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Reassessing Growth Impact of Financial Deepening in Emerging Economies: Evidence from Nigeria

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Abstract:
This paper reassesses the relationship between financial deepening and economic growth in Nigeria using distributed lag model and causality analysis. It presents two important conclusions. First, financial deepening in Nigeria may not necessarily impact growth; and when it does, its impact may be negative. Second, financial sector in Nigeria seems not to have been positioned enough as policy instrument for achieving economic growth. To further understand the relationship between financial deepening and economic growth in Nigeria for proper policy recommendations, this paper suggests two important areas for more studies – optimization of Nigerian financial sector size for economic growth, and factors militating against expected growth impact of financial deepening in Nigeria.

Keywords: Economic growth, financial deepening, causality, credit, money supply

1. Introduction

Financial development is considered an integral factor in economic growth of a country. Financial deepening – the extent to which an economy is making use of bank intermediation and financial market activities – provides a country with the potential to generate positive employment, high productivity and growth. Several studies have suggested that a well-functioning financial system (that mobilizes savings, allocates resources, and facilitates risk management) contributes to economic growth by supporting capital accumulation, improving investment efficiency, and promoting technological innovation (Kirkpatrick, 2000; McKinnon, 1973; Shaw and Edward, 1973; Galbis, 1977; and Mathieson, 1980). However, Buffie (1984) and Wijnbergen (1983) developed alternative view that financial deepening decreases total real credit supply and prevents economic growth.

Efficient financial sector is expected to mobilize and allocate savings for a country's economic growth and development. Financial development enhances efficiency in allocation of resources, thereby stimulating growth. Countries with high degree of financial development, according to Levine, Loayza and Beck (2000), experience higher productivity and GDP growth rate per capita. Nzotta (2004) also noted that financial system serves as a catalyst to economic development through various institutional structures. Ndebbio (2004) remarked that economic growth cannot be possible without the combined role of investment, labour and financial deepening. However, the fundamental question in economic growth that has preoccupied researchers is whether financial deepening in emerging economies actually translates to growth.

Nigeria, as an emerging economy, has adopted several policies to strengthen and deepen its financial sector. It is against this background that this paper examines the effect of financial deepening on economic growth in Nigeria from 1970 to 2011. Thus, the hypotheses of this paper are as stated below:

- H_o: There is no growth evidence of financial deepening in Nigeria
- H_o: There is no causality between growth and financial deepening in Nigeria

Existing literatures identified supply-leading hypothesis that supported a positive impact of financial development on economic growth, and demand-following hypothesis that finance responds to changes in the real sector or "where enterprise leads, finance flows" as the major conflicting theories on the effect of financial deepening on economic growth. Another approach is the bi-directional causality hypothesis which suggests mutual impact of finance and growth. The supply-leading hypothesis postulates a unidirectional causation from financial deepening to economic growth implying that financial markets and institutions would increase the supply of financial services. The hypothesis further argues that the level of financial development is an indicator of future economic growth (McKinnon, 1973; Shaw and Edward, 1973; Levine, Loayza and Beck, 2000; and Calderon and Liu, 2002).

The demand-following hypothesis, on the other hand, postulates a unidirectional causation from economic growth to financial development implying financial system passive response to economic growth. In other words, the increasing demand for financial services might lead to the aggressive expansion of the financial system as the real sector of the economy grows (Gurley and Shaw, 1967; Goldsmith, 1969; and Jung, 1986).

According to Kose (2007), financial sector development is a key determinant of the extent of the growth and stability benefits which financial globalization could bring. He opines that the more developed a country's financial sector is the greater the growth benefits of capital inflows and the lower the country's vulnerability to crisis through direct and indirect channels.

Financial deepening is an increase in the supply of financial assets in the economy. The sum total of all the financial assets is therefore a measure of financial deepening. The other measure of financial depending include growth rate of per capita real money balances. These assets include broad money (M2), liabilities of non-bank financial assets (NB), treasury bills (TB), value of shares (VS) and money market fund (MMF). The sum of these assets represents one of the widest measures of financial deepening (Ndebbio, 2004).

Darrat (1999) examined the role of financial deepening on economic growth in Middle-Eastern countries of Saudi Arabia, Turkey and the United Arab Emirates using multivariate Granger causality tests within an error-correction framework to establish the casual link between financial deepening and economic growth in order to discriminate between several alternative theoretical hypotheses. The results obtained generally support the view that financial deepening is necessary causal factor for economic growth. However, the strength of the evidence varied across countries and across the proxies used to measure financial deepening. The causal relationships were also predominately long-term in nature.

Unalmis (2002) investigated the direction of causality between financial development and economic growth in Turkey. The study employed Granger non-causality in the context of VEC model and found that causality ran from financial development to economic growth in the short-run; and that in the long run, there was bidirectional causality between financial deepening and economic growth.

Waqabaca (2004) examined the causal relationship between financial development and growth in Fiji using low frequency data from 1970 – 2000. The study employs unit root test and co-integration technique within a bivariate VAR framework. The results suggest a positive relationship between financial development and economic growth for Fiji with causality running from economic growth to financial development.

Ang (2007) examined the contribution of financial development to output expansion in Malaysia between 1960 and 2003. Using augmented neoclassical growth framework to evaluate the impact of financial sector development on economic development, he found that aggregate output and its determinants were co-integrated in the long-run, suggesting that financial development, private capital stocks and the labour force exerted a positive impact on economic development.Guryay, Safakli and Tuzel (2007), using ordinary least squares techniques, examined the relationship between financial development and economic growth in Northern Cyprus. The results indicate that financial development has positive but insignificant effect on economic growth. Ayadi, Adegbite and Ayadi (2008) investigated the relationship between financial development and economic growth in Nigeria in post-SAP era using Spearman's rank correlation coefficient and noted that SAP has not impacted significantly on financial development, and that financial development and economic growth have inconsistent relationship in post-SAP era in Nigeria.

Ochulor (2008), employing distributed lag model and co-integration, investigated commercial banks financial intermediation on economic growth in Nigeria using the ratio of liquid liabilities to GDP as a measure to bank intermediation for the period 1970 – 2006. The results suggest that the overall impact of bank intermediation on real GDP growth is significant. Nnanna (2004) studied the relationship between financial sector development and economic growth in Nigeria using linear regression to estimate the parameters and discovered that no relationship exists between depth of the financial sector and economic growth in Nigeria.

This paper, therefore, reassesses the growth impact of financial deepening in Nigeria using distributed lag model and causality analysis. The period between 1970 and 2011 is considered.

2. Methods
The theoretical framework adopted in this paper is based on the works of Levine, Loayza and Beck (2000); Nzotta (2004); and Ndebbio (2004). According to them, economic growth is a function of financial development among other factors. This could be expressed as follows:

$Gr = f(Fd, \sum Xi)$ 1

where Gr is log of GDP (as proxy for GDP growth rate), Fd is financial deepening, and Xi are other factors that affect GDP growth rate. In this paper, Xi is limited to interest rate (int), trade openness (opn), and inflation rate (inf). Fd is measured using percentage of money supply (M2) to Gross Domestic Product (MG) and credit to private sector as percentage of Gross Domestic Product (CG).
Thus, equation (1) translates to:

$Gr = f(CG, MG, Int, Opn, Inf)$ 2

Autoregressive Distributed lag (ARDL) model and Granger causality analysis were used in this paper.

2.1. Stationarity Test
According to Ojide, Ojide and Ogbodo (2014), to ensure that all the variables are void of seasonality problem, unit root test was carried out using Phillips-Perron test at 5% level of significant. Variables that are not stationarity at its level (i.e. Zero) integration were differenced to achieve stationarity. Thus, all the variables were used at their levels of stationarity. According to Gujarati (2004), unit root test is specified as follows:

$$\Delta Y_t = \beta_1 + \beta_{2t} + \delta Y_{t-1} + \alpha_1 \sum_{i=1}^{m} \Delta Y_{t-1} + et .... 3$$

Where

Δ = Differences operator

ΔY_t = The change in the logarithm of the time series.

ΔY_{t-1} = The lagged values of the dependent variables
   m = chosen to eliminate the autocorrelation

   Note that there is evidence of unit root if δ = 0.

2.2. Distributed Lag Model (DL)
H_o: There is no growth evidence of financial deepening in Nigeria
To test the above hypothesis, the following DL model was used:

Model 1:
$$Gr = \beta_0 + \beta_{1i} \sum_{i=1}^{n} CG_{t-i} + \beta_{2i} \sum_{i=0}^{n} MG_{t-i} + \beta_{3i} \sum_{i=0}^{n} Int_{t-i} + \beta_{4i} \sum_{i=0}^{n} Opn_{t-i} + \beta_{5i} \sum_{i=0}^{n} Inf_{t-i} + \mu ....4$$

where: β_i = the parameters of the model
n = lag length (determined during the model estimation).
μ = Stochastic random term in the models

2.3. Co-integration Test (Model 2)
H_o: There is no causality between growth and financial deepening in Nigeria
For the causality test, the following equations were estimated:
$Gr = \pi_0 + \pi_1 Gr_{t-1} + \pi_2 CG_{t-1} + \pi_3\ CG_{t-2} + \varepsilon ......5$
$CG = \alpha_0 + \alpha_1 CG_{t-1} + \alpha_2 Gr_{t-1} + \alpha_3\ Gr_{t-2} + \ell ......6$
$Gr = \theta_0 + \theta_1 Gr_{t-1} + \theta_2 CG_{t-1} + \theta_3\ CG_{t-2} + \tau ......7$
$CG = \lambda_0 + \lambda_1 CG_{t-1} + \lambda_2 Gr_{t-1} + \lambda_3\ Gr_{t-2} + \gamma ......8$
where: π_i, α_i, θ_i, and λ_i are the parameters of the models
ε, ℓ, τ, and γ are Stochastic random terms in the models

2.4. Estimation Procedure
Each of the variables in the model were tested and corrected for stationarity, using the Phillips-Perron unit root test. Also equation (4) was tested for co-integration. Evidence of co-integration was established in the model, but was corrected by the introduction of error correction mechanism (ecm). Thus, equation 4 was expanded as captured in equation 9.

$$Gr = \beta_0 + \beta_{1i} \sum_{i=1}^{n} CG_{t-i} + \beta_{2i} \sum_{i=0}^{n} MG_{t-i} + \beta_{3i} \sum_{i=0}^{n} Int_{t-i} + \beta_{4i} \sum_{i=0}^{n} Opn_{t-i} + \beta_{5i} \sum_{i=0}^{n} Inf_{t-i} + \beta_{6i} ecm_{t-1} + \mu .... 9$$

2.5. Data sources and Description
All variables used in this paper were obtained from the Central Bank of Nigeria, Annual Statistical Bulletin 2011. The basic descriptive statistics of the core variables (GDP, CG and MG) are presented in table 1 below.

	GDP	CG	MG
Mean	5419694.	15.09357	22.89405
Median	289844.9	12.95000	21.60000
Maximum	37543655	36.70000	38.00000
Minimum	5281.100	4.780000	9.320000
Std. Dev.	9691858.	6.933193	7.152362
Skewness	1.992784	1.111961	0.300257
Kurtosis	5.976545	4.050990	2.129270
Observations	42	42	42

Table 1: Descriptive Statistics of Variables (1970 – 2011)

As shown in table 1, financial deepening measured by percentage of money supply (M2) to Gross Domestic Product (MG) maintained an average of 22.9% between 1970 and 2011 with standard deviation of about 7.2; while credit to private sector as percentage of Gross Domestic Product (CG) maintained an average of 15.1% within the same period with 7 as standard deviation of about. Figure 1 reveals that financial deepening Nigeria for the period has generally been on the upward slope. However, credit to private sector as percentage of Gross Domestic Product (CG) seems to be growing at faster rate than percentage of money supply (M2) to Gross Domestic Product (MG).
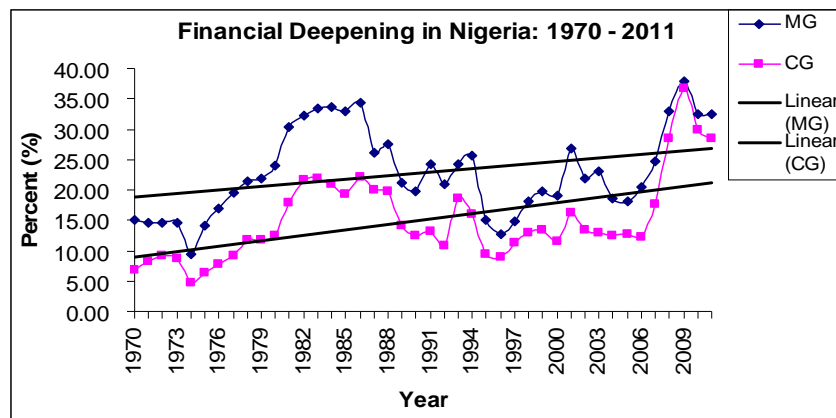
Figure 1: Financial Deepening in Nigeria 197 - 2011

3. Results

As specified, two models were estimated using Eview 7. These are discussed in turn below.

3.1 Statistionarity Test (Unit Root Test)

Regressing non-stationary data on one another often lead to spurious result. As previously, stationarity test was conducted using Phillips-Perron unit root test. Results of the tests are presented in table 2 below:

Variable	Critical value (5%)	Adj. t-Stat	Order of Integration
Gr	-2.936942	-5.671547*	I(1)
CG	-2.936942	-5.147984*	I(1)
MG	-2.936942	-6.263872*	I(1)
OPEN	-2.936942	-20.15595*	I(1)
INF	-2.935001	-3.765485*	I(0)
INT	-2.936942	-10.07826*	I(1)

TABLE 2: Augmented Dickey-Fuller Unit Root Test: 1970 – 2011
significant at 5 percent level

As shown in table 2, apart from INF, all the variables (including Gr which is the dependent variable) achieved stationary after the first difference. Evidence of co-integration was tested for which proved positive. Hence, the introduction of error correction mechanism (ecm) in the model.

3.2. Presentation and Evaluation of DL Model (Model 1)

Dependent Variable: D(GR)				
Method: Least Squares				
Sample (adjusted): 1974 2011				
Included observations: 38 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.299645*	0.030627	9.783522	0.0000
D(CG)	-0.010332	0.008391	-1.231222	0.2278
D(MG)	-0.035191*	0.007319	-4.808096	0.0000
D(MG(-3))	-0.010197*	0.004449	-2.291758	0.0291
D(INT)	-0.009990	0.005061	-1.973815	0.0577
D(OPN(-1))	0.293964*	0.142214	2.067048	0.0475
INF(-2)	-0.002665*	0.001121	-2.377879	0.0240
ECM(-1)	0.484733*	0.158828	3.051928	0.0047
R-squared	0.756447	Mean dependent var		0.220473
Adjusted R-squared	0.699618	S.D. dependent var		0.188009
S.E. of regression	0.103042	F-statistic		13.31090
Sum squared resid	0.318532	Prob(F-statistic)		0.000000
Durbin-Watson stat	1.842265			

Table 3:Distributed Lag Model – DL
significant at 5 percent level

The Distributed Lag Model in table 3 achieved about 76 percent goodness of fit (about 70 percent after adjustment). This is shown graphically in Figure 2.
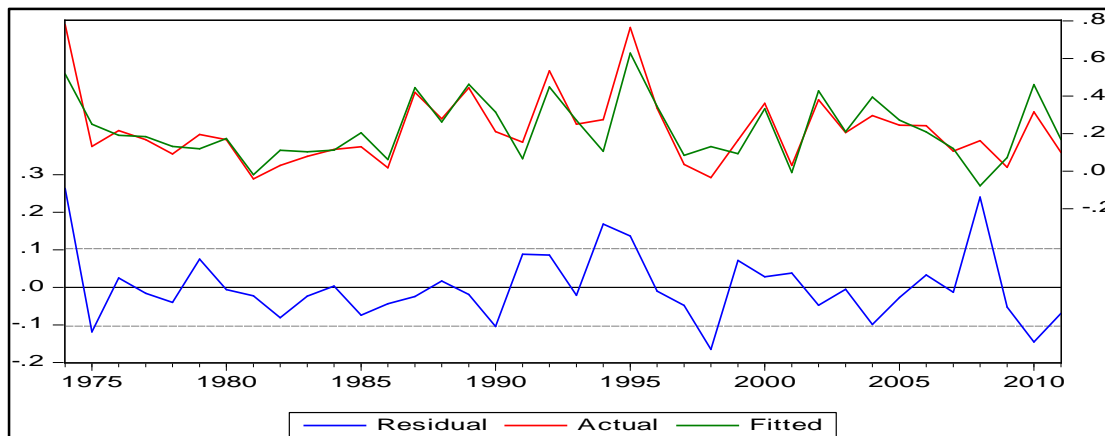

Figure 2: Residual, Fitted and Actual data

Prob(F-statistics) indicates that the exogenous variables are simultaneously significant in relation to their joint impact on GDP growth. Using 5% level of significant, estimated Durbin-Watson statistic (1.842265) falls between the lower-limit Durbin-Watson statistic (1.088) and upper-limit Durbin-Watson statistic (1.939). This implies that the regression result is more or less void of autocorrelation bias.

Furthermore, at 5% level of significant, all the exogenous variables show significant impacts on GDP growth with the exception of interest rate (Int) and credit to private sector as percentage of Gross Domestic Product (CG). As a result, the null hypothesis that financial deepening, as measured by credit to private sector as percentage of Gross Domestic Product (CG), has no impact on GDP was accepted. However, the null hypothesis that financial deepening, as measured by percentage of money supply (M2) to Gross Domestic Product (MG), has no impact on GDP was rejected since the result shows that percentage of money supply (M2) to Gross Domestic Product (MG) impacts significantly on GDP rate. Incidentally, this impact is negative. For instance, the result shows that a percentage increase in financial deepening (measured as proportion of money supply [M2] to Gross Domestic Product, i.e.: MG) at current year and lag 3 will reduce GDP growth by about 0.035 percent and 0.01 percent respectively.

On the other hand, trade openness (at lag 1) has positive and significant effect on growth; while inflation rate (at lag 2) shows significant but negative effect on growth.

3.3 Causality Test (Evaluation of model 2)

H_o: There is no causality between growth and financial deepening in Nigeria

Let $\alpha = 5\% = 0.05$

Decision Rule: Reject Ho if *Prob< α (0.05)*; accept if otherwise. The result of this test is summarized in table 4 below:

Sample: 1970 2011		Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.	α	Remark
D(CG) does not Granger Cause D(GR)	39	0.42918	0.6545	0.05	NC
D(GR) does not Granger Cause D(CG)		2.30083	0.1156	0.05	NC
D(MG) does not Granger Cause D(GR)	39	0.28479	0.7539	0.05	NC
D(GR) does not Granger Cause D(MG)		0.53857	0.5885	0.05	NC

Table 4: Pairwise Granger Causality Tests
Note: C = Causality at 5%; NC = No Causality at 5%

Based on the analysis as shown in table 4, the null hypothesis about causality between growth and financial deepening (both as measured by credit to private sector as percentage of Gross Domestic Product [CG] and percentage of money supply to Gross Domestic Product [MG]) was accepted with the conclusion that financial deepening does not granger cause growth in Nigeria. In other words, variation in financial deepening in Nigeria does not precede variation in growth. This result suggests that financial deepening may not be a robust policy instrument for achieving growth in Nigeria.

4. Discussion

In this paper, we reassessed the financial deepening and economic growth nexus in Nigeria and made two important conclusions. First, financial deepening in Nigeria may not necessarily impact growth; and when it does, its impact may be negative. Second, financial sector in Nigeria seems not to have been positioned enough as policy instrument for achieving economic growth. Our conclusions agree with the findings of recent researches. For instance, Ram (1999) who contests the general support for the positive effect of

financial development studied a set of 95 countries. He found a low negative or negligible correlation of finance and growth in the overall sample. Also, based on a sample of developed and emerging economies, Cecchetti and Kharroubi (2012) show that the level of financial development is good only up to a point, after which it becomes a drag on growth. In addition, they assert that a fast-growing financial sector is detrimental to aggregate productivity growth. Likewise, Maduka and Onwuka (2013) conclude that financial market structure in Nigeria has a negative and significant effect on economic growth. According to them, this suggests a low level of financial sector development in Nigeria. Well, defining financial deepening as low or otherwise is relative to the economy. Maduka and Onwuka (2013) did not, however, certain the optimum level of financial deepening suitable for Nigerian economy before asserting that negative impact it has on the economy as based on its low level. This calls for further investigation. Similarly to the result of Maduka and Onwuka (2013), Udoh and Ogbuagu (2012) found that both the long run and short run coefficients of financial sector development have negative and statistically significant impact on industrial production. They suggest that this negative impact could be as a result of inefficiency of the financial sector.

What else could explain the adverse effect of financial sector development on Nigerian economy? According to Wongswan, Luengnaruemitchai and Boonthaveepat (2013), finance can make an economy susceptible to shocks and fragility through the same mechanism that promotes growth. For example, financial deepening can amplify shocks and lead to financial crises or frequent policy changes which could cause negative impact on economic growth. The costs of financial crises (bank failures, in particular) can be substantial, both in terms of output losses and fiscal costs. Furthermore, financial deepening can create bubble and misallocation of resources. Though finance encourages efficient allocation of resources, it can also lead the economy into an irrational bubble, in which asset prices rise beyond their intrinsic values solely because of anticipated higher future prices. If this happens, financial resources could be misallocated to "bubble" sectors (recall the stock market bubble in Nigeria shortly before the financial meltdown of 2008 when commercial banks gave loans to their customers to buy stocks, including the banks' stocks) or consumers can stretch their balance sheets beyond their means. These could result in large adjustment costs after the bubble bursts. Thus, increase in financial deepening is definitely not always better. However, following the argument of Cecchetti and Kharroubi (2012), we suggest two areas for further studies: first, Nigerian financial sector size and productivity growth vis-à-vis inverted U-shaped effect; second, factors militating against expected growth impact of financial deepening in Nigeria.

5. References
i. Ang, J. B. (2007). Financial Deepening and Economic Development in Malaysia. Asian Business and Economic Research Unit Discussion Paper 42 . Retrieved on May 27, 2014 from: http://www.buseco.monash.edu.au/units/dru/papers/working-papers-07/p4207deepeningang.pdf

ii. Ayadi F. O., Adegbite E. O., and Ayadi F. S. (2008). Structural Adjustment, Financial Sector Development and Economic Prosperity in Nigeria. International Reseach Journal of Finance and Economics, Issue 15 , 318 – 330.

iii. Buffie, F. E. (1984). Financial Repression, The New Structuralist and Stabilization Policy in Semi-Industrialized Economics. Journal of Development Economies .

iv. Calderon, C. and Liu L. (2002). The Direction of Casualty between Financial Development and Economic Growth. Working Paper No.184 . Retrieved on July 11, 2014 from:http://cdi.mecon.gov.ar/biblio/docelec/bccl/dt/184.pdf

v. Cecchetti Stephen G. and Kharroubi Enisse. (2012). Reassessing the impact of finance on growth. BIS Working Papers, No 381 . Retrieved on March 12, 2014 from:http://www.bis.org/publ/work381.pdf

vi. Darrat, A. F. (1999). Are Financial Deepening and Economic Growth Causally Related? Another look at the Evidence. International Economic Journal Vol. 19 No.13 , 319 – 35.

vii. Galbis, V. (1977). Financial Intermediation and economic Growth in Less-Developed Countries: A Theoretical Approach. Journal of Development Studies, Vol.13.2 , 58-72.

viii. Goldsmith, R. W. (1969). Financial Structure and Development. New Haven CN.: Yale University Press.

ix. Gujarati, D. (2004). Basic Econometrics, Third Edition. New York: Mcgraw-Hill International Editions.

x. Gurley J. and Shaw E. . (1967). Financial Structure and Economic Development. . Economic Development and Culture Change, 34(2), 333-346.

xi. Guryay E., Safakli O.V. and Tuzel B. (2007). Financial Development and Economic Growth: Evidence from Northern Cyprus. International Research Journal of Finance and Economics, Issue 8 .

xii. Jung, W. (1986). Financial Development and Economic Growth: International Evidence. . Economic Development and Cultural Change, 34(2) , 333-346.

xiii. Kirkpatrick, C. (2000). Financial Development, Economic Growth and Poverty Reduction. The Pakistan Development Review, Vol. 39(4) , 363 – 388.

xiv. Kose, M. A. (2007). Financial Globalisation: Beyond the Game. Finance and Development, 44(1) , 9 – 13. Retrieved on June 21, 2014 from: http://www.imf.org/external/pubs/ft/fandd/2007/03/kose.htm

xv. Levine R., Loayza N. and Beck T. . (2000). Financial Intermediation and Growth: Casualties and Causes. Journal of Monetary Economics, Vol. 46 , 31-77.

xvi. Maduka Anne C. and Onwuka Kevin O. (2013). Financial Market Structure and Economic Growth: Evidence from Nigeria Data. Asian Economic and Financial Review, 3(1) .

xvii. Mathieson, D. (1980). Financial Reform and Stabilization Policy in a Developing Economy. Journal of Development Economics, Vol.7 , 359-395.

xviii.   McKinnon, R. (1973). Money and Capital in Economic Development. . Washington D.C.: The Brookings Institution. Retrieved on June12, 2014 from: http://www.brookings.edu/research/books/1973/moneyandcapitalineconomicdevelopment

xix.   Ndebbio, J. (2004). Financial Deepening, Economic Growth and Development: Evidence from Selected SSA Countries. AERC RP 142. Retrieved on March 12, 2014 from:
http://opendocs.ids.ac.uk/opendocs/bitstream/item/2846/RP%20142.pdf?sequence=1

xx.   Nnanna, O. J. (2004). Financial Sector Development and Economic Growth in Nigeria: An Empirical Investigation. Central Bank of Nigeria, Economic and Financial Review, 42(3) , 1-19.

xxi.   Nzotta, S. M. and Okereke Emeka J. (2009). Financial Deepening and Economic Development of Nigeria: An Empirical Investigation. African Journal of Accounting, Economics, Finance and Banking Research. Vol. 5. No. 5 .

xxii.   Ochulor, M. U. (2008). Empirical Analysis of the Impact of Commercial Banks Financial Inter-mediation on Economic Growth in Nigeria. M. Sc Dissertation, Department of Economics, Enugu State University Science and Technology .

xxiii.   Ojide M. G., Ojide K. C. and Ogbodo J. C. (2014). Export-led Growth Hypothesis in Nigeria: Applications of ARDL Model and Co-integration Analysis. Global Journal of Emerging Market Economies, 2014 6(1): 5-13. Retrieved on January 31, 2014 from: http://eme.sagepub.com/content/6/1/5

xxiv.   Ram, R. (1999). Financial development and economic growth: additional evidence. Journal of Development Studies, Vol. 35 , 164-174.

xxv.   Shaw S. and Edward . (1973). Financial Deepening in Economic Development. New York: Oxford University Press.

xxvi.   Udoh Elijah and Ogbuagu Uchechi R. (2012). Financial Sector Development and Industrial Production in Nigeria (1970-2009): An ARDL Cointegration Approach. Journal of Applied Finance & Banking, vol.2, No.4 , 49-68.

xxvii.   Unalmis, D. (2002). The Casualty between Financial Development and Economic Growth: The Case of Turkey. Research Department, Central Bank of the Republic of Turkey, 06100, Ankara.

xxviii.   Waqabaca, C. (2004). Financial Development and Economic Growth in Fiji. Economic Department, Reserve Bank of Fiji, Work Paper 03. Retrieved on May 2, 2014 from:http://www.reservebank.gov.fj/docs/2004_03_wp.pdf

xxix.   Wijnbergen, S. (1983). Credit Policy, Inflation and Growth in a Financial Repressed Economy. Journal of Development Economics, vol.13 , 45-65.

xxx.   Wongswan Jon, L. P. (2013). Financial Development and Long-term Economic Growth. Retrieved on March 12, 2014 from: http://www.bot.or.th/Thai/EconomicConditions/ResearchPublication/symposium/2556/Paper3.pdf