International Journal of Financial Economics
Vol. 1, No. 4, 2013, 108-118
RESEARCH ACADEMY OF SOCIAL SCIENCES

Is There A Link Between Financial Sector Development And Economic Growth In Nigeria?

Olabanji Olukayode Ewetan[1], Henry Okodua[2]

Abstract

There is no consensus in the empirical literature on the causal links between financial sector development and economic growth. This paper investigates the long run and causal relationship between financial sector development and economic growth in Nigeria for the period 1981 and 2011 using time series data. Results from a multivariate VAR and vector error correction model support evidence of long run relationship between financial sector development and economic growth in Nigeria. Granger causality test results also confirm the cointegration results indicating there exist causality between financial sector development and economic growth in Nigeria. The nature of the causality however depends on the variable used to measure financial development. The results demand that government should implement appropriate regulatory and macroeconomic policies to consolidate on the gains of previous financial sector reforms.

Keywords: Financial Sector Development, Economic Growth, Cointegration, Granger Causality

JEL Classification: G00, 016

1. Introduction

There is a vast literature on the role of financial sector development. A well established and developed financial system increases the efficiency and effectiveness of financial institutions and boosts the innovations in the financial services system. It also helps the advancement of technology, reduction of information cost and profitability of investment (Muhammad and Lean, 2011). Some scholars contend that financial deepening increases savings and investment which causes economic growth (Fung, 2009; Bekaert et al, 2001, 2002, 2005; Bekaert and Harvey, 2000; Mckinnon, 1973; Shaw, 1973; Schempeter, 1912) Another strand of the literature contends that economic growth leads to financial development (Lucas, 1988; Stern, 1989). There could exist a negative or positive relationship between financial development and growth (Baliamoline-Lutz, 2013; Yucel, 2009; Nyong, 1997; Bencivenga and Smith, 1991; King and Levine, 1993b).

On the direction of causality between financial development and economic growth the findings are inconclusive and mixed. Some researchers found unidirectional causality running from financial sector development to economic growth referred to as supply leading hypothesis (Baliamoune-Lutz, 2013; Akinlo and Egbetunde, 2010; King and Levine 1993a;), some found unidirectional causality running from growth to financial development referred to as demand-following hypothesis (Baliamoune-Lutz, 2013; Akinlo and Egbetunde, 2010), while others found bidirectional causality between financial sector development and economic growth (Calderon and Liu, 2003; Baliamoune-Lutz, 2013; Dabos and Gantman, 2010; Ewah, et al. 2009; Luintel and Khan, 1999).

There are studies that did not find any significant link between finance and economic growth (Baliamoline-Lutz, 2013; Demetriades and Hussein 1996).

The Central Bank of Nigeria has implemented various reforms in the financial sector aimed at deepening and strengthening the financial sector to cope with the nation's developmental challenges and to

[1] Department of Economics and Development Studies, College of Development Studies, Covenant University, Ota, Ogun State, Nigeria
[2] Department of Economics and Development Studies, College of Development Studies, Covenant University, Ota, Ogun State, Nigeria

ensure the realization of the vision 20:2020. The overall objective of recent reforms was to make Nigeria a financial hub center in Sub-Saharan Africa and thereby make the Nigerian economy a preferred destination for foreign investment and finance to bridge the financing gap in the domestic economy. The global economic and financial crisis of 2008 that led to serious problem in the Nigerian capital market, and the banking crisis of 2010 in Nigeria have impacted negatively on the financial sector service delivery and eroded the gains of recent reforms in the financial sector.

This paper seeks to find out the nature of the relationship between financial sector development and economic growth in Nigeria, using macro-economic data between the years 1981 and 2011. The paper estimates multivariate vector autoregressive (VAR) equations and perform Granger-causality tests within an error correction model framework to determine the nature of the relationship between financial sector development and economic growth in Nigeria. This study also seeks to establish whether there exists a long run stable relationship between the study time series variables.

This study is motivated by the need to shed additional light on the links between financial sector development and economic growth in Nigeria in view of the fact that the various reforms that have been implemented in the financial sector particularly since 2003 were aimed at creating a more robust financial sector to drive a sustainable growth rate. The gain of these reforms in terms of possible contribution to economic growth is another motivating factor behind this study.

The rest of this paper is structured as follows. Section 2 reviews the literature with emphasis on the empirical studies on the direction of causality between financial sector development and economic growth. Section 3 provides a description of the data and methodology. Section 4 reports and discusses the empirical results. Concluding remarks and policy implications of findings are reported in Section 5.

2. Literature Review

The financial system in any economy performs a number of functions. These functions include mobilization of savings, allocation of financial resources, diversification of risk and hedging, management of the payments system, facilitation of trade, and capital formation (Okodua and Ewetan, 2013; Alege and Ogunrinola, 2008). The critical role of the financial sector in the economic growth process is well documented in the literature and can be categorized into three groups. The first group posits that finance is a critical element in the growth process while the second group argues that finance is relatively unimportant in the growth process. The third group opines that finance has a negative impact on economic growth (Akinlo and Egbetunde, 2010).

A huge literature has evolved on the nature of the relationship between financial sector development and economic growth using an array of different techniques. From the huge literature, the nature of the relationship between financial development and economic growth reveals four possible scenarios which are examined. These are; finance-led growth referred to as supply-leading hypothesis, growth driven finance referred to as demand-following hypothesis, bi-directional relationship referred to as feedback, and no relationship between financial development and economic growth. Different techniques which include cross-country, panel, time series, country specific, industry-level, and case-study analyses have been used to investigate the links between financial development and economic growth.

The finance-led growth hypothesis states that financial sector development stimulates and drives economic growth. Financial development promotes growth through a number of channels which include mobilization of savings through attractive instruments, efficient allocation of capital, reduction of cost of information gathering, and a better access to investment information among others. There are a number of empirical studies in the literature that provide support for this hypothesis (Baliamoune-Lutz, 2013; Johannes et al. 2011; Akinlo and Egbetunde, 2010; Alege and Ogunrinola, 2003; McKinnon, 1973; Shaw, 1973). Finance influences economic growth through two different but complementary channels, the accumulation channel and the allocation channel. The accumulation channel occurs through the impact of physical and human capital on economic growth (Pagano, 1993), while the allocation channel occurs through efficient resource allocation as a result of financial deepening that drives growth (King and Levine, 1993a). Financial liberalization theory and new endogenous growth theories postulate a link between financial development

and economic growth (Hermes, 1994). Both time series and cross country studies confirm a strong and positive relationship between financial sector development and economic growth.

A number of studies found empirical evidence in support of the growth-driven finance hypothesis that postulates that economic growth bring about financial development. Such studies include (Baliamoune-Lutz, 2013; Akinlo and Egbetunde, 2010; Jenkins and Katircioglu et al. 2010; Oluitan, 2010).

The findings of a number of studies reveal a bi-directional causal relationship between financial sector development and economic growth. A study by Lewis a development economist reveals a bi-directional causality between financial sector development and economic growth. The findings of several other scholars support this bi-directional relationship (Baliamoune-Lutz, 2013; Chakraborty and Ghosh, 2011; Akinlo and Egbetunde, 2010; Colle, 2010; Bangake and Eggoh, 2010). A number of endogenous growth models show a two-way relationship between financial development and economic growth (Kar and Pentecost, 2000; Luintel and Khan, 1999; Murinde and Eng, 1994).

Some studies did not consider causality issues but examined the nature of the relationship between financial development and economic growth. Some found a positive relationship between financial sector development and economic growth (Sackey and Nkrumah, 2012; Hurlin and Venet, 2008), and others found a negative relationship (Yucel, 2009; Eso, 2009; Nyong, 1997; Van Wijnbergen, 1983). Some studies did not find any link or relationship between financial sector development and economic growth (Xu, 2010; Dabos and Gantman, 2010; Ewah et al. 2009; Eso, 2009; Vuranok, 2009)

Previous studies on Nigeria reveal mixed findings. Kolawole (2012) used a co-integration and error correction model to examine whether open markets and financial sector development affect economic growth in Nigeria. The study did not establish any link or causation between financial sector development and economic growth. Adeniyi and Omisakin (2012) examines the causal linkage between FDI, economic growth and financial sector development in Nigeria, Cote' d'Ivoire, Gambia, Ghana, and Sierra Leone within a trivariate framework and error correction model. The finding of the study shows that there is no evidence of any causal linkage between financial sector development and economic growth. Nwosa et al. (2011) investigate the causal relationship among financial development, FDI and economic growth using the co-integration and error correction model. The study reveals that financial sector development has a statistically significant causal influence on economic growth. Akinlo and Egbetunde (2010) found that financial development Granger causes economic growth in Nigeria. In another study, Chimobi (2010) examines the causal relationship among financial development, trade openness and economic growth in Nigeria for the period 1970 to 2005 using the co-integration and causality test. The study reveals a bi-directional causality between financial sector development and economic growth. This study is therefore motivated by the conflicting findings on the nature of the relationship between financial sector development and economic growth in Nigeria, and attempts to shed more light on the causal relationship between financial sector development and economic growth in Nigeria within a multivariate framework and error correction model.

3. Methodology and Data

This study investigates the causal relationship between financial sector development and economic growth in Nigeria using annual data from 1981 – 2011. This period is chosen on account of data availability and also a major policy package called the structural adjustment programme (SAP) which among others sought to remove the structural rigidities in the financial sector through liberalization and deregulation was adopted during this period.

In view of the multifarious nature of financial services and to avoid estimation bias, three indicators of financial development are used to ensure the robustness of empirical findings. Instead of the conventional indicator of financial development used in previous studies, this paper adopted a new set of indicators to measure financial development. The three indicators are liquid liabilities (M3) as percentage of GDP denoted as (M), total domestic credit provided by the banking sector as a percentage of GDP denoted as (DC), and stock market capitalization as percentage of GDP denoted as (MC). These alternative measures of financial development are used in order to capture the diversity of opinions on the precise definition of financial sector development. M3 or liquid liabilities (currency plus demand and interest-bearing liabilities of banks and non-bank financial intermediaries) as percentage of GDP measure the overall size of the financial sector

(Baliamoune-Lutz, 2013; Adeniyi and Omisakin, 2012; Alfaro et al. 2004). The second indicator, total banking sector credit as a percentage of GDP excludes non-bank credit to the private sector and is intended to capture the depth of the money market (Nwosa et al. 2011). The third indicator, market capitalization as percentage of GDP is intended to capture the size of the capital or stock market (Okodua and Ewetan, 2013; Nwosa et al. 2011). Real gross domestic product (GDP) is used to measure economic growth denoted as (GY) in line with the standard practice. To avoid simultaneous bias that could influence the direction of causality between financial development and economic growth, two control variables; real gross capital formation (K) and real interest rate (R) are included in the model (Ewetan and Okodua, 2013; Akinlo and Egbetunde, 2010).

Data for all variables were obtained from the Central Bank of Nigeria (CBN) Annual Statistical Bulletin (2011) edition. Data for the study is analyzed using the econometric software, EViews 7.0.

Model Specification

The baseline model estimated for this study is specified as follows:

$$FD_t = f(GY, K, R) \quad (3.1)$$

The function is transformed to natural logarithms for the conventional statistical reasons:

$$logFD_t^i = \alpha_0 + \alpha_1 logGY_t + \alpha_2 logK_t + \alpha_3 logR_t + \varepsilon_t \quad (3.2)$$

Where FD is financial development proxied by Liquid Liabilities (M), Domestic Credit by banks to the private sector (DC) and Stock Market Capitalization as percentage of GDP (MC).

i = M, DC or MC

GY is Real Gross Domestic Product GDP.

K is Real Capital Stock.

R is Real Interest Rate..

α_0 is the constant terms, 't' is the time trend, and 'ε' is the random error term.

Model Estimation Technique

In terms of econometric methodology, the multivariate cointegration approach offers useful insights towards testing for causal relationship. In principle, two or more variables are adjudged to be cointegrated when they share a common trend. Hence, the existence of cointegration implies that causality runs in at least one direction (Okodua and Ewetan, 2013; Akinlo and Egbetunde, 2010; Granger, 1988). However there could be exceptions to this expectation. The cointegration and error correction methodology is extensively used and well documented in the literature (Banerjee, et al. 1993; Johansen and Juselius, 1990; Johansen, 1988; Engle and Granger, 1987). Johansen (1988) multivariate cointegration model is based on the error correction representation given by:

$$\Delta X_t = \mu + \sum_{i=1}^{\rho-1} \tau_i \Delta X_{t-i} + \Pi X_{t-1} + \varepsilon_t \quad (3.3)$$

Where X_t is an (nx1) column vector of ρ variables, μ is an (nx1) vector of constant terms, Γ and Π represent coefficient matrices, Δ is a difference operator, and ε_t is the error term . The coefficient matrix Π is known as the impact matrix, and it contains information about the long-run relationships. Johansen's methodology requires the estimation of the VAR equation (3.3) and the residuals are then used to compute two likelihood ratio (LR) test statistics that can be used in the determination of the unique cointegrating vectors of X_t. The cointegrating rank can be tested with two statistics, the trace test and the maximal eigenvalue test.

Vector Error Correction Model (VECM).

The error correction version pertaining to the four variables (FD, GY, K, R) used in the study is stated below:

$$\Delta GY_t = \alpha_0 + \sum_{i=0}^{n} \alpha_{1t}\Delta GY_{t-1} + \sum_{i=0}^{n} \alpha_{2t}\Delta FD_{t-1} + \sum_{i=0}^{n} \alpha_{3i}\Delta K_{t-1} + \sum_{i=0}^{n} \alpha_{4i}\Delta R_{t-1} + \lambda_1 ECM_{t-1} + \varepsilon_i \quad (3.4)$$

$$\Delta FD_t = \beta_0 + \sum_{i=0}^{n} \beta_{1t}\Delta FD_{t-1} + \sum_{i=0}^{n} \beta_{2t}\Delta GY_{t-1} + \sum_{i=0}^{n} \beta_{3i}\Delta K_{t-1} + \sum_{i=0}^{n} \beta_{4i}\Delta R_{t-1} + \lambda_2 ECM_{t-1} + \varepsilon_i \quad (3.5)$$

Where ECM_{t-1} is the error correction term and ε_t is the mutually uncorrelated white noise residual. The coefficient of the ECM variable contains information about whether the past values of variables affect the current values of the variable under study. The size and statistical significance of the coefficient of the error correction term in each ECM model measures the tendencies of each variable to return to the equilibrium. A significant coefficient implies that past equilibrium errors play a role in determining the current outcomes. The short run dynamics are captured through the individual coefficients of the difference terms. Financial development (FD) does not Granger cause economic growth (GY) if all $\alpha_{2t} = 0$, and Economic growth (GY) does not Granger cause financial development (FD) if all $\beta_{2t} = 0$. According to Akinlo and Egbetunde (2010), and Mehra, (1994) these hypotheses can be tested using standard F statistics

Stationarity Tests

There is the possibility of co-integration when each variable is integrated of the same order d≥1. This necessary, but rarely sufficient, condition implies that the series share a common trend. Therefore to ascertain whether mean reversion is characteristic of each variable the paper used both Augmented Dickey-Fuller (ADF) test by Dickey and Fuller (1979, 1981), and Phillip-Perron (PP) test by Phillips (1987) and Phillips Perron (1988) to infer the stationarity properties of the study series. This is conducted, with intercept only and intercept and trend respectively, on the levels and first difference of the series.

Granger Causality Test

Granger causality tests are performed to find out the direction of the causal link between financial development and economic growth. The Granger causality approach measures the precedence and information provided by a variable (X) in explaining the current value of another variable (Y). The basic rationale of Granger causality is that the change in financial sector development Granger causes the change in economic growth if past values of the change in financial sector development improve unbiased least-square predictions about the change in economic growth. The null hypothesis H_0 tested is that X does not granger-cause Y and Y does not granger-cause X.

4. Empirical Results and Discussions

This section presents the results of the unit root, cointegration, vector error correction, and Granger causality tests conducted.

Stationarity Tests

To avoid spurious regression outcomes, the paper used both the Augments Dickey-Fuller and Phillip-Perron (PP) tests to find the existence of unit root in each of the time series. Table 1 summarizes the results of both the ADF and PP tests conducted with intercept only and intercept and trend respectively. A variable is stationary when the ADF and PP values are greater than the critical value (CV) at a given level (1%, 5%, and 10%, denoted as *, **, ***, respectively). Since all the variables were non stationary in levels they were all differenced once. Table 1 shows that all the variables were stationary after first differencing (that is, the variables are integrated of order one), meaning that the variables are I(1) series.

Table 1. Unit Root Test for Stationarity at First Difference

Variables	ADF (Intercept)	ADF (Intercept and Trend)	PP (Intercept)	PP (Intercept and Trend)
LDC	3.261(-2.981)**	5.076(-4.356)*	-8.704(-3.689)*	-17.108(-4.324)*
LM	7.489(-3.744)*	5.231(-4.374)*	-6.014(-3.689)*	-6.105(-4.324)*
LMC	-5.44(-3.689)*	-5.77(-4.324)*	-5.983(-3.679)*	-6.524(-4.309)*
LGY	-7.197(-3.689)*	-7.054(-4.324)*	-11.717(-3.689)*	-11.682(-4.324)*
LK	-3.899(-3.679)*	-4.762(-4.309)*	-3.823(-3.679)*	-4.721(-4.309)*
LR	-6.087(-3.679)*	-5.632(-4.324)*	-6.279(-3.679)*	-6.149(-4.309)*

Note: *,** and*** indicate 1%, 5% and 10% significance respectively. Figures within parentheses indicate critical values.
Source: Author's Estimation using Eviews 7.0.

Cointegration Result

Having established that all the variables of the study are integrated of order one, the Johansen-Juselius approach described in the methodology is used to test for the existence of cointegration relationship among the variable series. Table 2 and 3 report the cointegration test results for models 1, 2 and 3. The results confirm the existence of cointegration between the three indicators of financial development, economic growth, real capita stock and real interest rate. The trace statistic and the maximum eigenvalue statistic reject the null hypothesis of no cointegration at 5 per cent level (0.05 level).

Table 2: Unrestricted Co-integration Rank Test (Trace)

Hypothesized No of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Probability
Model 1: DC as a Measure of Financial Development				
None*	0.727385	64.20018	47.85613	0.0007
At most 1	0.483402	26.50889	29.79707	0.1142
Model 2: M as a Measure of Financial Development				
None*	0.758481	70.36685	47.85613	0.0001
At most 1	0.432999	29.16340	29.79707	0.0590
Model 3: MC as a Measure of Financial Development				
None*	0.718957	61.95263	47.85613	0.0014
At most 1	0.400358	25.14445	29.79707	0.1563

Trace test indicates 1 cointegrating eqn at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Table 3: Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized No of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Probability
Model 1: DC as a Measure of Financial Development				
None*	0.727385	37.69120	27.58434	0.0018
At most 1	0.483402	19.15421	21.13162	0.0925
Model 2: M as a Measure of Financial Development				
None*	0.758481	41.20346	27.58434	0.0005
At most 1	0.432999	16.45443	21.13162	0.1994
Model 3: MC as a Measure of Financial Development				
None*	0.718957	36.80813	27.58434	0.0025
At most 1	0.400358	14.83123	21.13162	0.3009

Trace test indicates 1 cointegrating eqn at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Error Correction Model

According to N'Zue (2006) as cited in Akinlo and Egbetunde (2010), when cointegration exists, the Engle-Granger Theorem establishes the encompassing power of the ECM over other forms of dynamic specification. The error correction term measures the speed of adjustment to restore equilibrium in the dynamic model. The error correction coefficient shows how quickly/slowly variables return to equilibrium and it should have a statistically significant coefficient with a negative sign. A highly significant error correction term is further proof of the existence of a stable long-term relationship (Bannerjee et al. 1993). Table 4 below shows that the error correction coefficient has the expected negative sign and lies between the usual range of 0 and 1. Precisely, this speed of adjustment is -0.46 suggesting that about 46 percent of errors generated in each period is automatically corrected by the system in the subsequent period and is statistically significant at 1 percent level.

Table 4: Error Correction Model 1

Dependent Variable ΔDC Included observations; 29 after adjustments			
Variable	Coefficient	Std. Error	t-statistic
ECM_{t-1}	-0.462458*	0.27413	-2.84254
C	-140901.2	419023	-0.33626
ΔDC(-1)	0.313344	0.27640	1.13366
ΔGY(-1)	26.35582	18.8178	1.40058
ΔK(-1)	13.57697	15.1489	0.89623
ΔR(-1)	-22196.54	43972.4	-0.50478
R-squared	0.313785	Mean dependent var.	
Adj. R-squared	0.164608	S.D. dependent var.	
F-statistic	2.103442	Akaike AIC	

Δ is the difference operator. *, stands for statistical significance at the 1% level.

Table 5 below shows that the error correction coefficient has the expected negative sign and lies between the usual range of 0 and 1. Precisely, this speed of adjustment is -0.33 suggesting that about 33 percent of errors generated in each period is automatically corrected by the system in the subsequent period and is statistically significant at 1 percent level.

Table 5: Error Correction Model 2

Dependent Variable ΔM Included observations; 29 after adjustments			
Variable	Coefficient	Std. Error	t-statistic
ECM_{t-1}	-0.333446*	0.05390	0.62051
C	93770.40	128057	-0.73225
ΔM(-1)	0.642516	0.17750	3.61977
ΔGY(-1)	0.044797	5.22971	0.00857
ΔK(-1)	-0.011196	4.30346	-0.00260
ΔR(-1)	-6329.163	12141.9	-0.52126
R-squared	0.584406	Mean dependent var.	
Adj. R-squared	0.494060	S.D. dependent var.	
F-statistic	6.468507	Akaike AIC	

Δ is the difference operator. *, stands for statistical significance at the 1% level.

Table 6 below shows that the error correction coefficient has the expected negative sign and lies between the usual range of 0 and 1. Precisely, this speed of adjustment is -0.58 suggesting that about 58 percent of errors generated in each period is automatically corrected by the system in the subsequent period and is statistically significant at 1 percent level.

Table 6: Error Correction Model 3

Dependent Variable ΔMC Included observations; 29 after adjustments			
Variable	Coefficient	Std. Error	t-statistic
ECM_{t-1}	-0.586024	0.07278	-2.55603
C	854.3442	666.638	1.28157
ΔMC(-1)	-0.081499	0.17386	-0.46876
ΔGY(-1)	-0.024345	0.02994	-0.81299
ΔK(-1)	-0.050682	0.02376	-2.13273
ΔR(-1)	6.480697	68.0598	0.09522
R-squared	0.337199	Mean dependent var.	
Adj. R-squared	0.193111	S.D. dependent var.	
F-statistic	2.340239	Akaike AIC	

Δ is the difference operator. *, stands for statistical significance at the 1% level.

Granger Causality Result

In general, the cointegration result is supported by the results reported in Table 7 which show the existence of causality between economic growth and financial development for the three measures of financial development. However the causality relationship depends on the variable used to measure financial development. There is bidirectional causality between economic growth and financial development when financial development is measured by total banking credit as percentage of GDP denoted as (DC) and stock market capitalization denoted as (MC). However there is unidirectional causality running from economic growth to financial development when financial development is measured by the ratio of liquid liabilities to GDP denoted as (M).

Table 7: Pair-wise Granger Causality Tests

Null Hypothesis	Obs	F-statistic	Probability
LGY does not Granger Cause LDC	29	7.41977	0.0009
LGY does not Granger Cause LDC	29	5.07363	0.0038
LGY does not Granger Cause LM	29	6.92229	0.0022
LM does not Granger Cause LGY	29	0.04685	0.9543
LGY does not Granger Cause LMC	29	8.20032	0.0004
LGY does not Granger Cause LMC	29	7.13853	0.0010

5. Conclusion and Policy Implications

This paper examines the long run and causal relationship between financial sector development and economic growth in Nigeria over the period 1981 to 2011 within a multivariate VAR framework and error correction model.. The study employed three different measures of financial development including two banking sector indicators and one stock market indicator. Results from the cointegration test show evidence of cointegration among economic growth, financial development, real capita stock and real interest rate, indicating the existence of long run relationship between the variables.

The granger causality results support the cointegration results indicating that there exist causality between financial development and economic growth in Nigeria during the study period, 1981 to 2011. An important observation is that the nature of the causality depends on the variable used to measure financial development. Our findings suggest that financial development indicators does have a direct impact on real output. This finding agrees with the findings of Nwosa et al. (2011), Adeniyi et al. (2012), Akinlo and Egbetunde (2010), and Chimobi (2010), but contradicts the findings of Kolawole (2012).

The policy implications of the findings of this study demands that government should consolidate on previous financial sector reforms by strengthening the relevant components of the financial sector to improve financial resources intermediation. In addition government must implement appropriate regulatory and macroeconomic policies to ensure a stable and conducive macroeconomic environment for local and foreign investments to thrive.

Reference

Adeniyi, O., & Omisakin, O. (2012). Foreign Direct Investment, Economic Growth and Financial Sector Development in Small Open Developing Economies. Economic Analysis and Policy, 42(1), 105-127.

Akinlo, A. E., & Egbetunde, T. (2010). Financial Development and Economic Growth: The Experience of 10 Sub-Saharan African Countries Revisited. The Review of Finance and Banking, 02(1), 17-28.

Alege, P. O., & Ogunrinola, I. O. (2008). Financial Sector Reforms and Growth of the Nigerian Economy. Lagos Journal of Banking, Finance, and Economic Issues, 2(1), 50-76.

Alfaro, L. C., Areendam, S., Kalemli-Ozan., & Sayek, S. (2004). FDI and Economic Growth: The Role of the Financial Markets. Journal of International Economics, 64, 89-112.

Baliamoune-Lutz, M. (2013). Financial Development and Income in African Countries. Contemporary Economic Policy, 31(1), 163-175.

Banerjee, A., Dolado, J. J., Galbraith, J. W., & Hendry, D. F. (1993). Cointegration, Error Correction, and Econometric Analysis of Non-Stationary Data. Oxford: Oxford University Press.

Bangake, C., & Eggoh, J. C. (2010). Further Evidence on Finance-Growth Causality: A Panel Data Analysis. Economic Systems, 35(2), 176-188.

Beakart, G., Harvey, C. R., & Lundblad, C. (2005). Does Financial Liberalization Spur Growth? Journal of Financial Economics, 77, 3-55.

Bencivenga, V. R., & Smith, B. D. (1991). Financial Intermediation and Economic Growth. Review of Economic Studies, 58, 195-209.

Calderon, C,. & Liu, L. (2003). The Direction of Causality between Financial Development and Economic Growth. Journal of Development Economics, 72, 321-334.

Central Bank of Nigeria (CBN). (2011). Statistical Bulletin, Abuja: Central Bank of Nigeria Publication.

Chakraborty, I., & Ghosh, S. (2011). The Relationship between Financial Development and Economic Growth and the Asian Financial Crisis: An FMOLS Analysis. International Journal of Economic Research, 2(3), 88-101.

Chimobi, O. P. (2010). The Causal Relationship among Financial Development, Trade Openness and Economic Growth in Nigeria. International Journal of Economics and Finance, 2(2), 137-147.

Colle, A. D. (2010). Finance-Growth Nexus: Does Causality Withstand Financial Liberalisation? Evidence from Cointegration VAR. Discussion Paper, 102, 1-33.

Dabos, M. P., & Gantmann, E. R. (2010). The Fading Link? A New Empirical Analysis of the Relationship between Financial Development and Economic Growth. MFI Working Paper Series, No. 2010-013, 1-20.

Demetriades, P., & Hussein, K. A. (1996). Does Financial Development Cause Economic Growth? Time-Series Evidence from 16 Countries. Journal of Development Economics,51, 387-411.

Dickey, D. A., & Fuller, W. A. (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root. Journal of the American Statistical Association, 74, 427-431.

Dickey, D., & Fuller, W. (1981). Likelihood Ratio Statistics for Autoregressive Time Series with a unit root. Econometrica, 49, 1057-1072. http://dx.doi.org/10.2307/1912517

Engel, R. F., & Granger, C. W. J. (1987). Cointegration and Error Correction: Representation, Estimation and Testing. Econometrica, 55, 252-276. http://dx.doi.org/10.2307/1913236

Esso, L. J. (2009). Cointegration and Causality between Financial Development and Economic Growth: Evidence from ECOWAS Countries. European Journal of Economics, Finance and Administrative Sciences, 16.

Ewah, S. O., Esang, A. E., & Bassey, J. U. (2009). Appraisal of Capital Market Efficiency On Economic Growth in Nigeria. International Journal of Business and Management, 4(12), 219-225.

Ewetan. O.O., & Okodua, H. (2013). Econometric Analysis of Exports and Economic Growth in Nigeria. Journal of Business Management and Applied Economics, 2(3). Available at http://jbmae.scientificpapers.org/econometric-analysis-of-exports-and-economic-in-nigeria.

Fung, H. K. (2009). Financial Development and Economic Growth: Convergence or Divergence? Journal of International Money and Finance, 28, 56-78.

Granger, C. W. J. (1988). Some-Recent Development in a Concept of Causality. Journal of Econometrcs, 39, 199-211.

Hermes, N. (1994). Financial Development and Economic Growth: A Survey of the Literature. International Journal of Development Banking, 12(1), 3-22.

Hermes, N., & Lensink, R. (2003). Foreign Direct Investment, Financial Development and Economic Growth. Journal of Development Studies, 40(1), 142-163.

Hurlin, C., & Venet, B. (2008). Financial Development and Growth: A Re-Examination using a Panel Granger Causality Test.

Jenkins, H. P., & Katircioglu, S. T. (2010). The Bounds Test Approach for Cointegration and Causality between Financial Development, International Trade and Economic Growth: The Case of Cyprus. Applied Economics, 42, 1699-1707.

Johansen, S. (1988). Statistical Analysis of Cointegrating Vectors. Journal of Economic Dynamic and Control, 12, 231-254.

Johansen, S., & Juselius, K. (1990). Maximum Likelihood Estimation and Inference on Cointegration with Application to Demand for Money. Oxford Bulletin of Economics and Statistics, 52, 169-210.

Johannes, A. T., Njong, A. M. & Cletus, N. (2011). Financial Development and Economic in Cameroun. 1970-2005. Journal of Economics and International Finance, 3(6), 367-375.

Kolawole, B. O. (2012). Open Markets, Financial Sector Development and Economic Growth in Nigeria. European Scientific Journal, 8(28), 283-299.

Kar, M., & Pentecost, E. J. (2000). Financial Development and Economic Growth in Turkey: Further Evidence on the Causality Issue. Economic Research Paper No. 00/27.

King, R. G., & Levine, R. (1993a). Finance and Growth: Schumpeter Might Be Right. Quarterly Journal of Economics, 108, 717-738.

King, R. G., & Levine, R. (1993b). Finance, Entrepreneurship and Growth: Theory and Evidence. Journal of Monetary Economics, 32, 1-30.

Luintel, K. B., & Khan, A. (1999). A Quantitative Reassessment of the Finance-Growth Nexus: Evidence from a Multivariate VAR. Journal of Development Economics, 60, 381-405.

McKinnon, R. I. (1973). Money and Capital in Economic Development. Washington DC: Brookings Institutions Press.

Mehra, P. Y. (1994). Wage, Growth and the Inflation Process: An Empirical Approach, In B. B. Rao (Ed.), Cointegration for the Applied Economist, 147-59, New York: St Martin's Press.

Muhammad, S., & Lean, H. H. (2011). Does Financial Development Increase Energy Consumption? Role of Industrialization and Urbanization in Tunisia. Online at http://mpra.ub.uni-muenchen.de/33194/

Murinde, V., & Eng, F. S. H. (1994). Financial Development and Economic Growth in Singapore: Demand-Following or Supply-Leading. Applied Financial Economics, 4(6), 391-404.

Nwosa, P. I., & Agbeluyi, A. M., & Saibu, O. M. (2011). Causal Relationships between Financial Development, Foreign Direct Investment and Economic Growth: The Case of Nigeria. International Journal of Business Administration, 2(4), 93-102.

Nyong, M. O. (1997). Capital Market Development and Long run Economic Growth: Theory, Evidence and Analysis. First Bank Review, 13-38, December.

N'zue, F. F. (2006). Stock Market Development and Economic Growth: Evidence from Cote D'Ivoire. African Development Review, 18(1), 123-143.

Okodua, H., & Ewetan, O. O. (2013). Stock Market Performance and Sustainable Economic Growth in Nigeria: A Bounds Testing Cointegration Approach. Journal of Sustainable Development, 6(8), 84-92.

Oluitan, R. (2010). Bank Credit and Economic Growth: The Nigerian Experience.

Pagano, M. (1993). Financial Markets and Growth: An Overview. European Economic Review, 37(2-3), 13-22.

Sackey, F. G., & Nkrumah, E. M. (2012). Journal of Economics and Sustainable Development, 3(8), 122-139.

Schumpeter, J. (1912). The Theory of Economic Development. New York, OUP.

Shaw, E. S. (1973). Financial Deepening in Economic Development. New York: Oxford University Press.

Van Wijnbergen, S. (1983). Credit Policy, Inflation and Growth in Financially Repressed Economy. Journal of Development Economics, 13, 45-65.

Vuranok, S. (2009). Study on Financial Development and Economic Growth: A Cointegration Approach. Economic Bulletin, 29(3), 1670-1677.

Xu, Z. (2010). Financial Development, Investment, and Growth. Economic Inquiry, 38(2), 331-344.

Yucel, F. (2009). Causal Relationships between Financial Development, Trade Openness and Economic Growth: The case of Turkey. Journal of Social Sciences, 5(1), 33-42. .