interval (in first differences): 2 to 3

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Eigen value	Trace Statistic	Critical Value	Prob.**
None *	0.763366	92.18557	69.81889	0.0003
At most 1 *	0.600702	51.83078	47.85613	0.0202
At most 2	0.435900	26.12548	29.79707	0.1250
At most 3	0.201650	10.09480	15.49471	0.2735
At most 4	0.126565	3.788989	3.841466	0.0516

Trace test indicates 2 co-integrating 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 Eigen value)

Hypothesized	Eigenvalue	Max-Eigen Statistic	Critical Value	Prob.**
None *	0.763366	40.35479	33.87687	0.0074

At most 1	0.600702	25.70531	27.58434	0.0853
At most 2	0.435900	16.03067	21.13162	0.2231
At most 3	0.201650	6.305815	14.26460	0.5743
At most 4	0.126565	3.788989	3.841466	0.0516

Source: Author's computation using EViews 10

Table 4.4. Parsimonious error correction model

Dependent Variable: D(LOG(GDP))

Method: Least Squares

Date: 05/06/19 Time: 23:21

Sample (adjusted): 1990 2017

Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.210481	0.111247	1.892015	0.0829
D(LOG(GDP(-2)))	0.185745	0.269670	0.688789	0.5041
D(LOG(GDP(-3)))	0.157587	0.254996	0.617998	0.5481
D(LOG(CPGD))	-0.376026	0.218985	-1.717135	0.1116
D(LOG(CPGD(-1)))	-0.557747	0.229342	-2.431948	0.0316
D(LOG(CPGD(-3)))	-0.436643	0.253188	-1.724576	0.1102
D(LOG(MSGD))	0.719340	0.383374	1.876338	0.0851
D(LOG(MSGD(-1)))	-0.483486	0.546402	-0.884854	0.3936
D(LOG(MSGD(-2)))	-0.513798	0.451279	-1.138538	0.2771
ECM(-1)	-0.323602	0.128948	-2.509554	0.0274
R-squared	0.833373	Mean dependent var		0.203404
Adjusted R-squared	0.625089	S.D. dependent var		0.192244
S.E. of regression	0.117711	Akaike info criterion		-1.145605
Sum squared resid	0.166271	Schwarz criterion		-0.384346
Log likelihood	32.03848	Hannan-Quinn criter.		-0.912881
F-statistic	4.001142	Durbin-Watson stat		1.959505
Prob(F-statistic)	0.010088			

Source: Author's computation using EViews 10

The estimates of the ECM provide the short run elasticities of the variables and how the real GDP responds to changes in its own lagged value and the lagged value of the other variables in the short run. It therefore indicates the short run causality between ratio of financial

deepening variables and real GDP respectively.

5.0. Granger Causality Test

Granger causality (1969) test is employed to test for the direction of causality between the financial deepening variables and economic growth in our model. In Table 5.1 we present the results of the Pairwise Granger causality test conducted with a maximum lag of 2 in order to evaluate hypothesis five stated as thus;

Table 5.1: The Pair-wise Granger Causality Test Result for Lag 3

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision
GDP does not Granger Cause CPGD	29	4.22030	0.0168	bi-directional
CPGD does not Granger Cause GDP		13.0193	4.00E-05	
MSGD does not Granger Cause CPGD	29	1.06648	0.3835	no causality
CPGD does not Granger Cause MSGD		1.54700	0.2305	no causality

Source: Author's computation using E-Views 10

According to the results in table 5, there exist a bi-directional causality running from GDP to ratio of (CPGD) and vice versa which indicates that ratio of private sector credit to GDP has significant causal relationship with economic growth and vice versa indicating bi-directional causal relationship. No causality exist between MSGD and CPGD.

The empirical result shows ratio of private sector credit to GDP has significant causal relationship with economic growth (GDP) (CPGD, $p = 0.0001 < 0.05$, F-value = 13.019 & 4.2203). The ratio of private sector credit to GDP has significant causal relationship with economic growth and vice versa indicating bi-directional causal relationship (ratio of private sector credit to GDP has significant causal relationship with economic growth (GDP) (CPGD, $p = 0.0001 < 0.05$, F-value = 13.019 & 4.2203)). However, there is no causality relationship between other indicators and GDP. This result is in agreement with the findings of Igwe, Udeh and Ukpere (2014) which revealed that money supply (MS) is positive and weakly significant in determining economic growth and credit to the private sector was negative and not significant in the short run.

5.1 Conclusion and Recommendation

Conclusion

Given the finding of this study the results show that financial deepening has significant impact on economic growth, therefore, the assertion is that financial deepening drives economic growth. This is in line and supports the findings of (Ogblu 2009) and (Isu and Okpala 2013).

Recommendations

The recommended actions to be taken include the following:

- i. The greater percentage possibly (60%) of government resources should be channeled towards the provision of necessary infrastructure that enhance activities that spur financial sector development.
- ii. Particularly, part of government resources should be spent towards the reduction of risks which inhibits investments in Nigeria. These include provision of adequate security to stem increasing kidnapping, assassination and terrorism as well as the provision of inadequate public power supply and efficient transportation infrastructure. These will boost and enhance the establishment of new investments as well as expansion and efficiency of the old ones.
- iii. The financial system reforms should be continued to ensure efficient allocation of resources and management of money supplied in the economy. The factors inhibiting easy sourcing funds from the financial system by private entrepreneurs should be drastically reduced to encourage new investments that will spur economic development.

References

- Abu-Bader, S. & Abu-Qarn, A. S. (2008). Financial development and economic growth: the Egyptian experience, *Journal of Policy Modelling*, 30 (5), 887 - 898
- Adelakun, O. & Udeaja, J. (2010). Financial sector development and economic growth in Nigeria. *International Journals Economics Development Reserve Investigation*. (1), 25-41.
- Adelekan, O.J (2010), Financial sector development economic growth in Nigeria, *International Journal Economic Development Research and Investment*, 1 (1).
- Agu, C.C & Chukwu, J.O (2008) Toda and tamamoto *causality tests between "bank based" financial deepening and economic growth in Nigeria*, *European Journal of Social Science*, 33(2), 121-136.
- Akinlo, A. E., & Akinlo, O. O. (2007). Financial development, money, public expenditure and national income in Nigeria. *Journal of social and economic development*, 9(1), 1.
- Akintola, A.E & Akintola, O (2007), *Financial development, money, public expenditure and national income in Nigeria*. J. Soc.. Econ 1,21-30.
- Akpasung, A.O & Babalola, S.J. (2014). Banking sector credit and economic growth in Nigeria: An empirical investigation, *CBN Journal of Appeal Statistics*, 2(2), 51-62.
- Arestis, A., Demetriades, P & Luintel, K. (2001). Financial development and economic growth: The role of stock markets, *Journal of Money, Credit and Banking*, 33 (1), 16-41. (2).
- Awang, M.M., Ahmed, A.R & Ali, M.M. (2013). Perceived environmental impact on knowledge resources and social network: Evidence from Malaysia *Journal of Business* 1(1), 6-34.
- Brooks, C. (2008). *Introductory econometrics for finance*, 2nd ed. Cambridge, Cambridge University press.
- Darrat, A. F. (1999). Are financial deepening and economic growth causally related? Another look at the evidence. *International Economic Journal*, 13(3), 19-35.
- Demetriades, P. O. & Hussein, K. A. (1996). Financial development and economic growth: cointegration and causality tests for 16 countries, *Journal of Development Economics*, 51(2), 387-411.
- Demirguc-Kunt, A, & Leora, K. (2012). Measuring financial inclusion: the global index database. World bank policy research working paper 6025.
- Dickey, D. & Fuller, W. (1979). Likelihood ratio statistics for autoregressive time series with a unit root, *econometrics*, 49, 1057-1077
- Era, D. N. & Serivsal N. (2013). Revisiting the link between finance and macroeconomic vitality IMF working paper. Wp/13/29 1-33, Available <http://www/IMForgexternal/pubs/ft/wp/2013/wpl32pdf>
- Granger, C. W. J. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrics*, 37, 424-438.
- Gregory, A.W. & Hansen, B.E (1996). Practitioner corner: tests for cointegration in models with regime and trend shifts. Wiley online library.
- Hosking, D.I (2008). *Critical disability theory: Essay in philosophy, politics, and law*. UBC press, Vancouver. Toronto. www.ubcpres.ca.
- Igwe, A., Edeh, C. & Ukpere, N. (2014). Financial deepening and economic growth in Nigeria (1981-2012): A managerial economic perspective, *Risk governance & control: Financial Markets & Institutions*, 4(4-1), 120-131.

- Ireland, P. N. (1994). Money and growth: an alternative approach. *The American economic review*, 1(2) 47-65.
- Isu, H. O., & Okpara, G. C. (2013). Does financial deepening follow supply leading on demand following hypothesis? A look at the Nigerian evidence. *Asian Journal of Science and Technology*, 5(1), 010-015.
- Johansens, S. & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration-with applications to the demand for money. *Oxford Bulletin of Economics and Control*, 12(2-3), 231-254.
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The Quarterly Journal of Economics*, 108(3), 717-737.
- Levine R. & Zervos, (1998). Stock markets banks and growth, world bank policy research working paper.1790.
- Levine, R (2005). Finance and growth theory and evidence. In: P Aghion and S.N Durlauf (eds) *Handbook of economic growth IA*, North Holland, Amsterdam. 2(4) 865-934.
- Levine, R. & Zervos, S. (1996). Stock market development and long-run growth, *The World Economic Review*, 110(2), 323-340.
- Levine, R.; Loayza, N., & Beck, T. (2000). Financial intermediary and growth: causality and causes. *J. Financial Deepening Econ*, 46(1), 31-77.
- Mckinnon, R. (1973). Money and capital in economic development, Washington, D.C: *Brookings Institution*.
- Mohan, R. (2014). Economic growth, Financial deepening and financial inclusion, address at the annual banker's conference. Hydrabad, India 1-18 (www.bis.org/review/roh1121.epdf).
- Ndebbio, J.E. (2004). Financial deepening, economic growth and development: Evidence from selected Sub-Saharan African Countries, Research. Paper 142 African Economic Research Consortium Nairobi, Kenya, August.
- Ndubisi, D. & Fuller, W. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74(366), 427-431.
- Ndubuisi, P. (2017). Capital market-economic growth nexus in emerging market economies: Nigeria in focus. *Journal of Financial Banking and Investment*, 4(1) 183-196.
- Nnanna, O.J. (2004). Financial Sector Development and economic growth in Nigeria: *Economic and Financial Review*, 42 (3) 40-59.
- Nnenna, O. M. (2012). Evaluating the nexus between financial deepening and stock market in Nigeria. *European Scientific Journal, ESJ*, 8(15) 18-32.
- Nwogwugwu, I. C. (2008). Stock market development and economic growth in Nigeria: the causal linkage, *The Nigerian Journal of Securities and Finance*, 13 (1), 115 - 128.
- Odeniran, S.O. & Udeaja, E.A. (2017). Financial sector development and economic growth: Empirical evidence from Nigeria. *Central Bank of Nigeria. Economic and Financial Review*, 48(3), 92-124.
- Ogbulu, O.M. (2009). Capital market development and economic growth in Nigeria: Application of co-integration and causality tests. *Journal of Finance, Banking and Investment*, (1), 1-19.
- Olowofeso, E. O., Adeleke, A. O., & Udoji, A. O. (2015). Impact of private sector credit on economic growth in Nigeria. *CBN Journal of Applied Statistics*, 8(2), 81-101.

- Onwumere, J. U. J., Ibe, I. G., Ozoh, F. O., & Mounanu, O. (2012). The impact of financial deepening on economic growth: Evidence from Nigeria. *Research Journal of Finance and Accounting*, 3(10), 64-71.
- Osuji, C.C. & Chigbu, E.E. (2012). An Evaluation of Financial Development and Economic Growth of Nigeria: A Causality Test Kuwait Chapter Arab. *J. Bus Manag.Rev. (1)* 27-44.
- Patrick, H.T. (1966). Financial development and economic growth underdeveloped countries. *Economics Development Culture Change*, (14)174-189.
- Schumpeter, J. A. (1911). *Theory of Economic Development*. Cambridge Harvard University Press.
- Shaw, E. S. (1973). *Financial deepening in economic development* New York. Oxford University Press.
- Victor, E.O & Samuel, J.E. (2014). An empirical assessment of financial sector development and economic growth in Nigeria. *International Review of Management and Business Research* 3(1) 140-149.



INJASR