Financial Deregulation and Capital Market Development in Less Developed Nigerian Economy an Empirical Discourse

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Abstract:
The health condition of an economy is determined by the effectiveness of the financial sector. The study investigates the empirical link between financial deregulation and capital market development. The use of inferential statistic and econometrics method of data analysis for data covering 1990 through 2019. Unit root test for stationary of the data, granger causality for causes and effect, autoregressive distributed lag, co integration test (bound test) and cusum test. The result shows that irrespective of the endowed factor input in the economy, the interest rate financial deregulation have little impact in the capital market development. This was as a result of the governing body running as an enterprise and inability of the government to allow the invisible hands of Adam smith to determine the prices and allocation of economic resources. The study recommends; corrective measure of the system whereby the governing body needs to focus on the primary responsibility and allowing faithful and effective deregulation of the interest rate financial sector. Ensuring the security of life and property, cut down tax on importation of capital goods, grant tax holiday for industrial sector of the economy. Above all, basic infrastructural facilities should be put in place

Keywords: Financial deregulation, Trade openness, Interest rate spread, Inflation rate, Foreign direct for investment

1. Introduction
The health condition of an economy is mostly determined by the standard of the financial market due to high positive correlation between financial market development and economic growth. Financial sector as an aid to trade facilitates trade transactions, efficient use of financial resources, savings mobilization and risk management. According to T.W. Oshikoya and Osita Ogbu [1995], implementation of financial deregulation in Nigeria economy has been largely through Structural Adjustment Programs. The adoption of structural adjustment program in 1986, financial repression and bureaucratic control of interest rates were the order of the day. Economic Development creates demands for particular types of financial arrangements and the financial system responds automatically to these demands. Finance act as a catalyst in the process of Development but if repressed could become an obstacle to the Growth process [Ikhide, 1997].

Compared to other developed nations, the money and capital markets in Nigeria are still un desirable. Late 1980s and early 1990s has given a starting to develop a more robust and structural financial background that would improve the ability of the domestic financial system to mobilize savings and contribute to self sustained Economic Growth [Iyoha, 2002].

Deregulation purpose is mainly to build more efficient, effective, robust and deeper financial systems, which can improve the private sector contribution to the general growth of the economy. Efficiency comprises of two components; improved credit allocation and more or higher quality financial services for a given level of inputs [Brown Bridge and Gayi, 2001].

The role played by the financial sector in an Economy can be important in determining Economic Growth. A growing empirical literature demonstrates that the Development of the financial system has positive effects on the long run rate of Economic Growth and the volume and efficiency of investment [Fry, 1995 Philip Arestis et al, 2002], through the removal of the elements of financial repression, particularly controlled interest rates, financial sector deregulation is expected to lead to higher nominal and real interest rate [Emenuga, 2001].

The capital market is divided into two segments: the primary market where companies' shares are issued for the first time before being quoted on the stock exchange and secondary market where trading is done in existing stocks. The capital market has served as a source of long- term fund to finance investment in the private sector of the Nigerian Economy.

The deregulation of the financial sector involved liberalization of interest rates, promotion of market-based system of credit allocation and enhancing completion and efficiency of the regulatory and supervisors framework [Ikhide, 1997]. The research work is based on the following: Has the financial sector deregulation measures been effective in achieving its stated objectives? Are the financial sector deregulation measures being able to solve the repressed nature of the Nigeria capital market? Has financial sector deregulation measures improved the efficiency in resource allocation and
quality of investment in Nigeria economy? All these question calls for the research work in the economy. Chapter one is the introduction, chapter two is about the literature review, three is the research methodology four is the analysis and chapter is about the conclusion and recommendation of the research work.

2. Empirical Review

Akinwale, Samuel Olusegun and Adekunle Elijah (2019), globalization and capital market development in Nigeria. The researchers used capital market development to proxy trade openness, foreign direct investment and foreign capital inflow. MACP and TOP were stationary at 1; the other variables were stationary at level. With the use of econometric analysis, the researcher concluded that the level of openness in the economy and foreign capital inflow, show positive effect on capital market performance. It was recommended that total deregulation of the economy should a paramount issue.

Iyoha (2018). He used econometrics techniques and concluded that financial deregulation increases the real deposit ratio and also will lead to substitution into financial asset resulting in a greater supply credit to finance real investment for capital market development and economic growth. He recommends that for micro economic stability, efficiency and proper development of the financial system, direct control should be discouraged while indirect control should be encouraged through the market mechanism.

Akinmulegun (2018), He observe the relationship between capital market development and foreign portfolio. Data were sourced from the central bank of Nigeria. the unit root test through the ADF and PP for the stationary of the variables under review, granger causality test for the causes and effect and ECM as a result of all the variable stationary at 1. The researcher proxy capital market development on foreign portfolio investment. He concluded that the capital market development is positively significant to foreign portfolio investment in Nigeria economy.

Dr Adesola W. Adebisi & Oka Felix Arikpo (2017). Financial market performance and foreign portfolio inflow to Nigeria. The paper only focused on capital market variables. The study shows that there is no there is no long run significant association between financial market development and foreign portfolio in the economy. Also, no short run causal relationship between stock market development and foreign portfolio investment. More so, no short run association between stock market liquidity and foreign portfolio investment but there is short run relationship between total new issue and foreign portfolio investment. Adelakun O.J (2010). Financial sector development and economic growth in Nigeria. All the variables used were found to be integrated of order 1 but the paper did work on error correction model before the co-integration test for the causality relationship. The result shows positive relationship between financial sector development and economic growth of the system. There is also causal relationship between financial sector and economic growth rate of Nigeria.

Dr Uche Basil Onwe (2013). The Nigeria financial market and the challenges of information technology based operational service. The researcher only works on money market without reference to capital market. No methodology and statistical analysis to back up the research work. The paper concluded that financial market has grown in the last two decades. The players in the market have posed some challenges as well as the regulatory authorities that were charged with the responsibility of overseeing different aspect of the financial market.

Okoye O. victor Nwissenyi J. Kenchuckwu and Eze, Onyekachi Richard [2013], the research work focusses on capital market development and industrial sector of the economy and proportion of manufacturing industry in market capitalization. The paper revealed that capital market has effectively impacted industrial development but the major setback is infrastructural deficit, lack of skilled manpower and insecurity of the country. The recommendations are infrastructural improvement and effective economic policies for efficient deregulation system of the capital market. No econometrics analysis for the variables.

Anderson (2003) financial deregulation will not necessarily induce efficient financial intermediation. Increased competition is likely to erode franchise values, which may, in turn, generate an unstable banking environment where gambling behavior on the part of the banks is prevalent. Increased competition can also discourage relationship-banking, and it disturbs what may actually be a constrained efficient mode of contracting in a dynamic setting characterized by asymmetric information. He argued that these problems are further aggravated by the massive task of building an appropriate institutional and regulatory framework designed to effectively curb imprudent bank behavior. Turning to the empirical evidence, it is shown that the alleged first-order effect whereby financial development causes growth is not adequately supported by econometric work. The empirical evidence on the finance–growth nexus does not yield any clear-cut picture. By way of conclusion, we question whether financial development, in the sense of increased formal financial sector intermediation in a deregulated environment can be expected to act as ‘engine of growth’ in the development process; and we argue in favor of a more cautious approach to financial sector reform.

King and Levine (1993) use international monetary fund data and various financial indicators to arrive at a positive relationship between financial indicator and growth of an economy. They opined that financial development is correlated with sequential growth rate of the economy, capital accumulation and economy efficiency. More so, policies that change the effectiveness of the financial intermediation apply a first order influence on growth of the economy.

Bababola (1999) review the performance of the Nigeria capital market since deregulation. The paper discusses the development of the capital market with emphasis on the period since deregulation in 1986. Crucial institutions for the delivery of financial services were analyzed. No econometrics model only mathematical model were used to analyzed the development of the sector. The studies shows that a prospect of the market appear to be brighter considering the governmental effort in the privatization and commercialization process of the government establishment together with appropriate regulatory and policy framework.
Cross country studies highlight that developed money market and capital market are associated with foster growth of the economy. Levine and Zervos (1998) these findings are verified by a panel and time series estimation techniques Christopher and Tsionas (2004) Rousseau and sylla (1999). Research also shows that financial market development enhanced economic growth through more efficient equitable allocation of resources and productivity growth rather than through investment sales or savings mobilizing. Beck et al (2000). More so, cross country studied highlights that financial liberalization enhanced economic growth by improvement in the efficient allocation of resources and investment rate Bekaat et al (2001). Bekaat et al (2005) Arestis and Demetrias (1997) the researchers use time series data and Johansson co integration analysis for Germany and united states of America. In the united states the GDP contributed to both the money market and the stock market development while in Germany they found out the impact of money market development growth.

Demigru and Maksimovic (2002) they use financial planning model and firms level data to highlight more financial development system as a proxy by larger money market system and more liquid stock market to enhanced firm’s growth faster than internal financing. Financial development plays an important role in external shock impact on the local economy impact Beck et al (2006) and Radditz (2006) indicate that financial issue does happen in developed economy alike Demigru and Detragiache (1998) and Demigru and Detregiache (1999), Kaminsky and Reihart (1999). Studied financial market without necessary financial institution development has been shown to leading bad handling of risk investment rather than mitigation.

Generally political economy is of the opinion that effective functioning of financial market makes financial services available to the major segment of the population instead of just the few political class with high connection Rajan Zingales (2003), Mock et al (2005) Argued that access to financial credit in less developed economy, are only benefitting the rich and average income earner class, with high political connection particularly during the early stage of economic development. While financial market development may enhance economic growth, the impact on even distribution of income is yet to be determined (lemoreaux 1994).

Improvement in the accessibility to credit with sustainable economic growth where more people can afford to join the formal financial system of the economy, the relationship between income distribution and financial developments may not be linear, with the effect at the early stage but gradually positive impact after certain stage. Honohan (2004) opined that even at the same average income level, economy with deeper financial system have fewer citizen living in abject poverty level. Anne C Maduka (2013) and Kelvin O Onwuka (2013) in their study, the unit root shows that all the variables except GDP per capital, inflation rate and credit to the private sector are stationary at first different in ADF and PP test. Johansson co integration test shows a long run relationship. The short run dynamic coefficient with Henry’s general to specific approach shows that the log structure was restricted to a maximum of 3 periods. The long run correction term (ECT) shows negative and significant in all the models. It covered 1970 to 2008.Omoniyi, Adeleke & sikiuru (2014) in their topic empirical analysis of the impact of financial market development in Nigeria economy. The result shows that only the regression equation was highlighted no stationary test or causality test (co integration or bond test) to test for the causes and effects of the variables. Only two variables have significant impact on the gross domestic product (market capitalization and stock of turnover ratio).

Akongbowa Amadasun & Okosun () Regulation of the Nigeria financial market emphasis was mainly on liberalization of the sector. The deregulation by the government was just re-regulation not mainly deregulation of the system. The paper reviews the Nigeria economy since 1950s, highlighting the conceptual framework and stating the mode with the requirement for the successful development of the sector. Challenges were also highlighted but there was no methodology or economic analysis to back up the research work. The conclusion was that the Nigeria financial market mirrors a case of both regulation and deregulation within a market driven philosophy.

However, from all indication the governing body in Nigeria economy is running as an enterprise which deviates away from primary objective of government. The interest of the government in all activities of the economy affects proper and faithful deregulation of the financial sector deregulation. Under development of the sector, is really affecting the performance. The little development of the financial capital sector is as a result of the endowed natural factor input and markets in the economy.

3. Theoretical Review

3.1. Duesenbery’s Accelerator Theory

- Investment is higher than savings when income increases.
- When capital stock increases, gross investment start depreciating.
- Growth rate of stock of capital and income are determined by the ratio of capital to income.

\[ Y_t = C_t + I_t \]

\[ I = F(Y_{t-1}, K_{t-1}, \pi_{t-1}, R_t) \]

Investment is a function of previous national income (Y), previous capital stock (K), previous profit (π) and capital accumulation of the current year (R).

\[ \pi = \alpha Y - bK \]

\[ R = K_{t-1} \]
\[ \pi = \alpha Y_{t-1} - b K_{t-1} \]

(π) Profit is positively related to national income and negatively related to stock of capital. The coefficient of national income and capital stock \((\alpha, b)\) are constant

\[ R_t = k K_{t-1} \]

\[ I = \alpha Y_{t-1} + b K_{t-1} \]

Capital consumption allowance \((R_t)\) are fraction of the stock of capital \((k_{t-1})\) of the previous year, \(\alpha\) is the effect of income changes on investment while \(\beta\) is the influence of stock of capital on investment.

The determinant of investment also has effect on consumption

\[ C_t = F(Y_{t-1} - \pi_{t-1} - R_{t-1} + d) \]

\[ \pi = F(Y, K), R = kY, d = F(\pi) \]

d represent dividend payment of the particular year

\[ C_t = \alpha Y_{t-1} + b K_{t-1} \]

The parameter of the national income \((\alpha)\) is the marginal propensity to consume. It also reflects increase in profit. When the profit on dividends is improving, the marginal propensity to consume reduces. Parameter \((b)\) influences the change in capital stock. It is as a result influence of capital stock on the profit through the influence of profit on dividend.

The equation of capital stock equation

\[ K_t = (1 - k)K_{t-1} + I_t \]

\[ K_t = K_{t-1} + (I_t - R_t) \]

\[ R_t = k K_{t-1} \]

\[ K_t = K_{t-1} + I_t - kK_{t-1} \]

\[ K_t = (1 - k)K_{t-1} + I_t = [(1 - k)K_{t-1} + Y_{t-1} + K_{t-1}] = K_{t-1}[(1 - k) + \beta] + Y_{t-1} \]

\[ K_{t-1} = K_{t-2}[(1 - k) + \beta] + Y_{t-2} \]

\[ Y_t = I_t + C_t = \alpha Y_{t-1} + \beta K_{t-1} + \alpha Y_{t-1} b K_{t-1} = (\alpha + \alpha)Y_{t-1} + (\beta + b)K_{t-1} \]

\[ Y_t = (\alpha + \alpha)Y_{t-1} + (\beta + b)K_{t-1} + [(1 - k) + \beta]K_{t-2} \]

\[ Y_t = (\alpha + \alpha)Y_{t-1} + (\beta + b)[\alpha Y_{t-2} + (1 - k) + \beta]K_{t-2} \]

\[ 0r (\beta + b)K_{t-2} = Y_{t-1} - (\alpha + \alpha)Y_{t-2} \]

Substitute the value of \(K_{t-2}\)

\[ Y_t = (\alpha + \alpha)Y_{t-1} + (\alpha + \beta + b)Y_{t-2} + [(1 - k) + \beta](Y_{t-1} - (\alpha + \alpha)Y_{t-2}) \]

\[ Y_t[(\alpha + \alpha) + (1 - k + \beta)Y_t] + \alpha(\beta + b) - (\alpha + \alpha)(1 - k + \beta)Y_{t-2} \]

\[ I_t = \alpha Y_{t-1} - b K_{t-1} \]

Investment is regarded as net investment \(K = 0\). Where the coefficient or parameter of \(\beta = -1\). The influence of changes in capital stock on consumption is neglected and Depreciation is not considered, so that \(b = 0\). Therefore

\[ Y_t = (\alpha + \alpha)Y_{t-1} - (\alpha + \alpha)Y_{t-2} \]

Since the determinant of investment determined the consumption pattern. Equation 8 can be informed of CPM highlighting the determinant of capital market development

\[ CPM = F(FL, TO, FDI, INFLR, INTR) \]

\[ CPM = \beta_0 + \beta_1 F_L + \beta_2 TO + \beta_3 FDI + \beta_4 INFLR + \beta_5 INTR + \mu_t \]

Marginal propensity to consume in the equation is said to be lower to marginal propensity to consume of the disposable income because it influences changes in income on profit and business saving at the same time. More so, negative effect on increase in the financial capital stock with constant income is said to be lower to the simple multiplier accelerator model.
The coefficient of the national income (α) is the marginal propensity to consume. It also reflects increase in profit. When the profit on dividends is improving, the marginal propensity to consume reduces which invariable increases savings that can be channeled to production process. This shows the negative relationship between marginal propensity to consume and dividend on stocks. Coefficient (b) influences the change in capital stock. It is as a result influence of capital stock on the profit through the influence of profit on dividend, the improvement of the capital stock has a greater multiplier effect on investment.

Deregulating the financial sector for market mechanism to determine the prices of goods and services enhanced the growth of the financial capital market in the economy. A well-functioning financial sector of the economy paved way to the growth of the capital and money market which has a long-term effect on investment. The multiplier effect on investment increases the national output a persistence growth that in the long run put the nation among the developed economy.

3.2. Conceptual Framework

![Figure 1: Financial Market](image)

The surplus spending unit invests their cash or tradable items in the financial market either in short term or long term. The financial institution rewards the surplus unit for their investment or saving inform of interest or dividend. The deficit spending unit comes to the financial institution to borrow funds invested by the surplus unit, for business financing and pay interest in return for the cost of borrowing. The financial institution makes profit for charges called the transaction fees. Some of the financial institution charges both parties (surplus spending unit and deficit spending unit) for services rendered. The organized financial institution acts as intermediary body in the financial market by facilitating trading.

3.3. Performance of the Financial Capital Market

NIGERIA CAPITAL MARKET: Performance of the capital market in Nigeria can be observe though the following indices.

- Listed companies in the economy
- Listed securities in the country
- Market capitalization
- All share price index

In the 80s, transaction in the market was very slow due to the information barrier. With improved information system in delivering corporate financial information and computerization of the trading system, efficiency and effectiveness is now what the market is known for. Dealings in the market recorded tremendous increases in the number of securities listed. The efficient performance of listed companies, listed securities, market capitalization and price index were as a result of the second-tier securities market in 1985 and the liberalization of the interest rate in 1987. More so, the privatization of 18 government companies contributed to the number of listed companies and also increased the number of securities listed. Interest rate liberalization encouraged investors to source for capital in the market due to high source of capital in the money market (from the banks).

Listed companies witness 95% increased between early 1988 and 1999. From 100 companies to 195 companies. The multiplier effect of the securities traded was 13% till 1986 then declined to 9.8% by the end of 1999. Majority of the security traded then in the market were corporate debentures, equities and government stocks. By the end of 1999 financial year review the numbers of securities traded and listed in the flow were government bond 15, equities 195 and corporate debentures 58. 33 companies were listed from year 2000 to 2009, while 18 companies were listed from year 2010 to 2019.

Market capitalization has been increasing from the onset. From 1994 to 1995 it increases from 2.977b to 7.777b an increase of 161%. It was 7.6% of GDP in 1987 to 8.7% of the GDP in 1999. By 2004 it increases to 15.87b an increase of 568%. 2005 it was 22.24b, 2006 32.83b, 2007 158.57b experienced an increase of 84.89% market capitalization of the GDP from 2008 to 2019 is as follow; 2008 – 14.6%, 2009 – 10.8%, 2010 – 13.7%, 2011 – 9.4%, 2012 – 12.2%, 2013 – 0.1%, 2014 – 11%, 2015 – 6.3%, 2016 – 7.3%, 2017 – 9.9%, 2018 – 7.9%, 2019 – 9.8%.
The improvement of the market capitalization was as a result of additional offer of shares in the primary market, increase in the value of the company market price, conversion of debt to equity and new company listed. The dropped in some years, were as a result of declined in the value of companies’ market price and delisting of some companies.

4. Variables and Measurement

The variables for the research to be done with the measurement Financial liberalization where government involvement will be reduced. A situation where market forces of Adam smith determined the prices of goods and services. Asia deregulation have been seen to play a significant role in the financial sector of the economy.

Trade openness will be measured by adding export with import and dividing the result by the GDP. The figure shows the level of openness of the economy for the countries under review. Inflation rate. The real inflation rate of the economy will be used to Interest rate spread; it is the interest rate charged by the bank on loan to private sector customers minus the interest rate paid by the commercial or similar banks for demand time or saving deposit. The term and condition attached to the rate differ from country to country.

The model to be used in analyzing the relationship between the dependent variables and the independent variables is below. The model shows the CPM as the dependent variables while foreign direct investment, financial liberalization and others are independent variables.

\[ CPM = F(FL, TO, FDI, INFLR, INTR) \] ............................................8

\[ CPM = \beta_0 + \beta_1FL + \beta_2TO + \beta_3FDI + \beta_4INFLR + \beta_5INTR + \mu \] ............................................9

| VARIABLES   | ADF@LEVEL | ADF@1ST DIFF | ADF@2ND DIFF | O O I |
|-------------|-----------|--------------|--------------|------|
| LOGCPM      | -1.880132 | -4.705627*** | --------------| I[1] |
| INFR        | -2.026115 | -4.360499*** | --------------| I[1] |
| INTR        | -3.648729** | --------------| I[0] |
| LOGFDI      | -1.308081 | -2.267260    | -9.101181*** | I[2] |
| OPEN        | -1.536779 | -7.46230***  | --------------| I[1] |
| FINLIB      | -2.361643 | -7.219158*** | --------------| I[1] |

Table: 1 Presentation and Discussion of Empirical Result

Augmented Dickey Fuller Unit Root Test (Test for Stationary of the Variables)

Source: Author’s Computation E.View 10

It shows the result of the stationary test using the Augmented Dickey fuller test at level 1[0], 1st different 1[1] and 2nd different 1[2]. The study applies constant, intercept and trend terms. The optimal lag length of each variable is chosen, using the Schwarz information criteria (SIC).

From the table INTR of the economy is the only variable stationary at level. After taking the first different, LOGCPM, INFR, OPEN and FINLIB became stationary, and after taking the 2nd different LOGFDI became stationary. The result shows by ADF calculated statistic for the variables in absolute terms is greater than the ADF critical value at either 1% or 5% level of significant (or both) as denoted by **** and ** respectively. This implies that the variables in the model are integrated at order 0, 1 or 2 as denoted by I[0], I[1] and I[2]. From the obtained result the study further carries out the co integration test using the ADL bond test.

| Pairwise Granger Causality Tests |
|----------------------------------|
| Date: 02/09/21 Time: 19:49       |
| Sample: 1990 2019                |
| Lags: 2                          |

| Null Hypothesis:               | Obs | F-Statistic | Prob.  |
|--------------------------------|-----|-------------|--------|
| LOGFDI does not Granger Cause LOGCPM | 28  | 1.96834 | 0.1625 |
| LOGCPM does not Granger Cause LOGFDI  |     | 1.75738 | 0.1949 |
| FINLIB does not Granger Cause LOGCPM  | 28  | 0.23912 | 0.7893 |
| LOGCPM does not Granger Cause FINLIB  |     | 1.97689 | 0.1613 |
| OPEN does not Granger Cause LOGCPM   | 28  | 2.21298 | 0.1321 |
| LOGCPM does not Granger Cause OPEN    |     | 1.85392 | 0.1821 |
| INFR does not Granger Cause LOGCPM    | 28  | 1.13575 | 0.3385 |
| LOGCPM does not Granger Cause INFR    |     | 3.47086 | 0.0482 |
| INTR does not Granger Cause LOGCPM    | 28  | 0.38460 | 0.6850 |
| LOGCPM does not Granger Cause INTR    |     | 4.58331 | 0.0211 |
Pairwise Granger Causality Tests  
Date: 02/09/21  Time: 19:49  
Sample: 1990 2019  
Lags: 2

| FINLIB does not Granger Cause LOGFDI   | 28 | 15.7326 | 5.E-05 |
|----------------------------------------|----|---------|--------|
| LOGFDI does not Granger Cause LOGFDI   | 28 | 0.76782 | 0.4756 |
| OPEN does not Granger Cause LOGFDI     | 28 | 0.40269 | 0.6731 |
| LOGFDI does not Granger Cause OPEN     | 28 | 3.49961 | 0.0471 |
| INFR does not Granger Cause LOGFDI     | 28 | 4.53780 | 0.0218 |
| LOGFDI does not Granger Cause INFR     | 28 | 3.07213 | 0.0657 |
| INTR does not Granger Cause LOGFDI     | 28 | 0.29091 | 0.7503 |
| LOGFDI does not Granger Cause INTR     | 28 | 0.06320 | 0.9389 |
| OPEN does not Granger Cause FINLIB     | 28 | 0.98420 | 0.3889 |
| FINLIB does not Granger Cause OPEN     | 28 | 9.85010 | 0.3886 |
| INFR does not Granger Cause FINLIB     | 28 | 5.00188 | 0.0157 |
| FINLIB does not Granger Cause INFR     | 28 | 29.9215 | 4.E-07 |
| INTR does not Granger Cause FINLIB     | 28 | 0.52910 | 0.5961 |
| FINLIB does not Granger Cause INTR     | 28 | 0.51798 | 0.6025 |
| INFR does not Granger Cause OPEN       | 28 | 0.56793 | 0.5744 |
| OPEN does not Granger Cause INFR       | 28 | 2.55323 | 0.0997 |
| INTR does not Granger Cause OPEN       | 28 | 0.05513 | 0.9465 |
| OPEN does not Granger Cause INTR       | 28 | 1.83397 | 0.1824 |
| INTR does not Granger Cause INFR       | 28 | 0.53709 | 0.5916 |
| INFR does not Granger Cause INTR       | 28 | 0.39562 | 0.6778 |

Table 2: GRANGER CAUSALITY TEST  
Source: Author's computation e.view 10

Capital market development does not granger cause FDI, FINLIB and OPEN. Its granger cause inflation and interest rate at 5% but inflation and interest rate did not granger cause capital market development indicating a unit causality relationship. FDI granger cause openness of the economy but openness did not granger cause FDI. There is bi-directional causality between inflation rate and foreign direct investment. Inflation rate granger cause financial liberalization at 5% but financial liberalization does not granger cause inflation rate of the economy.

ARDL Long Run Form and Bounds Test  
Dependent Variable: D(LOGCPM)  
Selected Model: ARDL(1, 1)  
Case 2: Restricted Constant and No Trend  
Date: 02/09/21  Time: 20:07  
Sample: 1990 2019

| Test Statistic | Value | Signif. | I(0) | I(1) |
|----------------|-------|---------|------|------|
| F-statistic    | 3.289784 | 10% | 3.02 | 3.51 |
| K              | 1     | 5%       | 3.62 | 4.16 |
|                |       | 2.5%     | 4.18 | 4.79 |
|                |       | 1%       | 4.94 | 5.58 |
| Actual Sample Size | 29 | Finite Sample: n=35 |          |
|                |       | 10%     | 3.223 | 3.757 |
|                |       | 5%     | 3.957 | 4.53 |
|                |       | 1%     | 5.763 | 6.48 |
|                |       | Finite Sample: n=30 |          |
|                |       | 10%     | 3.303 | 3.797 |
|                |       | 5%     | 4.09 | 4.663 |
|                |       | 1%     | 6.027 | 6.76 |

Table 3  
Source: Author's Computation E.View 10

Table 2: bound test result shows that the null hypothesis of no co integration is accepted as the value of F-statistic is only greater than the lower bound of the 10%. The F-statistic is in between the lower bound and upper bound of the 10%critical value. From the given result the long analysis of the model under review is inconclusive. However, since the variables in the model, are all integrated at I[0], I[1] and I[2] then the autoregressive distributed lag is presented in table 3, for the short run relationship of the variables under review.
Dependent Variable: LOGCPM
Method: ARDL
Date: 02/09/21 Time: 20:02
Sample (adjusted): 1991 2019
Included observations: 29 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (1 lag, automatic): LOGFDI
Fixed regressors: INFR INTR FINLIB OPEN C
Number of models evaluated: 2
Selected Model: ARDL(1, 1)

| Variable       | Coefficient | Std. Error | t-Statistic | Prob.* |
|----------------|-------------|------------|-------------|--------|
| LOGCPM(-1)     | 0.704296    | 0.130176   | 5.410329    | 0.0000 |
| LOGFDI         | -0.232772   | 0.273719   | -0.850406   | 0.4047 |
| LOGFDI(-1)     | 0.698959    | 0.279687   | 2.499078    | 0.0208 |
| INFR           | -0.002858   | 0.012240   | -0.233483   | 0.8176 |
| INTR           | -0.003886   | 0.078370   | -0.049584   | 0.9609 |
| FINLIB         | -0.062921   | 0.038684   | -1.626534   | 0.1187 |
| OPEN           | -0.042528   | 0.018618   | -2.284218   | 0.0329 |
| C              | -1.788241   | 3.291032   | -0.543368   | 0.5926 |
| R-squared      | 0.928476    |            |             | 20.59636 |
| Adjusted R-squared | 0.904635 |            |             | 1.960600 |
| S.E. of regression | 0.605458 |            |             | 2.063289 |
| Sum squared resid | 7.698177 |            |             | 2.440474 |
| Log likelihood | -21.91769   |            |             | 2.181419 |
| F-statistic    | 38.94396    |            |             | 1.974923 |
| Prob(F-statistic) | 0.000000 |            |             |        |

Table 4 showing the result of the ARDL

The dynamic ARDL model result of capital market development in less developed Nigeria economy is presented in Table 4. It is the short run growth model and it takes into consideration instability of the variables and the adjustment process to long run equilibrium since they are linearly integrated. The result shows that the capital market of the economy has been growing but not up to the potentials given the endowed natural factor input available in the economy. The lag of the capital market development is positively related to the present development. For every 100% increase in the present capital market development previous development account for 70.43%. It is statistically significant at 1%. The current foreign direct investment is not having positive impact on the development but the previous FDI is positively related to the capital market development with 5% significant level. The result shows foreign portfolio has really been declining in Nigeria economy. interest rate, inflation rate, financial liberalization and openness of the economy are all having negative impact on the capital market development. Only the openness is statistically significant at 5%. The negative impact of the financial liberalization shows that the government involvement in the economy is still not economical. Also, the negative relationship of the interest rate and capital market development shows that deregulation impact is yet to be felt on financial capital market of the economy

In statistical term, the R. square and adjusted R. square shows that 92.8% variation in growth of the capital market is explained by all the included explanatory variables and that if the other variables influencing growth of the capital market are put into consideration or factor into the model, the included variation coupled in the model will explain 90.5%, of the financial capital market in Nigeria economy. The probability of the F-statistic shows robustness of the model at 1% level of significant. The Durbin Watson statistic of 1.97 shows that the short run model as estimated is not spurious and it is reliable. The values of the Durbin Watson statistic also show that there is no auto-correlation or serial correlation in the model.

Table 4;
The figure of the cusum test shows that the plotting of the cusum test for the model under review which is the blue line, are within the 5% critical bound as indicated by the two red lines that bounded the trend curve. The implication of the cusum plot test for the model is that the parameters of the model do not suffer from any structural instability over the period of review.

5. Conclusion and Recommendation

5.1. Conclusion

The governing body in the Nigeria economy are still operating as an enterprise, which is really affecting major sector of the economy. Inability of the government to focus on the primary objective and allowing the invisible hand of Adam smith (leiszez –faire) to determine the market prices and allocation in the financial sector is still hindering the development of the major sector in the economy. As a result of the government action, the total impact of the financial deregulation is yet to be felt in the financial capital market of the economy. More-so the wide gap in the interest rate spread of the economy is really drawing back investment. Rational investors are really scared of taking the risk of high charges in an uncertain economy situation where the unexpected is very high. This is the major reason of high saving gap and foreign exchange gap in the less developed Nigeria economy.

5.2. Recommendation

For efficient financial deregulation where financial capital sector of the economy can be fully effective, a situation where foreign portfolio can contribute largely to growth of the sector.

- The government should focus on the primary objective of his responsibility. Such as protecting the interest of the citizen.
- Invisible hand of Adam smith should be allowed to determine the market prices and efficient allocation of economic resources.
- Basic infrastructural facilities need to be improved to enhance the production and distribution of goods and services.
- Security of life and property needs to be collectively pursued.
- Industrialization should be encouraged with a type of tax holiday to encourage investors.
- Tariff cut on certain importation such as machineries and other capital goods.

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