EMPIRICAL STUDY OF FINANCIAL SECTOR DEVELOPMENT ON ECONOMIC GROWTH IN NIGERIA (1990-2010)

Ugbaje, David Ojofedo[1] & Ugbaje Henry Edez[2]

[1] *Nigeria Security and Civil Defence Corps, Kogi State Commands, Lokoja, Kogi State*
Email:daveso2010@yahoo.com
[2] *Department of Accountancy, Federal Polytechnic Idah, Kogi State, Nigeria*
Email:ugbajehenry@gmail.com

Abstract

The linkage between financial sector and economic growth has been controversially debated in finance and economic literatures. This research examines financial sector development and economic growth in Nigeria For the period 1990 to 2010. The study relied on historical time series for its secondary data obtained from Central bank of Nigeria statistical bulletin for the period. The study employed Vector Error Correction (VEC) model to ascertain the direction of causality between financial sector development and economic growth in Nigeria between 1990 to 2010. Recent econometric technique Eviews 4.0 software was used to test for the stationaries properties of the data, co-integration and direction of causality between the dependent and in dependent variables. The study found strong positive relationship between financial sector and economic growth and causality runs from market capitalization, banking sector credits and foreign direct investment to the real gross domestic product which supports the supply-leading hypothesis. The conclusion that emerged from this study is that market capitalization, banking credits and foreign direct investment impact significantly on real gross domestic product. We therefore, recommend the adoption of policies and actions that will develop the financial sector in form of increase banking credits to the private sectors, robust and efficient capital market as well as increase flow of foreign direct investment to the financial sector of the economy. This will ultimately impact significantly and positively on the real gross domestic product in the form of economic growth.

Keywords: Financial sector, Economic growth, foreign direct investment, Bank Credits, Market capitalization.

Introduction

Financial sector comprises central Bank of Nigeria, commercial banks, discount houses, other financial institutions, capital markets, Assets management, insurance companies and pension sub-sectors. These institutions trade financial instrument such as domestic currency, foreign currency, stocks, and derivatives. The role of the financial sector in any economy is that of intermediation by channeling savings from the area of surpluses to that of deficits. This means no profitable investment would be frustrated on the account of lack of finance.

Capital is one of the factors of production and where finance is readily available in an economy it is presumed that production will be higher and this will impact positively on the economic growth. It is in line with the aforementioned, that governments of many economies try to develop the financial sector in an effort to achieving sustainable economic growth. There are sub-sectors that make up the entire financial sector of an economy, and all are interrelated. This means that where one is doing well it can impact on others e.g where there is strong and vibrant capital market it is likely to effect the flow of foreign investment into the economy. Accordingly, where there is high inflow of foreign investment into an economy it is likely to increase new investment and enhance the existing investment

Ugbaje, David Ojofedo & Ugbaje Henry Edez , 2014, 2(3):122-137

through finance, new technology and skills transfers. There is strong perception of economic growth to be associated with the financial sector through other sectors such as real sector and provision of infrastructures. Capital Market provides important avenue for economic growth. Its liquidity role stands on clearly as the most significant among the numerous functions it provides. According to Levine, R (1991, 1997), without a liquid stock market, many profitable long-term investments would not be taken because savers may be reluctant to tier their investments for long period of time. Through this catalyst role, the stock market is also able to influence investment and economic growth in general. With the recent global financial crisis, most countries appear to have recognized the role of financial sector development in sustaining economic growth. Most affected economies had decline in market capitalization.

The Central Bank of Nigeria's monetary policy appears to be one that tends to enhance the banks' ability to extend more credits whenever economic growth is aimed at. Campaigns have also been going on inviting foreigners to come and invest in Nigeria with a view that FDI promotes economic growth. The research therefore investigates the development in three sub-sectors of the financial sector viz: banking sector represented by total credits to all sectors of the economy, capital market represented by market capitalization and Foreign Direct Investment (FDI) inflow to the financial sector in relation to whether or not they affect economic growth. The outcome of this research will assist the policy makers in highlighting areas that affect the economic growth which will consequently increase the tendency for achieving a required rate of economic growth especially in strategic initiatives like Financial Sector Strategy 2020.

The limitation of this study has to do with source of data which was solely derived from the Central Bank of Nigeria statistical Bulletin. Other institutions such as Bureau of statistics which provide data are largely unemployed. Different series of statistics published by the Nigerian Bureau of statistics and the Central Bank are often conflicting, some are internally inconsistent or simply do not add up. However, this research relied on the 50 years statistical bulletin of Central Bank of Nigeria (special edition), 2009.

Statement of the Problem

There have been several studies on financial sector development and economic growth. However, most of them consider one component of the financial sector in relation to economic growth. Many studies have been conducted on capital market and economic growth, banking credit and economic growth, like wise foreign direct investment and economic growth. The use of one component of the financial sector like capital market or Foreign Direct Investment as a representative of the entire financial sector is inadequate and in appropriate. For adequate analysis to be made for informed judgment to be reached there is the need for the collaboration of at least three components of the financial sector. To fill this gap therefore, this study considered three components of the financial sector comprising banking credits, capital market and foreign direct investment to the financial sector together in relation to economic growth.

Based on this, the following research question is formulated to guide the study. What is the causal relationship between market capitalization, banking sector credit, foreign direct investments and real gross domestic product in Nigeria?.

Objectives of the Study

The major objective of this research is to determine the causal relationship between market capitalization, banking sector credits and Foreign Direct Investment to financial sector and real Gross Domestic product in Nigeria.

Statement of Hypothesis

Research hypotheses formulated for this are stated below.

Hypothesis 1

Ho: There is no significant causal relationship between market capitalization, banking sector credits, Foreign Direct investment and real Gross Domestic Product in Nigeria.

Hi: There is significant causal relationship between market capitalization, banking sector credits and c real Gross Domestic Product in Nigeria.

Scope of the Study

The study covers the overall market capitalization of the Nigeria Capital Market, Banking sector total credit granted to all sectors and Foreign Direct Investment to financial sector for the period 1990 to 2010, considered as periods of financial sector liberation and control. Market capitalization is the overall capitalization of the entire listed companies on the stock exchange. Total Bank Credits are those of commercial banks only, while Foreign Direct Investment considered is total received by the financial sector.

LITERATURE REVIEW

Earlier and contemporary studies on financial sector development and Economic growth have been reviewed for better understanding.

Financial Sector Development and Economic Growth

Earlier Scholars such as Schumpeter (1911), Goldsmith (1969) Shaw (1973) & Mackinnon (1973), emphasize the importance of financials system in economic growth. Hicks (1969) argues that the industrialization process in England was promoted by the development of the financial sector which increased the access of the government and people to funds that were used to finance capital project which led to the development of the economy. This view was supported by King & Levine (1993), that financial development fosters economic growth.

Bencivenga (1995) concluded that well developed financial market induces long run economic develop growth. Unalmis (2002) investigates the direction of causality between financial development and economic growth in Turkey using Granger non-causality in the context of VEC model. Annual data from 1990 to 2001 were used. The study found that except for one proxy of the proxies used, causality runs from financial development to economic growth in the short run. Osinubu (2002) investigates the effect of financial sector development in Nigeria using the data from 1980 to 2000, by applying ordinary least square (OLS) Regression and found positive relationship between economic growth in Nigeria and all the stock market development variables used. The result showed that economic growth in Nigeria is adequately explained by the model for the period 1980 and 2000. By implications 98 percent of the variation in growth of economic activities is explained by the independent variables based on his findings.

Samson & Udeaja (2010) examine financial sector development and economic in Nigeria. The study unlike most early studies; the major empirical results show that financial deepening does not have influence on economic growth. The VAR results indicate that changes in net domestic credit impact on economic growth while per capital output also influences net domestic credit and economic growth. Changes in deposit liabilities appear to have no major impact on economic growth. More recently, Samson & Elias (2012) examine the relationship between financial sector development and economic growth in Nigeria. It tests the competing financial growth nexus hypothesis using granger causality tests in VAR framework over the period 1969 to 2009. The empirical results suggests bidirectional causality between some of the proxies of financial development and

Foreign Direct Investment and Economic Growth

There is conflicting evidence in literature regarding, the question as to how, and to what extent FDI affects economic growth. Nigeria as a country considering her natural resource base and large market, qualifies to be a major recipient of FDI in Africa and indeed one of the top three leading African Countries that consistently received FDI in the past decades. However, the level of FDI attracted by Nigeria is mediocre (Asiedu 2003) compared with the resource base and potential need.

Romer (1993) argues that idea gaps exist between the rich and the poor countries and foreign direct investment can ease the transfer of technology and business understanding of poorer countries. Based on this view, FDI can have spillover on all firms thereby boosting the productivity of the entire economy. Boyd & Smith (1992) however argued to the contrary .According to them; FDI can affect resource allocation and growth negatively where there is price distortion, financial trade and other forms of distortions existing prior to FDI injections.

Gregorio & Lee (1998) examine the effect of FDI on economic growth using data on FDI flows from industrial countries to 69 developing countries over the last two decades. Their regression results suggested that FDI was an important tool for technology transfer and it has contributed to growth more than domestic investment. However, the higher productivity of FDI can be realized more when the host country has a minimum threshold stock of human capital. In addition, FDI has the potentials of increasing total investment more than one for one. In a similar study, Balasubramanyam, salisu, & Sapsford (1999) find evidence in support of FDI and economic growth in countries with trade openness. Ogbekor (2005) examines the role of exports and FDI on the economy of Namibia from 1991 to 2001 using multivariate models, the study concluded that FDI and export aid in economic growth potential

Aitken & Harrison (1999) argues that there is no significant positive relation between FDI and economic growth. Even when the relation is positive, the effects tend to be weak. Rodrick (1999) for example argues that much of the correlation between FDI and economic growth are driven by reversed causation. Few studies such as Salz (1992) show a negative relationship between FDI and economic growth.

FDI may affect economic growth directly because it contributes to capital formation, and transfer of technologies to the recipient country. In addition, FDI enhances economic growth indirectly where the direct transfer of technology augments the stock of

knowledge in the recipient country through labour training and skill acquisition, new management practices and organizational arrangements (De Mello 1999).

Adelegan (2000) explores the seemingly unrelated regression model to examine the impact of FDI on Economic growth in Nigeria and found that FDI pro-consumption and pro-import are negatively related to gross domestic investment. Akinlo (2004) finds that foreign capital has small and not statistically significant effect on economic growth in Nigeria. However, Mojekwu & Samson (2012) find a long run relationship between the dependent and independent variables. They find a positive and significant relationship between gross capital formation and economic growth. Further, on basis of time series data, Ekpo (1995) reports that political regime, real income per capital, rate of inflation, world interest rate, credit rating and debt service were the key variability of FDI into Nigeria.

Salvanathan (2008) explores the causal link between FDI, domestic investment and economic growth in China between 1988 and 2003, using Multivariate and ECM. Their results indicated that there was bi-directional causality between domestic investment and economic growth while there was single-directional causality from FDI to domestic investment and to economic growth. They found a higher level of complementary between FDI and domestic resources. Abu and Achegbulu (2011) investigates the impact of FDI on economic growth in Nigeria between 1986 and 2006. Their result showed that foreign direct investment has positive impact on economic growth in Nigeria. The Granger causality test indicates that GDP granger cause FDI. Causality analysis also indicates directional cause effect between GDP and FDI.

Alfaro (2006) analyzes the role of financial markets in enabling FDI to promote growth through backward linkages. He asserted that to operate intermediate firms in good sector, the entrepreneurs require upfront capital investments. The more developed, the local financial market is, the easier it is for credit constraints the increase the varieties and quantities of intermediate goods, leads to positive spillover to the financial final good sector, due to this, the financial market ensure the backward linkages between foreign and domestic firms to turn into FDI spillovers. Their calibration result indicated that holding foreign presence constant, financially well develop economics perform almost as twice as economics with poor financial market in terms of growth. FDI contributes more in an economy with well-developed financial system than in an economy with less financial system. Lastly, local condition and as market structure, human capital are also important to generate a positive effect of FDI on economic growth economic development variables.

Capital Market Development and Economic Growth

Capital market also provides important avenue for economic growth. Its liquidity role stands out clearly as the most significant among the numerous functions it provides. Stock markets can encourage economic growth by providing an avenue for growing companies to raise capital at lower cost. In addition, companies in countries with developed stock market are less dependent on bank financing, which can reduce the risk of credit Crunch. According to Levine (1997), without a liquid stock market, many profitable long-term investments would not be undertaken because savers may be reluctant to tie up their investments for a long period of time. The stock market mainly provides liquidity by enabling firms to raise funds through the sale of securities with relative ease and speed.

The nature and economic significance of the relationship between stock development and growth vary according to a country's level of economic development with a large impact in less developed economies (Filer,Hanousek & Campos,1999). The proponents of positive relationships between stock market development and economic growth hinged their argument on the fact that the stock market aids economic growth and development through the mobilization and allocation of savings, risk diversification, liquidity creating ability and corporate governance improvement among others. In recent times, research interests have focused on investigating whether stock markets, especially in developing countries have achieved the development oriented goals for which they were originally conceived. The concept of stock market liquidity, for instance, has been used to demonstrate how developments in the securities market transmit to economic growth. This liquidity argument is based on the proposition that stock markets enable firms to acquire much needed capital quickly and, by so doing, helps in facilitating capital allocation, investment, and growth. It also assists in reducing investment risk due to the ease with which equities are traded and play crucial role in helping to determine the level of economic activities in most economies (Yartey & Adjasi, 200

Levine & Zervos (1998) observed a significant positive effect of stock market development on economic growth. Mohtadi & Agarval (1998) examine the relationship between stock market development and economic growth for 21 emerging markets over 21 years, using dynamic panel method. Their results indicated a positive relationship between several indicators of stock market performance and economic growth both directly and indirectly by boosting private investment behaviour. Existing evidence on the relationship between stock market development and economic growth has been inconclusive. Levine (1991) argues that developed stock market reduces both liquidity stock and productivity stock of businesses. This increase the access of businessmen investment funds as well as enhancing the production capacity of the economy, thereby leading to higher economic growth

In Nigeria, some authors have also attempted to examine the relationship between stock market and economic growth. For instance, Adam & Sanni (2005) examine the role of stock market in Nigeria's economic growth using Granger-Causality test and regression analysis. The authors discovered a one- way causality between GDP growth and market turnover. They also observed a positive and significant relationship between GDP growth and turnover ratios. Arzarm (2005) examines the empirical association between stock market development and economic growth in in India. The authors found no evidence of association between the Indian stock market development and economic growth in the entire period they studied. Whereas the author founds support for the relevance of stock market development in economic development during   pre- liberalization, they discovered a negative relationship for the post liberalization period. In Nigeria, Ariyo & Adelegan (2005) contend that, the liberalization of capital market, yet its impact at the macro-economy is quite negligible. In another development, Gabriel (2002) asenunciated by Nyong (2003) lay emphasis on the Romanian capital market and concluded that the capital market is insufficient and hence it has not contributed to economic growth in Romanian.

Obamiro (2005) investigates the role of the Nigerian stock market in the light of economic growth. The author reported significant positive effect of stock market on economic growth. Osinubi & Amaghionyeodiwe (2003) also examine the relationship

between the Nigerian stock market and economic growth during the period 1980-2000. Their results did not support the claim that stock market development promotes economic growth. Earlier, Nyong (1997) analyzes the relationship between capital market development and economic growth. The author used various indicators of stock market development (like market capitalization-GDP ratio, value of transaction-GDP ratio, value of transaction-GDP and listings) to capture capital market development. He also included the degree of financial market depth in the growth model. The result revealed a negative effect on economic growth of capital market development. The results of a study carried out by Ajayi (2006), which examines the effect of stock market development on economic growth in 14 African countries, revealed a positive relationship between the two and indicated that stock market development played a significant role in growth only for adequately capitalized markets.

In Belgium, Nieuwerburgh (2006) investigates the long run relationship between financial market and economic development. The authors used a new data set of stock market development indicators to argue that financial market development substantially affect economic growth. They found strong evidence th at stock market development led to economic growth in Belgium, especially in the period 1873 and1935. More recently, Kokpo & Adaramo, (2012) examine the impact of the Nigerian Capital Market on economic from the period of 1990-2010.The economic growth was proxied by Gross domestic product (GDP) while the capital market variables considered include: Market Capitalization(MCAP), Total New Issues(TNI), Value of Transactions(VLT) and The Listed Equities and Government Stocks(LEGS). Applying Johanson's Co-integration and Ganger causality tests result show that the Nigerian Capital Market and Economic Growth are co-integrated. This implies that along run relationship exists between capital market and economic growth in Nigeria. The causality tests suggest bidirectional causation between the GDP, the value of transactions (VLT) and unidirectional causality from market capitalization to the GDP. There is therefore a clear indication of the relative positive impact of capital market on the economic growth of the country. The evidence from this study reveals that the activities in the capital market tend to impact positively on the economy.

Banks Credits and Economic Growth

Existing literatures on finance and economic growth suggested that the financial functions provided by banks (and other financial intermediaries) are important in promoting economic growth: Empirical research strongly supports the view that banks promote economic growth at the firm, industry and country levels. The recent literature also highlights that not only is aggregate size of financial intermediaries important for economic growth, but also that the institutional framework of the banking sector can significantly affect economic growth (Mbat, 2001).

The existing literature does not measure the performance of bank functioning directly, instead, it relies primarily upon aggregate size of bank credit as an indicator of financial development, where high ratios of bank credit to GDP indicate better functioning of a country's banking sector. If bank credit is allocated to politically desirable but unprofitable projects, then the effect on banks credit to financial development and subsequent economic growth will be negative (Laporta 2002).The question then is that do there exist other channels by which banking industry can make its contributions to the

128

Ugbaje, David Ojofedo & Ugbaje Henry Edez , 2014, 2(3):122-137

productive capacity of the economy? One of the channels lies in the arguments given the level of total cost, if one assumes that the availability of banks credit allows firms to stockless raw materials in warehouse, their output would increase as a result.

Studies such as King and Levine (1993), Ndebbio (2004), have established that a well-developed banking system promotes economic growth. Azege (2004) examined the empirical relationship between the level of development by financial intermediaries and growth. He concluded that the development of financial intermediary institutions in is fundamental for overall economic growth. Samson and Elias (2010) however show that financial deepening does not have any influence on Nigeria's economic growth.

Agu & Chukwu (2008) in his effort to ascertain the direction of causality between "bank based" financial deepening variables and economic growth in Nigeria found that financial deepening variables and economic growth were positively co-integrated and that there was only one co-integrating vector indicating a stable and sustainable long run equilibrium relationship in the full Information Maximum Like-hood (FML) multivariate Johnson.

Methodology
Research Design
The research plan adopted for this study is descriptive research method. In designing this research, the type of data to be collected, nature of variables and technique of analysis were considered. The study relied on historical time series for its secondary data which formed the entire source for the study. Time series data collected from secondary sources were purely used. An initial investigation of the time series properties of the data is followed by examination of the existence of the possible long-run relationship between financial sector development and economic growth, by applying the multivariate co-integration methodology suggested by Johansen (1995).

Population of the Study
The population of this study consists of all institutions in the Nigerian financial sector. Central Bank; commercial banks; discount houses; other financial institutions; capital markets; Assets management; insurance companies and pension sub-sectors.

Sample Size
Because of the nature and requirement of this research secondary source of data were used to study the relationship between financial sector development and economic growth in Nigeria for the period of 1990-2010. The sample period is 21 years from 1990 to 2010. This period is considered as period of economic liberalization and control.

Method of Data Collection
Documentary evidence constitutes the instrument of data collection as the study is based on secondary data. The data is time series collected from the Central Bank of Nigeria statistical bulletin. The data for the study is the aggregate of banking sector credits, market capitalization and foreign direct investment to financial sector and real GDP from 1990 to 2010. This period is regarded as period of financial liberalization and control.

Techniques of Data Analysis

The variables for aggregate banking sector credits, market capitalization, foreign direct investment to financial sector and real GDP met the requirement for the quantitative data available for the study periods of 1990 to 2010. Based on this, the hypothesis was tested using vector error correction model. This study is interested in the long run predictive effect of financial sector development on economic growth. The advances in econometric techniques however, enable recent researchers to use techniques such as stationarity tests (i.e. unit root test), co- integration test and causality test in their analysis to reanalyze the traditional regression applied in earlier studies. The steps used in this analysis are discussed below.

Stationarity (Unit Root) Tests

We investigate the stationarity properties of the time series data using the Augmented Dickey Fuller (ADF) test. According to Nelson and Plosser (1982), Chowdhury (1994) there exist a unit root in most macroeconomic time series. While dealing with time series, it is necessary to analyze whether the series are stationary or not. Since regression of non-stationary series on other non-stationary series leads to what is known as spurious (bogus) regression causing inconsistency of parameter estimate. The Null hypothesis of a unit root is rejected against the one sided alternative if the t-statistics is less than the critical value. Otherwise, the test fails to reject the null hypothesis as a unit root at 5% significance level.

Co-integration Test

Next, we employ Johansen Multivariate Co-integration Test.
Co-integration is the existence of a long run equilibrium relationship among time series variables. Johansen (1988, 1991) pointed out that a linear combination of two or more non-stationary time series may be stationary. If such a stationary linear combination of two or more non-stationary time series exists, the non-stationary time series are said to be co-integrated and may be interpreted as long-run relationship among the variables. The lag length is one and is based on the Akaike (1969) information criterion (AIC). The lag is taken into account at Mckinnon critical values at 5% level. If the residuals from the regression are 1(1) or 2(2), i.e stationary, then variables are said to be co-integrated and hence interrelated with each other in the long run.

Vector Error Correction (VEC) Technique

We investigate the direction of causality for the hypotheses using Vector Error Correction (VEC) model based causality technique. The presence of co-integrating relationship forms the basis of the use of Vector Error Correction Model. Eviews econometric software used for data analysis, implement vector Auto-regression (VAR)- based co-integration tests using the methodology developed by Johansen (1991,1995). The non-standard critical values are taken from Osterward Lenun (1992).

Data Presentation and analysis

The time series data on the market capitalization, Banking sector credit and foreign direct investment to the financial sector and Real GDP for the study periods of 1990 to 2010 are presented and analyzed. It presents the result of the unit root test statistics and Co-

integration tests as well as the Vector Error Correction based causality analysis. The growth patterns of the variables are also presented and compared in percentages in tabular form.

Investigation of the Stationarity properties of Data

The properties of the time series data for the period of the study covering 1990-2010 was investigated in order to test its stationarity using the Augmented Dickey fuller (ADF) test statistics.   The number of lag used in (ADF) regressions was selected using Akaike information criterion (AIC). Table 4.2 shows ADF test results of the time series. The results suggest that the null-hypothesis (Ho) of unit root can be rejected in the first difference, for MCAP, BCRDT, while FDI and RGDP can be rejected at the same level in the second difference respectively. All the series (MCAP, BCRDT, FID and RGDP) are stationary and therefore their regression will not be spurious (Bogus). They are all stationary at 5% critical value.

ADF Unit Root Test

Variable	ADF Test	Critical Value	Lag	Stationarity
	Statistics	1	0	
MCANP @ TREND	-3.483895	-3.0521	2	1 (1)
BCRDT @ TREND	-7.329960	-3.0521	2	1 (1)
FDI @ TREND	3.238244	3.0400	1	1 (0)
RGDP @ TREND	-2.54889	-1.9642	3	1 (2)

Source: Compiled from Eviews 4.0 statistical software.

Co-Integration Analysis

The results of the co-integration analysis are in table 4.3 below. Two variables are co-integrated if both their max-Eigen and trace statistic are greater than critical values respectively. Johansen's (1988, 1991) multivariable are co-integrated. Co-integration determines if the variables are co-integrated. Co-integration analysis is necessary in all-time series data so as to determine whether or not there is long run relationship between two variables.

Johansen Co-Integration Test

Variable	Max-Eigen Statistic	Critical Value	Trace Statistic	Critical value
RGDP AND MCAP	15.42989	14.07	16.09099	15.41
RGDP AND BCRDT	24.31973	14.07	24.86930	15.41
RGDP AND FDI	20.17091	14.07	20.59399	15.41

Max-Eigen value test indicates 1 co-integrating equation(s) at the 5% level.
Trace test indicates co-integrating equation(s) at the 5% level.
Critical values are all at 5%.
Source: Compiled from Eview 4.0 result.

Test of Hypotheses
Causality Test

According to Granger (1969), measuring the correlation between variables will not be enough to construct a complete understanding about the relationship between two or more time series. This is because some correlations may be spurious and not useful, as there

might be a third variable that cannot be accounted for. This is the essence of performing the causality test. The causality test is the vector error correction based causality test and the results are presented in the table   below

Vector Error Correction based Causality Test

Model 2.1	RGDP	MCAP	CAUSALTY
Standard Error	0.02174	1.15925	Causality runs from
T-Statistics	0.20953	8.44715	MCAP to RGDP
Model 2.2	RGDP	FDI	Causality runs
Standard Error	0.15029	0.33465	FDI to RGDP
T-Statistics	0.49145	5.00298	
Model 2.3	GGDP	BCRDT	
Standard Error	0.08355	13.0818	Causality runs from BCRDT to
T-Statistics	-0.61731	-4.17259	RGDP

 Source: Compiled from Eviews 4.0 result.

The direction of causality can be determined by comparing t-statistic of two variables. The variable with the highest value of t-statistic indicates where Causality is running from. Thus from the table above, causality runs from market capitalization to the real GDP, foreign direct investment to the real GDP and Causality runs from banking sector credit to the real GDP. Therefore the three null hypotheses formulated to test the relationship between the dependent and independent variables are rejected. The result indicates positive relationship between financial sector development and economic growth in Nigeria for the period under consideration.

Discussion of Findings

Looking critically at the preliminary tests of the data using statistical tools; indicates that they are stationary and co-integrated. This means that their combinations will not lead to spurious regression and there exist a long run relationship between the variables which can be sustained. The Causality test between the variables which was conducted using vector error correction model shows that Causality runs from the independent variables (market capitalization, foreign direct investment, banking sector credit to the dependent variable (Real GDP). This means that market capitalization, foreign direct investment and banking sector credit cause Real GDP. The relationship between the variables derived from the Vector Error Correction Model in this study support the supply-leading hypothesis. Supply-leading hypothesis states, that, development of financial institutions and their related services induce real investment and growth. This means, countries with better developed financial systems particularly those with large efficient banks and a large well organized and smoothly stock markets tend to growth much faster by providing access to much needed funds for financial constrained economic enterprises.

The key question then is what is the implication of these findings? The implication of this result is that, development of functional financial market and institutions in form of increase banking sector credits, increase flow of FDI, efficient capital market will increase the supply of financial services in an economy. This will ultimately lead to high and sustainable economic growth in the form of increase real gross domestic product.The findings based on the data for the period 1990-2010 from both the ordinary and the vector

error correction models provide evidence in support of earlier findings from studies both here in Nigeria and others countries.

The result of this finding is in line with some of the studies conducted both outside and in Nigeria such as World Bank (1995). Other studies having similar findings include Unalmiss (2002) conducted in Turkey, Nedebbio (2004) conducted in Sub Saharan African countries, and in Nigeria, the findings of this research are in line with results of Agu & Chukwu (2008), Nurudeen (2009), Samson & Elias (2012). However, there are some studies conducted both within and outside Nigeria having contrary result with the finding of this research. For instance, studies like Ndebio (2004) conducted in South Africa, Waqabaca (2004) conducted in Fiji. In Nigeria Akinlo (2004), Adelekan (2010)

Summary

The purpose of this study is to determine the causal relationship between market capitalization, foreign direct investment, banking sector credits and real GDP as well to examine the pattern of growth of variables for the Sample periods of 1990-2010 in Nigeria.

The economic tools of analyses for the empirical tests of the relationship between the variables includes ADF test of stationary, Johansen's co-integration test for the long run relationship and vector error correction model for the test of Causality. The results of the study shows that all the variables are stationary and co-integrated, meaning that their combinations will not lead to spurious regression and there exist a long run relationship between the variables. The weakness of previous studies such as unlagged variables; non-stationarity of variables; shortcomings of traditional Granger Causality and spurious regression have been avoided. The finding which shows a positive relationship between market capitalization, banking sector credits and foreign direct investment to financial sector and the real GDP as well as the Causality which runs from MCAP, BCEDT and FDI to the RGDP validates the supply-leading hypothesis.

Conclusion

The research contributes to the emerging evidence of the validity of supply-leading hypothesis for the Nigerian case over the period of 1990 to 2010. It adds to the debate and existing literature about financial sector development and its relationship with economic growth. The stationarity properties of the data were investigated using the Augmented Dickey-Fuller (ADF) test, we also applied Johansen Co-integration test to all the models formulated for the hypotheses .The co-integration results show that financial sector development and economic growth is positively co-integrated indicating a stable long run relationship. The Vector Error Correction (VCE) model shows that there is unidirectional Causality running from market capitalization, banking credits and foreign direct investment to financial sector development i.e. to real gross domestic product. This means that financial sector development leads to high and sustainable economic growth.

The conclusion that emerges from this study is that market capitalization, banking credits as well as foreign direct investment to financial sector will impact significantly on the real gross domestic product. Therefore, the development of financial sector in form of increase credits by banks to the private sectors, increase in foreign direct investment flow into the economy and efficient and robust capital market influence real gross domestic product in form of economic growth. Government and all the regulatory institutions should

focus on the development of the financial sector to restore confidence in the system in order to facilitate economic growth in Nigeria.

The finding from this study has policy implications which will reinforce the observed benefits derivable from financial sector development especially in the form of economic growth arising from the established positive link between the variables. The policy issues relate to the individual component of the financial sector included in this study viz; capital market and economic growth, banking credit and economic growth and foreign direct investment and economic growth.

Recommendations

To make Nigeria one of the worlds's largest economies by 2020 as captured in financial system strategy (FSS 2020) the following policy recommendations have been made:

The first policy recommendation which relates to capital market and economic growth is that, investor's protection policies and other rules and regulations governing capital market operation should be re-examined with a view to enhancing public confidence in the market and increasing the level of activity for enhance liquidity and growth of the market. For example, reduction of listing requirements to ease listing of new companies on the exchange, lowering of charges and other fees payable by investors for buying and selling securities and establishment of an effective legal framework that will enable investment related dispute to be resolved timely and satisfactorily.

Secondly, the need to re-assess the banking credits and economic growth's policy of the current universal banking license and the minimum capital requirement of ₦25 billion with a view to having banks that will focus on specific areas like real sector of the economy instead of having few banks carrying businesses that divert more of their funds to trading and less productive sectors of the economy as mostly practice by banks hiding under the provision of the current universal banking license. This will enhance banks' lending to the most productive sectors of the economy while curtailing their speculative activities in other sectors in the name of universal banking. This will likely increase the total credits granted by banks to the economy with ultimate positive impact on the economic growth.

Thirdly, the policy makers should evaluate the existing traditional approach of the country towards attracting FDI to an engineered strategic approach. The engineered approach can be in form of reassessment of the current funding of some social service project from the current government funding to a public private partnership, where one or two private individuals partners with the government in financing public project. The private individuals own/acquire the project after completion and transfer to government after recouping its capital in accordance with an agreed term. This will attract new FDI into the economy with consequent impact on the economic growth.

Suggested Area for Further Studies:

Further studies on The Impact of Global Financial Crisis on the Nigeria Economy are to be carried out. This is to further verify the assertion that the recent global financial crisis has retarded the economic growth of many countries particularly Nigeria. This study is to provide bases for the formulation of policies and strategies for the adoption of reforms that will reposition the Nigerian Financial System to promote sustainable economic growth.

References

Books

Anyanwu, J. C. (1993).*Monetary Economic Theory*, Policy *and Institutions*. Onitsha: Hybrid Publications Limited

Best, J.W. and Khan, J.V. (1989). *Research in Education*. Prentice-Hall, New Delhi, India.

Goldsmith, R.W. (1969). *Financial Structure and Development.* New York: Yale University Press.

Gupta, K.L. (1984). *Finance and Economic Growth in Developing Countries*. London: Groom Helm.

Hicks, J.A. (1996). *A Theory of Economic History*. Oxford, UK: Clarendon Press.

Mbat, D.O. (2001). *Financial Management (1st ed).*Uyo: Associate Publishers.

Mckinnon, R. (1993). Money and Capital in Economic Development, Washington: The Book in Institute.

Meier, G. (1984). *Leading Issues in Economic Development*. Oxford: Oxford University Press Inc.

Mohtadi, H. and Agraval, S. (2004) Stock Market Development and Economic Growth: Evidence from Developing Countries, New York: Oxford University Press.

Schumpeter, J.A. (1911). The Theory of Economic Development, Cambridge: Harvard University Press.

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

Journal.

Adams J.A. (1998). "Financial Intermediation and Economic Growth: Evidence from Nigeria", *Journal of Management*, Volume 5, No2, June.

Adelegan, J.O. (2000) "Foreign Direct Investment and Economic Growth in Nigeria: A seemingly unrelated model". African Review of money, financial and banking, supplementary issue of Savings and Development" 2000. Milan Italy pp.

Ailken, B. and Harison, A. (1999). "Do Domestic firms benefit from foreign investment, Evidence from Venezuela" *American Economic Review,* 89, No.3.

Ajayi, S.I. (2006). Foreign Direct Investment and Economic Development in Africa: Paper Presented to the ADB/AERC International Conference on Accelerating Africa's Development. Five Years into the Twenty – five century, Tunis, Tunisia.

Akaike, H. (1969). "Statistical predictor Identification". *Annuals of the Institute of Statistical Mathematics (21), pp.207-17.*

Akino, A.E. (2004) "Foreign Direct Investment and Growth in Nigeria: An Empirical Investigation". *Journal of Policy Modeling,* (2c) 5, 627-639.

Alfaro, L., Arendam, C.K (2006). "How Does foreign Direct Investment Promote Economic Growth?" Exploring the Effects of financial Markets on Linkages. *NBER Working Paper No. 12522.*

Asiedu, Elizabeth (2002)." On the Determinants of Foreign Direct Investment to Countries: Is Africa Different"? *World Development Journal*,(vol.30.No1).107-119 Developing

Azege, M. (2004). The Impact of financial intermediation on Economic Growth: *The Nigerian Prospective*, Lagos State University.

Balasurbramanyam, V.N., Salisu, M. and Sapfold, D. (1999). "Foreign Direct Investment as an Engine of Growth". *Journal of International Trade and Economic Development,* 8(1) 27-40..

Beekaert, G., Harvey, C. and Lundblad, C. (2005). Do financial Liberalization Spur Growth? *Journal of Financial Economic Studies*58, 195-209.

Ben, Naccur, S. and Ghazouani, S. (2007). Stock Market, Banks and Economic and Growth; Empirical Evidence from MENA region. Research in International Business Finance, 21(1), 297-315.

Bencivenga, V.R., Smith, B. and Stars, R.M. (1995). Equity Markets, Transaction costs, and Capital Accumulation: The *World Bank Economic Review,* Vol. 10: 241-65.

Bolbol, A; and Omran, M. (2005). Financial Development, Structure and Economic Growth: The case of Egypt, 1974-2002. *Research in International Business finance*, 19, pp.171-174.

Calderon, C and Liu, L. (2002). The director of casualty between financial development and economic growth. *Working Papers*, Central Bank of Chile.

Characteristics of the Nigeria Stock Exchange". *Africa Economics Research Consortium Research Paper* 60 March 1997.

Demello, L.R. (1999). Foreign direct in developing countries: A Selective survey, *Journal of Development Studies*, 34(1), 1-34.

Demirguc-Kunt, A.and Levine, R. (1996). "Stock Market, Corporate Finance and Economic Growth. An Overview". *The World Bank Review* 10(2):223

Filer, R.K., Hanousek, J., and Campo, N.F. (2000). Do Stock Markets Promote Economic Growth? William Davidson Institute at the University of Michigan, *Working Paper* No.151.

Goldsmith, R.W. (1969). Financial Structure and Development; New Haven. *National Bureau of Economic Research*.

Granger, C.W.J (1969). Some Properties of time series data and their use in Econometric models specification. *Journal of Econometrics*.16,121

Gursory, C.T and Musluvov, A. (1999). Stock Markets and Economic Growth: A Casualty Test. MBA Thesis submitted to the institute of Social Sciences, Istanbul Technical University Turkey, pp 124-13

Inanga, I.L. and Chidozie, E. (1997). "Institutional, Traditional and Asset Pricing Johansen S. (1988). "Statistical Analysis of co integrating vectors", *Journal of Economic Dynamics and Control*, 12, 231-254

Khan, A. (2000).The Finance and Growth Nexus." FRBP Business Review, January/February, 3-14.

Levine, R (1998). "Financial Development and Economic Growth; views and Agenda. *Journal of Economic Literature*. Vol.35.pp.31-77.

Levine, R. (1991). Stock Markets, Growth and Tax Policy. *Journal of Finance*, Vol. XIVI. Pp.1445-1465.

Levine, R. and S. Zervos (1996). "Stock Market Development and Long-run Growth ".*The World Economic Review*. 110(2):323-340.

Lipsey, R. (1999). The Location and Characteristic of U.S Affiliates in Asia. *NBEW Working Paper, No 6876 Cambridge M.A.*.

Ndebbio, J.A.U. (2004). Financial Deepening, Economic Growth and Development: Evidence from Selected SSA Countries, AERCRP 142.

Nieuwerburgh, S. (2006). Stock Market Development and Economic Growth.

Obamiro, J.K. (2005). Nigerian Economy: Growth and the Role *of* Stock Market. *Journal* of *Economic and Financial Studies*, 2(2).

Obida, Gobna A. (2010). Determinants of Foreign Direct Investment in Nigeria. An Empirical Analysis. *Global Journal of Human Social Science, Vol.10 issue 1 (Ver.1.0) April, p*

Osinubi, T.S. and Amaghionyeodiwe, L.A. (2003).Stock Market Development and Long-run Growth in Nigeria. *Journal of African Business*. *Vol. 4, No3, pp 103-129.*

Romer, P. (1993). Idea Gaps and Object Gaps in Economic Development. *Journal of Monetary Economics 32,543-573.*

Sanusi, L.S (2009). "The Nigerian Banking Industry: What Went Wrong and Way Forward". *Pre-Convocation Lecture,* Delivered at Bayero University, Kano.

Shan, J. and Tian, G.G. (1998). Causality Between Exports and Economic Growth: The Empirical Evidence From Shanghai. *Australian Economic Papers, 37(2),pp.195-*

Tang, S. Salvanathan, E.A. and Salvanathan, S. (2008). "Foreign Direct Investment, Domestic Investment, and Economic Growth in China." *UNU-WIDER Research Paper 2008/19*

Toda, H.Y. and Phillips, P. (1993). "Vector Auto Regressions and Causality". *Econometrical, Volume 61,pp.1367-1393.*

Toda, H.Y. and Yamamoto, T. (1995). "Statistical Inference in Vector Auto Regressions with Possibly Integeted Processes", *Journal of Econometrics, 66(1-2),pp.225-250.*

Unalmis, D. (2002). "The causality between Financial Development and Economic Growth: Case of Turkey" Research Department*, Central Bank of the Republic of Turkey.061 A*

Xaxier, F.R and Raja, A.V. (2007). Stock Market and Shareholders protection: Are they important for economic growth? *The Law and Development Review 3(2), 306-325.*

Yartey, C.A. and Adjasi, C.K. (2007). Stock Market Development in Sub-Saharan Africa: Critical Issue and Challenges. *IMF Working Paper, WP/07/209*.

Internet

Achegbulu J.O. (2011). An Investigation of the Impact Foreign Direct on Growth in Nigeria. International Business and Management vol. Investment 3(1), PP 232-238. http://*www.cscanada*. Retrieved: 10-08-2014.

Adelekun, O.J. (2010). Financial Sector Development and Economic Growth in Nigeria. E-mail-joadelakan@yahoo.co.uk Retrieved: 16/10/12014.

Agu, C.C. &Chukwu J.O. (2008). "Toda and Yamamoto Causality Test Between" banks Based Financial Deepening and Economic Growth in Nigeria. http.www.europeanjournal.com. Retrieved: 20/10/2014.

Akinlo, A.E. (2004). "Foreign Direct Investment and Growth in Nigeria: An Empirical investigation: J. Policy modeling. joi.sagepub.com/content/2/2/105refs. Retrieved: 30/09/2012.

Central Bank of Nigeria (2008). Annual Report and Statement of Accounts. Abuja Nigeria www.cenbank.org Retrieved: 11/08/2014..

Central Bank of Nigeria (2010). Annual Report and Statement of Accounts. Abuja Nigeria www.cenbank.org Retrieved: 11/08/2014..

Central Bank of Nigeria (various years): Central Bank of Nigeria Statistical Bulletin. Abuja, Nigeria. www.unbanking.org. Retrieved: 30/10/2014.

Ekpo, A.H. (1995). Foreign Direct Investment in Nigeria: Evidence from Time Series Data". CBN Economic and finance Review, 35(1); 59-78. www.eurojournals. com/ESSR53,3,02.Pd. Retrieved 01/12/2014.

Mojekwu, J.N and Samson, O. (2012).Foreign Direct Investment and the challenges of sustainable development in Nigeria. http./www.interestjournals.org./TRIBN. Retrieved: 11/08/14

Moses, F.O. and Ade, O.A. (2006). Economic Growth and Human Capital Development. The case of Nigeria. http/www.mfolu@cenbank.org;aoadenuga@cenbank.org Retrieved: 16/11/2014

Sanusi, L.C (2012). Rational for the Banking Reforms Embarked Upon by the Central Bank of Nigeria. www.africanleadershipmagazine.com.

Soludo, C.C. (2009). Global Financial and Economic Crisis. How Vulnerable is Nigeria. www.cenbank.org. Retriewed:18/11/2014

UNCTAD, Foreign Direct Investment Data Base, www.unctad.org. Retrieved: 11/11/2014