IMPACT OF FINANCIAL DEEPENING AND FOREIGN DIRECT INVESTMENT EFFECTIVENESS ON ECONOMIC GROWTH IN NIGERIA

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Abstract

The study examined empirically the impact of financial deepening; foreign direct investment on economic growth in Nigeria from 1981 to 2012. The paper seeks to investigate the hypothesis that financial development is positively related to growth. The study utilized the Augmented Dickey-Fuller (ADF) for unit root test and the variables were found to be stationary, though not in their level form but in their first difference and the Johansen co-integration technique indicated the presence of co-integration among the variables, this was followed by the Vector Error Correction Model (ECM) which supports this long run relationship and a satisfactory speed of adjustment. The study concluded that private sector credit, liquidity ratio and foreign direct investment have a statistically significant influence on economic growth. But the ratio of broad Money (M2) to GDP which indicates the overall size of the financial intermediary of a country exerts a negative impact on economic growth. It is important to sustain the influence of finance on growth in Nigeria which requires the sustenance of present reforms in the financial sector as well as guiding against excess money supply on part of the monetary authorities.

Keywords: Finance, Intermediation, Foreign Investment, Economic Growth, VEC Model

INTRODUCTION

The debate on finance and growth nexus is still ongoing. The pioneering work was done by an economic historian, Joseph Schumpeter (1911) where he argued that a well-developed financial system engenders technological innovation and economic growth through the provision of financial services and resources to entrepreneurs who have the highest probability of implementing innovative products and processes. Since then this topic has received a great

attention by scholars. Empirical studies investigating the relationship between finance and growth have been conducted for either single country data (Oriavwote and Eshenake 2014, S.A Ibrahim 2012, Odeniran and Udeaja 2010, Nzotta and Okereke 2009, Odhiambo 2009, among others) or panel of countries or regions (Levine et al. 2000, Khan and Senhadji 2000, Abu-Bader and Abu-Qarn 2008, Apergis et al. 2007, Bangake and Eggoh 2011,.., etc). Studies on the subject matter have produced mixed results across countries and periods as evidence in the literature. These divergent views may not be unconnected with the fact that different estimation procedures and theories were employed for these studies.

According to Nnanna, Englama and Odoko (2004) as cited by Oriavwote and Eshenake (2014), The Nigeria financial markets have not developed to expectations and the underdeveloped financial markets have further deteriorated the level of economic growth in Nigeria. Although the Nigerian financial system recorded some progress in the last few years, like the national economy, it has been faced with many challenges. The problem of macroeconomic instability has continued to be a hindrance to the development of the financial sector in Nigeria. Frequent policy reversals have caused disinvestment in the financial and real sectors which have negatively affected macroeconomic performance.

The lack of adequate coordination and harmonization of fiscal and monetary policies have even deteriorated the performance of the Nigerian financial sector. The high cost of assessing funds has also discouraged investors from patronizing the banking system. The development of the financial sector in Nigeria has also been hindered by poor state of infrastructure utilized in the financial sector. These include power supply, problem of telecommunication, which include difficulty in internet access etc. This has increased the cost of operation. The lack of efficient payment system has also hindered the development of the financial sector in Nigeria. The excessive use of cash has not enhanced the development of the financial sector in Nigeria. In addition, the competitiveness that resulted from the entry of new banks into the financial system and the liberalization of interest rates brought about a sharp rise in nominal deposit and lending rates. Maximum lending rate which averaged 12.0 percent in 1986 rose to 26.5 percent in 2003. This study therefore, attempts to examine empirically the impact of financial market development and foreign direct investment on economic growth in Nigeria using data spanning 1981 to 2012.

The rest of the paper is divided into four sections. The second section is on the review of literature. The third section is on the method of study which is closely followed by the fourth section which is on results and discussions. The fifth section concludes this paper.

LITERATURE REVIEW

In view of Schumpeter (1911), a well-developed financial system engenders technological innovation and economic growth through the provision of financial services and resources to entrepreneurs who have the highest probability of implementing innovative products and processes.   This thought remains the first framework for analyzing the finance-led growth hypothesis. Robinson (1952) argued contrarily that the relationship should run from growth to finance. According to this view, increase in economic growth leads to increase in demand for a particular financial instrument thereby creating a well-developed financial sector that will automatically respond to financial demand in the economy. This thought is often describe as growth-led finance hypothesis.

Similarly a Nobel Laureate Robert Lucas (1988) dismisses finance as the cause of economic growth insisting that finance is an "over-stressed" determinant of growth. A highly liberalized and developed financial market may well turn out to be an impediment to growth when it induces volatility and discourage risk averse investors from investing (Singh, 1977). Easterly, et al (2000) supports this view when they argue that financial crises in emerging market economies around the world over the past 20 years highlights the degree inherent in financial liberalization without adequate domestic restructuring in the context of participation in an increasingly globalized financial system.

In view of Patrick (1966), the direction of influence between financial development and economic growth can be divided into 'demand following' and 'supply leading' hypothesis. In the demand following hypothesis causality runs from economic growth to financial development while in the supply leading hypothesis causality runs from financial development to economic growth. Relatedly, empirical evidence by Goldsmith (Goldsmith, 1969), Hicks (Hicks, 1969), McKinnon (McKinnon, 1973), Shaw (Shaw, 1973) found credence for supply leading hypothesis while evidence from studies by Kuznets (Kuznets, 1955), Friedman and Schwarts (Friedman & Schwarts, 1963), Lucas (Lucas, 1988), Kar and Pentecost (Kar & Pentecost, 2000), Hermes and Lensink (Hermes & Lensink, 2003) and Alfaro et al. (Alfaro et al., 2004) found credence for demand following hypothesis. Contrary to the above, studies by Demetriades and Hussein (Demetriades & Hussein, 1996), Ünalmiş (Ünalmiş, 2002), Claessens, Klingebiel and Schmukler (Claessens, Klingebiel & Schmukler, 2002) and Yucel (Yucel, 2009) found a bi-directional causality between financial development and economic growth while Ram (Ram, 1999) did not find any relationship between financial development and economic growth.

The third hypothesis shows the "feedback" between economic growth and financial development. For example, Ozturk (2008) noted that cointegration exists between the variables of his study and the feedback effect is confirmed in case of South Africa for the period 1970-

2003. Using a multivariate framework, Helmi Hamdi, Abdelaziz Hakimi & Rashid Sbia (2013) noted that financial development and economic growth are complementary in case of China during the period 1979-2008. They used VECM approach and Granger causality test. Similarly, Husam-Aldin et al. (2012) study showed the existence of the feedback effect between financial development and economic growth in the case of UAE. The authors used the autoregressive distributed lag (ARDL) approach to co-integration. Further, they employed two indicators to detect the level of financial development. The first one was the financial depth or size of the financial intermediaries sector as measured by the monetization ratio. The second one is the ratio of the credit provided to private sector by commercial banks as a percentage of the GDP. Generalized Least Square (GLS) method with cross-section Seemingly Unrelated Regression (SUR), Eslamloueyan and Sakhaei, (2011) demonstrate the feedback relationship between financial development and economic growth in the Middle East countries

The fourth hypothesis shows no relationship between finance and growth. For example, Bakhouche (2007) explored the relationship between several indicators of the development of the financial sector and economic growth in Algeria by applying an autoregressive distributed tag (ARDL) model. He stated that financial development does not stimulate economic growth and thus economic growth has no effect on financial development in the case of Algeria during 1979-2004. Ernesto and Dabós, (2012) have also found the same results based on a new, larger dataset in terms of time periods and countries comparing to previous studies. Further, they incorporated additional set of control variables such as institutional quality and the investment rate. They confirmed that financial development and economic growth are independent and thus stated that that the finance–growth relationship is not as strong as described. This fourth hypothesis is in line with the finding of (Ram, 1999), who did not find any relationship between financial development and economic growth.

Nzotta and Okereke (2009) report that financial deepening index is low in Nigeria over the years. They employ two stages least squares analytical framework in their analysis. In a similar vein, Oriavwote and Eshenake (2014), using cointegration technique with its implied Error Correction Mechanism (ECM) observes that the financial sector development has not significantly improved private sector development. They argued further that although financial sector development has on the aggregate significantly improved the level of economic performance, the credit to the private sector did not play significant role.

Carbo Valverde et al (2003) in their study investigated the issue of causality between financial development and regional economic growth in Spain. They found that increased competition in the banking sector (which leads to higher deposit and lower loan rates) has not caused economic growth in Spain. Their conclusion is that the positive link between financial

development and economic growth in cross- country may be due to an unobserved third factor. McKinnon Shaw hypothesis, according to many authors implies that a monetized economy reflects a highly developed capital market; hence a high degree of monetization should be positively related to growth performance.

Helmi Hamdi, Abdelaziz Hakimi and Rashid Sbia (2013), empirically examine the dynamic relationship between financial deepening, investment activities and economic growth for the case of Tunisia during the period 1961-2010. They use a multivariate framework based on Vector Error Correction Model and Cointegration techniques. The short-run estimation reveals that finance does not led to economic growth in Tunisia while the long-run results show the opposite conclusion. Further, it was shown that investment is the main engine of growth in the short-run and long-run as well.

Similarly, Nwosa, Abeluyi and Saibu, 2011 study examined the causal relationships among financial development, foreign direct investment and economic growth in Nigeria over the period 1970 to 2009. The study utilized the Augmented Dickey-Fuller (ADF) for unit root test and the variables were found to be stationary, though not in their level form but in their first difference. The Johansen and Juselius (JJ) co-integration technique indicated the presence of co-integration among the variables. The tri-variate vector error correction model (VECM) test for the causal relationships showed the presence of causality among financial development, foreign investment and economic growth. The study concluded that financial development and foreign direct investment have a statistically significant causal influence on economic growth.

Commenting on the financial development-economic growth nexus Ibrahim and Shuaibu (2013), using the bounds testing approach to cointegration within an ARDL framework proposed by Pesaran et al. (2001) and the augmented Granger causality test developed by Toda and Yamamoto (1995) reported that financial development significantly affects economic growth in the short and long run.

METHODOLOGY

Financial development is proxied by various indictors. First, the ratio of broad Money (M2) to GDP which indicates the overall size of the financial intermediary of a country (Levine, 1997, Calderon and Liu, 2003, King and Levine, 1993, Khan and Senhadji, 2000). A higher ratio of M2 to GDP indicates a larger financial sector and a larger financial intermediation Helmi Hamdi, Abdelaziz Hakimi and Rashid Sbia, (2013). The second ratio is the broad Money (M3) to GDP ratio which reflects the change in liquidity of the banking sector during the time. Because of the upward trend in financial innovation in the different financial systems we are going to use the ratio of broad money stock (M2) to capture the extent of intermediation in Nigeria. (See

Ogbonna, Uwajumogo, Godwin and Agu, 2013 as well as Nkoro and Uko, 2013). The third ratio is the private sector credits to GDP (PSC), which is considered as one of the relevant indicators of the magnitude and the extent of financial intermediation. (Adekunle, Salami and Adedipe, 2013). Therefore, it is our main indicator of financial deepening and we expect a positive impact of PSC on economic growth. Another indicator of financial deepening selected is liquidity ratio since it has been widely used as prime indicator of financial development in Nigeria. (See Oriavwote and Eshenake, 2014).

The Foreign Direct Investment (FDI) variable is measured by the direct investment items in the balance of payment account of Nigeria while economic growth is measured by gross domestic product (GDP), The data on broad money supply, private sector credit, and interest rate as well as liquidity liabilities will be collected from the World Bank Indicator database Online and Central Bank of Nigeria Statistical Bulletin. Data on FDI and gross domestic output would be collected from the International Financial Statistics of various years.

There are several controversies relating to each of these proxies as measures of financial development (Wolde-Rufael 2009). Thus there is no single aggregate measure that would be sufficient to capture most aspects of financial development (Ang, 2008).

Based on the foregoing, the relationship between financial development, foreign direct investment and economic growth can be specified as:

GDP = f (MS, PSC, LR, FDI) --- (1)

Where;

GDP = Gross Domestic Product

MS = Broad Money Supply

PSC = Private Sector Credit

LR = Liquidity ratio

FDI = Foreign Direct Investment

f = functional relationship

The econometric form of equation (1) is represented as:

$$GDP = \beta_0 + \beta_1 MS + \beta_2 PSC + \beta_3 LR + \beta_4 FDI + e$$ ----------------------- (2)

Where β_0 = Intercept of relationship in the model/constant

$\beta_1 - \beta_4$ = Coefficient of each independent or explanatory variable.

e = Stochastic or Error Term.

By loglinearizing, the model becomes;

$$\log GDPt\beta_0 + \beta_1 \log MS_t + \beta_2 \log PSC_t + \beta_3 \log RL_t + \beta_4 \log FDI_t + e - (3)$$

By specifying the error correction model (ECM) from eqn3, the model becomes;

$$\Delta \log GDPt\beta_0 + \beta_1 \sum \log MSC_{t-1} + \beta_2 \sum \log PSC_{t-1} + \beta_3 \sum \log LR_{t-1} + \beta_4 \sum \log FDI_{t-1} + \sum ECM_{t-1} - - (4)$$

Where $\sum ECM$ = Error Correction Term

$t = 1$ = Variable lagged by one period

$\sum_t$ = White noise residual.

The a'priori' expectations are determined by the principles of economic theory and refer to the expected relationship between the explained variable and the explanatory variable(s). It is that

$\beta_1 < 0$ and β_2, β_3, $\beta_4 > 0$

Unit Root Tests

The early and pioneering work on testing for a unit root in time series was done by Dickey and Fuller (Dickey and Fuller 1979) and the Phillip-Perron (PP) test developed by Philip and Perron (Philip & Perron, 1988). Phillips and Perron have developed a more comprehensive theory of unit root nonstationarity. The tests are similar to ADF tests, but they incorporate an automatic correction to the DF procedure to allow for auto correlated residuals. The tests usually give the same conclusions as the ADF tests, and the calculation of the test statistics is complex.

This development is a consequence of the fact that most macroeconomic time series variables exhibit non-stationary behavior; capable of invalidating the quality of empirical inferences drawn from such estimates if appropriate measures are not taken. Consequently, one class of econometric instrument that has been indispensable in guarding against the pitfall of spurious regression result arising from non-stationary time-series variable is the unit roots test. Taking into cognizance the foregoing, this study commenced its empirical analysis by ascertaining the stationary properties of the variables. In this wise, the Augmented Dickey-Fuller (ADF) test was utilized to infer the number of unit roots (if any) or non-stationary of the variables, before the co-integration test among the variables are examined.

Cointegration Test

Cointegration regressions measure the long-term relationship between the variables whose existence guarantees that the variables demonstrate no inherent tendency to drift apart. We

employ the Johansen Cointegration tests (Johansen 1988; Johansen and Juselius, 1990), which set up the non-stationary time series as a vector autoregression (VAR) of order p

Two test statistics, the trace test and the maximum eigenvalue test, are used to test the hypothesized existence of r cointegrating vectors. The trace test statistic tests the null hypothesis that the number of distinct cointegrating vectors is less than or equal to r against a general alternative while the maximum eigenvalue test statistic tests the null hypothesis that the number of cointegrating vectors is r against the alternative of r+1 cointegrating vectors..

EMPIRICAL RESULTS

Results from Stationary Tests

The decision rule is that Augmented Dickey-Fuller (ADF) test statistics must be greater than Mackinnon Critical Value at 5% and at absolute term i.e. ignoring the negativity of both the ADF test statistics and Mackinnon critical value, before the variable can be adjudged to be stationary, otherwise we accept the null hypothesis (H_O) i.e. data is non-stationary and reject the alternative hypothesis (H_I) i.e. data is stationary. The results of the ADF unit root test is reported in table 1 and 2.

Table 1: Result of ADF Unit Root Test at Level

Variables	ADF Test Statistics Value	5% Mackinnon	Decision Rule		Remarks
			Ho	Hi	
GDP	3.748317	-2.991878	Reject	Accept	Stationary
MS	5.630137	-2.986225	Reject	Accept	Stationary
PSC	6.750150	-2.981038	Reject	Accept	Stationary
LR	-2.803547	-2.960411	Accept	Reject	Non-Stationary
FDI	-1.075150	-2.976263	Accept	Reject	Non-Stationary

From the table revealing the results of the test for stationarity of data at level i.e. before differencing, it could be deduced that three variables were found to be stationary and two non-stationary because their ADF test statistics value is lesser than the Mackinnon critical value (at absolute term) and at 5%. To ensure the stationarity of data for variables found to be non-stationary at level, there is need to proceed to test for stationarity at first difference. The first difference ADF unit root test is presented below:

Table 2: Result of ADF Unit Root Test at First Difference

Variables	ADF Test Statistics Value	5% Mackinnon	Decision Rule		Remarks
			Ho	Hi	
GDP	3.009848	-2.986225	Reject	Accept	Stationary
MS	5.214057	-2.991878	Reject	Accept	Stationary
PSC	3.989438	-2.991878	Reject	Accept	Stationary
LR	-5.995960	-2.963972	Reject	Accept	Stationary
FDI	4.894894	-2.981038	Reject	Accept	Stationary

From the table 2, it could be revealed that all the variables (GDP, MS, PSC, LR, and FDI) were stationary at first difference. This is because their respective ADF test statistics value is greater than Mackinnon critical value at 5% and at absolute term.

Summary of Order of Integration

Table 3: Summary of Order of Integration

Variables	Order of Integration
GDP	I(0)
MS	I(0)
PSC	I(0)
LR	I(1)
FDI	I(1)

Results from Co integration Test

The concept of co-integration is relevant to the problem of determination of long-run equilibrium relationship. Co-integration is the statistical implication of the existence of a long-run equilibrium relationship between variables. The condition for a long run co-integrating vector is that the trace statistics (likelihood ratio) must be greater than 5% critical value.

Table 4 represents the Trace and the Maximum Eigenvalue statistics for the model. The null hypothesis of the absence of a cointegrating relation among the variables is rejected at the 5 percent level for both statistics. The Trace statistics indicates that there are four cointegrating equations while the Maximum Eigenvalue statistics also indicates three cointegrating equation. The existence of Cointegration is indicative of a long run relationship between output and the financial variables and is consistent with the finance-led theories.

Table 4: Presentation of Johansen Co-integration Result

Date: 05/25/14   Time: 20:57
Sample (adjusted): 1983 2012
Included observations: 30 after adjustments
Trend assumption: Linear deterministic trend
Series: PSC GDP MS LR FDI
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.997984	308.8617	69.81889	0.0001
At most 1 *	0.916692	122.6680	47.85613	0.0000
At most 2 *	0.661436	48.11149	29.79707	0.0002
At most 3 *	0.341695	15.62018	15.49471	0.0479
At most 4	0.097499	3.077572	3.841466	0.0794

 Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.997984	186.1938	33.87687	0.0001
At most 1 *	0.916692	74.55650	27.58434	0.0000
At most 2 *	0.661436	32.49130	21.13162	0.0008
At most 3	0.341695	12.54261	14.26460	0.0919
At most 4	0.097499	3.077572	3.841466	0.0794

 Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

Result from Vector Error Correction Model (VECM)

The error correction mechanism is the speed or degree of adjustment i.e. the rate at which the dependent variable adjust to changes in the independent variables. Since a long run equilibrium relationship has been established, the next step is test for the speed of adjustment using the vector error correction mechanism (ECM).

Table 5: Error Correction Model (VEC) Framework

Error Correction:	D(GDP)	D(MS)	D(PSC)	D(LR)	D(FDI)
CointEq1	-0.229192	0.479099	0.251799	2.37E-07	-0.195503
	(0.30045)	(0.09744)	(0.08143)	(6.6E-06)	(0.14195)
	[-0.76282]	[4.91680]	[3.09235]	[0.03594]	[-1.37728]
D(GDP(-1))	-0.215283	-0.464205	-0.270286	-6.11E-06	0.372817
	(0.36709)	(0.11905)	(0.09948)	(8.1E-06)	(0.17343)
	[-0.58646]	[-3.89920]	[-2.71686]	[-0.75708]	[2.14968]
D(GDP(-2))	0.102344	-0.258052	-0.148889	-4.22E-06	0.601655
	(0.33296)	(0.10799)	(0.09024)	(7.3E-06)	(0.15731)
	[0.30737]	[-2.38970]	[-1.64997]	[-0.57658]	[3.82468]
D(MS(-1))	-9.571835	1.289849	1.982116	-3.09E-05	5.844986
	(1.91717)	(0.62176)	(0.51958)	(4.2E-05)	(0.90576)
	[-4.99269]	[2.07450]	[3.81487]	[-0.73335]	[6.45312]
D(MS(-2))	-5.399382	2.798199	3.179865	-4.78E-05	14.06141
	(2.45171)	(0.79512)	(0.66444)	(5.4E-05)	(1.15830)
	[-2.20229]	[3.51920]	[4.78576]	[-0.88786]	[12.1397]
D(PSC(-1))	5.168190	0.418751	-1.328680	-4.97E-06	-19.86342
	(3.37219)	(1.09365)	(0.91390)	(7.4E-05)	(1.59318)
	[1.53259]	[0.38289]	[-1.45385]	[-0.06711]	[-12.4678]
D(PSC(-2))	1.463369	-0.227470	-2.676666	-1.54E-05	-3.605521
	(4.11179)	(1.33351)	(1.11434)	(9.0E-05)	(1.94261)
	[0.35590]	[-0.17058]	[-2.40201]	[-0.17058]	[-1.85602]
D(LR(-1))	17626.24	711.8596	244.4184	-0.089031	3348.452
	(11017.5)	(3573.12)	(2985.86)	(0.24210)	(5205.17)
	[1.59985]	[0.19923]	[0.08186]	[-0.36775]	[0.64329]
D(LR(-2))	21667.26	1125.848	-661.5580	-0.166500	-14.39566
	(10652.3)	(3454.70)	(2886.91)	(0.23407)	(5032.67)
	[2.03404]	[0.32589]	[-0.22916]	[-0.71131]	[-0.00286]
D(FDI(-1))	1.040569	3.994592	2.879465	4.61E-05	2.706483
	(1.98496)	(0.64375)	(0.53795)	(4.4E-05)	(0.93779)
	[0.52423]	[6.20520]	[5.35270]	[1.05667]	[2.88603]
D(FDI(-2))	1.278051	4.341611	2.874560	4.30E-05	1.790530
	(1.98043)	(0.64228)	(0.53672)	(4.4E-05)	(0.93565)
	[0.64534]	[6.75967]	[5.35579]	[0.98707]	[1.91368]
R-squared	0.979760	0.994220	0.993387	0.351220	0.999824
Adj. R-squared	0.964580	0.989885	0.988426	-0.135366	0.999692
F-statistic	64.54295	229.3498	200.2762	0.721804	7581.679

From the table above, it shows that the coefficient of ECM is -0.229192. The ECM is significant with the appropriate negative sign. The coefficient of ECM in the model indicates that the speed of adjustment of any past deviation to long run equilibrium is 22.9%. This captures the rate of adjustment of the dependent variable with respect to the independent variables the table reveals that the coefficient of MS is negative while the coefficients of PSC and LR, are positive. From the results, it could be deduced that PSC has a direct relationship with GDP because of the positively signed coefficient i.e. + 5.168190. This implies that a unit increase in LR will lead to increase in GDP by 5.168190 units. Also, the coefficient of LR (+ 17626.24) suggests that a positive relationship subsists between LR and GDP. The implication of a unit change in LR is that GDP will consequently increase by 17626.24 units. This result also agrees with the work of Oriavwote and Eshenake. (2014).

The results also indicate that FDI and GDP are positively related. The FDI coefficient is +1.040569. A unit increase in FDI will only cause GDP to rise by 1.040569 units. However, MS and GDP are negatively related. MS has a coefficient of --9.571835. This means that if MS should increase by a unit, GDP will decrease by -9.571835 units. This negative relationship between money supply and gross domestic product is inconsistent with the findings of Nkoro and Uko, 2013, who reported a positive relationship. But interestingly the finding of our study with regard to money supply having an inverse relationship with GDP is in line with the findings of Odeniran, S.O., Udeaja, E.A. (2010).

The result on FDI in particular is consistent with the findings of Nwosa, et al (2011), in Nigeria and Helmi, H, et al (2013), in Tunisia. Also the result on PSC is inconsistent with the findings of Nkoro and Uko, (2013), Nzotta, S.M., Okereke, E.J and Oriavwote and Eshenake, who reported that private sector credit not play significant role in the finance-growth nexus in Nigeria, while in direct opposition, Helmi, H, et al (2013), submitted that credit to private sector is the main engine of economic growth. This shows that facilitating credit conditions, by reducing for example constraints to access to finance, would improve the well- being of Nigerians households. In fact, when the cost of credits became affordable, enterprises would borrow at a lower cost and therefore, they would increase their output. As a result, they would recruit further and they will open opportunity for unemployed people to find a job.

The coefficient of multiple determination (R^2) is 0.979760 ≈ 0.97 which indicates that 97% of total variations or changes in the present value of GDP is explained by changes of past value in the explanatory variables (MS, PSC, LR and FDI), while the remaining 3% is explained by other variation outside the model i.e. the error term, while the F-statistic is also very robust with exception of liquidity ratio. Looking at the overall level of significant of the variables, only MS and lagged of LR variables in the model that were significant.

CONCLUSIONS

The study examined empirically the impact of financial deepening; foreign direct investment on economic growth in Nigeria from 1981 to 2012, using cointegration technique with its implied Error Correction Mechanism (ECM). This commenced with the ADF unit root test, followed by the Johansen cointegration test and the Vector Error Correction. The Johansen cointegration test revealed a long run relationship among the variables. The statistical significance of the one period lagged ECM supports this long run relationship and a satisfactory speed of adjustment. The results show that there exists a unique long run relationship between financial development and economic growth. Thus, financial development is an important determinant of economic growth in Nigeria. Credit to private sector, liquidity ratio and foreign direct investment exerted positive impact on economic growth in the long run, while money supply showed a negative impact on economic growth.

The fact that the growth in the net domestic credit positively influences output has major implications. To fully realize the growth potentials of the Nigerian economy, it is necessary to remove all obstacles that could undermine the growth of credit to the domestic economy. Therefore, DMBs should be encouraged through friendly policies of the CBN in order to enhance their ability to extend credit to the economy.

From the foregoing, it is important to sustain the influence of finance on growth in Nigeria which requires the sustenance of present reforms in the financial sector as well as guiding against excess money supply on part of the monetary authorities.

The study is limited to the impact of financial development and direct foreign investment on economic growth in Nigeria. It covered the period of thirty-two (32) years, spanning from 1981-2012. Also, the fact that there are other forms of investments like domestic and portfolio investment is a limitation of this paper. This limitations do not in any form diminishes the relevance of the study.

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