




“Analysis of foreign capital inflows and stock market performance in Nigeria”

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ANALYSIS OF FOREIGN CAPITAL INFLOWS AND STOCK MARKET PERFORMANCE IN NIGERIA

Abstract

Most studies concentrate on the impact of only one constituent of the foreign capital influx on the stock market and economic performance, but only few studies simultaneously considered the unique impact of the duo of foreign portfolio investment (FPI) and foreign direct investment (FDI), and many of these studies were not undertaken in Nigeria. This study, therefore, assesses how foreign capital inflows (FPI and FDI) affect the stock market development in Nigeria. The foundations for the empirical study were built upon the dividend discount model, which formed the basis for the analytical framework. Going forward, the ARDL co-integration procedure was adopted to examine the long-run relationship between foreign capital and stock market performance. The results from the ARDL Bounds test suggest no evidence of a long-run equilibrium relationship between foreign capital inflows (FDI & FPI) and the stock market performance. Also, the short-run analysis indicates an insignificant relationship between FDI and stock market performance, whereas, a reversed relationship was obtained for FPI, as it exerts a positive and significant impact on stock market performance. The study recommends strengthening the institutional framework for the enlistment of multinational companies in the Nigerian stock market.

Keywords

FPI, FDI, stock market, ARDL, time series

JEL Classification

G24, F21, C32, C22

INTRODUCTION

The significance of stock markets is evident in their cogent contributions towards national and even global economic growth. It has consistently created a platform through which savings can be transformed from the haves to the have-nots, providing easy cash flow, diversifying risks, ensuring a perfect flow of information in the financial market, and providing increased encouragement for the company management (Jecheche, 2011). The performance of the stock market facilitates growth and general improvement of the economy. Towards this, many developing economies geared up the financial liberalization schemes towards the close of the 1900s (Baleseng et al., 2016). However, the ineffectiveness of these programs in accomplishing the objectives has led to the rise of some policy questions bordering on how developing countries can strengthen their stock markets and make them more reputable on a global scale.

The performance of the stock market is considered important in attracting investment which is required to bridge the financing gap in most developing economies (Adam & Tweneboah, 2008; Baleseng et al., 2016). According to Chenery and Stout (1966), foreign investment such as foreign direct investment and foreign portfolio investment is necessary for developing nations with the goal of closing the internal investment-saving gap. Foreign direct investment has been referred

to as a capital investment, which indicates a long-term commitment to actively controlling a domestic company, by the parent company or a foreign individual. Contrarily, foreign portfolio investment is a foreign country investment that does not grant the investing entity control over it. It is these two – direct and portfolio foreign investment – that are referred to by the term “foreign capital inflows” (FCI) for the entire duration of this study (Eniekezimene, 2013; UNCTAD, 2007).

Since the establishment of the Nigerian Stock Exchange (NSE), it has experienced a series of ups and downs, which have warranted scholarly investigation in considering the pivotal place of the stock market in financial intermediation and ultimately growth and general improvement of the economy. Despite being the African region’s largest economy, Nigeria is significantly behind such economies as Morocco, South Africa, and Egypt in terms of stock market stability and efficiency.

The meltdown witnessed in the NSE in 2009 led to a colossal loss in the economy due to the repatriation of funds by foreigners from the Nigerian equity market; this action led to the huge infrastructure gap in the economy and resultant high production costs, regulatory inconsistencies, amongst others (Olisaemeka, 2009). The FCI to the Nigerian equity market experienced a cyclical trend over the years. In 2008, there was a slight increment in FDI in the equity market of 8% above the previous year. In 2009 and 2010, however, there was a deterioration in the influx of FDI to the equity market by an annual average of 54%. This decrease was driven majorly by the influence of the financial crisis across the world in 2008/2009 as well as pre-election jitters regarding the 2011 general elections. The deterioration was followed by full recovery of 107% in 2011. The next major deterioration occurred in 2015, 2016, and 2017 with an annual average decline of 23%. The decline was driven by a mixture of foreign exchange unavailability as a result of CBN’s devaluation of the Naira, the decline in crude oil receipts, and the resultant economic recession (Ogundipe et al., 2019). 2018 sees a moderate improvement in FDI in the equity market by 16%, following increased foreign exchange availability as a result of the CBN’s impressive stride of introducing the Investors and Exporters (I&E) foreign exchange window as well as improvements in crude oil receipts (Adeleye et al., 2019).

The FPI inflows in the Nigerian equity space experienced a similar trend in recent years. The global financial crisis’ impact was felt earlier in the FPI with an annual decline of 22%. This was followed by a full recovery of 107% in 2010, which was sustained at an annual mean of 93% in the subsequent years. Similar to the case of FDI, an annual average decline of 55% in 2015 due to the earlier mentioned stimuli was observed. This was followed by a staggering recovery of 323% in 2017 on the back of increased foreign availability. Finally, FPI to the equity market appeared more responsive to pre-election uncertainty as well as the benchmark rate in some advanced countries in the course of the year. This resulted in a 38% decline in the portfolio foreign investment equity inflows in 2018 (Ogundipe et al., 2019).

In many developing economies, a large percentage of the swings in the stock market is determined by the actions of the foreign investors because they constitute major actors in buying and selling of equities in emerging and frontier markets (Adam & Tweneboah, 2008). This background submits the rationale for the current discussion in assessing the role FCI plays in the performance of the Nigerian exchange market. This present re-examination considers uniquely the dynamism induced by the duo of foreign direct investment and foreign portfolio investment in the characterization of the cycles of booms and busts experienced in the market in the last decades.

The available extant studies in Nigeria that assess the effect of foreign capital influxes on the Nigerian stock market performance used a component of foreign capital inflow. Adaramola and Obisesan (2015) used total foreign direct investment. Musa and Ibrahim (2014) used net direct foreign investment as a percentage of GDP. Eniekezimene (2013) and Nzenwata (2013) made use of total FPI inflows. However, the Nigerian financial market is diverse and therefore comprises different financial assets that are available for purchase by both nationals and foreigners. It is also important to note that the influx of foreign

funds for the purchase of some of these assets will not directly affect the stock market because they are not transacted on the Nigerian Stock Exchange. Hence, the use of gross investments in accessing stock market performance will not yield a clear finding since stock market performance has not been extensively defined. In order to address this gap, this present re-examination assesses the unique effect of direct foreign investment and foreign portfolio inflows to the equity market on the performance of the stock market in Nigeria.

1. LITERATURE REVIEW

The discussion on the performance of the equity market as linked with foreign investment is a very diverse and multi-faceted one. As a result, it has been approached from different angles by various researchers across the globe with some focusing on just a branch of foreign investment and others broadening their inquiry into how this relationship will affect economic growth and development. Researchers have studied this relationship with time series, cross-sectional, and panel data making use of a wide range of econometric techniques. Given the complex and expansive nature of this relationship, a consensus is yet to be attained – scholars have been unable to agree on the significance, or lack thereof, of foreign investment in engendering the performance of the equity market. This section outlines the various techniques used in earlier studies to analyze this relationship, as well as the results of their investigations.

There are vast pieces of evidence from non-African developing economies. Abdelbaki (2013) employs the Autoregressive Distributed Lag (ARDL) model to assess the impact of macroeconomic indicators on equity market development in Bahrain between 1998 and 2009. To represent private capital flows in his study, he makes use of FDI and discovers that FDI was statistically insignificant in determining the country's equity market performance. In tandem with the work of Abdelbaki (2013), Thanh et al. (2017) examined equity market development in 36 developing countries using two-way Generalized Method of Moments and discovered that, among other macroeconomic factors, FDI and domestic investment are statistically significant but have negative implications on the development of the equity market. In explaining the results, they pointed out that the negative response of the equity market could be due to the poor institutional framework in the countries under review. Chauhan (2013) investigates the

role played by foreign direct investment, foreign portfolio investment, and foreign institutional investment (FII) in the National Stock Exchange and Bombay Stock Exchange in India. From their results, it was concluded that FDI had a more significant effect than FPI and FII on both exchanges. They, therefore, suggested that the Indian government should direct more focus on attracting FDI inflows.

Njane (2017) examined the effect of FDI on market development in Kenya for the period 1987–2016 using a multiple regression model and discovered that the development of the equity market is not significantly affected by FDI. Aquah-Sam (2016) made efforts to analyze the macroeconomic determinants of capital market development in Ghana from 1991 to 2011. The study concluded that FDI and inflation have no significant effect on market capitalization. However, GDP growth and gross capital formation affect market capitalization negatively. In addition, Adam and Tweneboah (2008) explore the effect of FDI on Ghana's stock market growth. The study used the Johansen cointegration test to analyze time series data from 1991 to 2006. They found, from their estimation, a long-term positive relationship between FDI and the growth of the stock market (market capitalization).

Tsaurai (2014) examines the connection between FDI and stock market development in Zimbabwe between 1988 and 2011 using the ARDL Bounds test. The study discovered the existence of a long-run relationship between FDI and stock market development. Another key goal of the study was to understand the direction of causality that exists between the two variables. Using the Granger causality test, it was discovered that no direct relationship exists between FDI and stock market development and vice versa. This, therefore, implies that the long-run relationship that exists between the two variables is facilitated by some mediating factors. Baleseng et al. (2016) empirically analyze

influential factors for stock market development in Botswana between 2005 and 2012 using the Johansen cointegration test. The study substantiates that, of all the variables used, money supply and interest rate have a significant and positive effect on stock market development in the long run.

Similarly, the literature shows a vast number of studies conducted in Nigeria, among which are Abubakar and Danladi (2018), who assessed one component of foreign investment, investigating the impact of FDI on the development of the Nigerian equity market from 1981 to 2016. The ARDL Bounds cointegration was employed with market capitalization serving as a proxy for equity market development and foreign direct investment, inflation, exchange rate, and gross domestic savings as explanatory variables. The study reveals that foreign direct investment yields a positive but insignificant effect on equity market development and proposes the need for government to solicit foreign investment into non-oil sectors. Using the OLS technique, Adaramola and Obisesan (2015) found that foreign direct investment impacts market capitalization in a significant and positive manner. The recommendation was for the government and monetary authorities to enact policies and activities fostering foreign direct investment in Nigeria. Eniekezimene (2013) investigated the influence of foreign portfolio investment on capital market (represented by market capitalization) from 1980 to 2011. The OLS approach was used and the study found that FPI has an impact on the development of capital markets that was statistically positive. To take advantage of this positive effect, efforts are recommended to be made to strengthen the legal framework of the capital market as well as to encourage privatization within the country.

In a similar study, Nzenwata (2017) explored the impact of FPI on the performance of the Nigerian stock exchange market from 1986 to 2015. The study found that FPI was positive and statistically significant in ensuring improved stock market performance, especially through improved market liquidity. Musa and Ibrahim (2014) use the Johansen technique of cointegration and error correction to analyze the consequence of external direct investment on the stock market. Also taking note of the role that macroeconomic stability plays in the model, the study focuses on the Nigerian

economy from 1981 to 2010 and finds that foreign direct investment has a positive but insignificant impact on the stock market. The study based its findings on the fact that huge numbers of companies that have been established in Nigeria by way of FDI are telecommunications and oil companies, none of which is listed on the Nigerian bourse. Based on these results, it was suggested that policies should be implemented to encourage companies in the oil and telecommunications sectors to become traded on the Nigerian Stock Exchange.

In this vein, studies have been executed to establish the effect of stock market development on foreign direct investment in Nigeria. Ifeakachukwu (2015) employs the Johansen cointegration test and concludes that stock market development represented by market capitalization, value traded ratio, and turnover ratio, has an insignificant effect on foreign direct investment in Nigeria. In addition, Ezeoha et al. (2009) explained the link between stock market development and the degree of investment flow between 1970 and 2006. The investment inflow was measured by the investment to GDP ratio, while stock market growth was captured using the market capitalization to GDP ratio. Using the Johansen cointegration test, Ezeoha et al. (2009) found that when foreign investment was taken as the endogenous variable, there exists a significant positive relationship between equity market development and foreign investment inflow. However, when the exogenous and endogenous variables were switched, the estimation outputs show the presence of a negative and insignificant relationship between the two variables. Yaqub et al. (2013) extended the scope of inquiry, examined the effect of FDI on economic growth using the vector autoregressive model, and found that FDI exerts an insignificant effect on economic growth in the review period.

A similar study by Okafor et al. (2016) sought to explicitly ascertain the direction of causal relationship using the Toda Yamamoto causality test. They discovered that bidirectional causality exists between FDI and GDP while for the other independent variables a unidirectional causality exists spanning from the explanatory variables to the explained variables. However, there is a joint unidirectional causality from FDI, FPI, and FA to GDP. The study concludes that foreign capital inflow results in GDP growth.

Adeniyi et al. (2015) sought not only to assess the consequence of FDI on economic improvement but also to determine the channel through which it affects it. They studied this for 11 sub-Saharan African nations between 1995 and 2005. The pooled OLS and fixed effect tests were used and discovered that FDI was statistically insignificant in determining economic growth. In addition, it was recommended that for any country in the region to attract substantial growth returns from FDI, it is imperative for the nation to develop its financial sector. In order to comprehend the driving forces behind stock market development, Eriemo (2014) intends to establish the empirical determining factors of market capitalization. The study regressed market capitalization on liquidity ratio, value of equity, value traded, and return on investment and found that value traded and rate of returns on securities alone had a significant consequence on stock market capitalization.

2. METHODS

2.1. Model specification

The study assesses the impact of foreign capital inflows on stock market performance in the long run. Specifically, it tests the hypotheses that foreign direct investment and foreign portfolio investment have a significant positive effect on stock market performance.

The empirical model follows the specification of Abdelbaki (2013) and Shahbaz et al. (2013), who explained the relationship between risk factors such as interest rate, investment, and stock market performance. The model is augmented to account for key considerations of the unique characteristics of the Nigerian economy. The empirical model is specified as follows:

$$ASI = f(FDI, FPI, INTR, OREC), \quad (1)$$

where ASI is the all-share index; FDI is the foreign direct investment inflow to the equity market; FPI is the foreign portfolio investment inflow to the equity market; $INTR$ is the prime lending interest rate; $OREC$ is crude oil receipts.

Rewriting the model above in explicit form:

$$ASI_t = \beta_0 + \beta_1 FDI_t + \beta_2 FPI_t + \beta_3 INTR_t + \beta_4 OREC_t + \mu, \quad (2)$$

where β_0 is the intercept term; β_{1-4} represent the partial slopes of the dependent variable; and μ represents the stochastic error term.

The *a priori* expectations for the above specified model is as follows:

$$\beta_1 > 0, \beta_2 > 0, \beta_3 < 0, \beta_4 < 0. \quad (3)$$

As shown above, the expectation is that FDI, FPI, and crude oil receipts will have a positive effect on stock market performance while the prime lending rate will have a negative effect on stock market performance.

2.2. Estimation technique

In order to accomplish the objectives of this study, which center around investigating the long-run relationship that exists between foreign capital inflows and stock market performance, the Autoregressive Distributed Lag (ARDL)-Bounds cointegration technique of estimation is used. The times series characteristics of the data being used provide a rationale for the use of the ARDL-Bounds test technique. This is because there is a high probability that the data being used is non-stationary. The term non-stationary implies that the data sets have non-reverting means which implies that the values of the observation in each data set may not tend to their average value over time. Therefore, if the data sets to be used in this study are non-stationary at level, it will be inappropriate to use an estimation technique such as the Ordinary Least Squares (OLS) technique as the test will yield a spurious regression. This is when the coefficient of determination (*r*-squared) of the model is high but the individual independent variables are found to be statistically insignificant. Also, the relevance of the ARDL cointegration technique supercedes other forms of cointegration test when the variables are integrated at combined zero and one order of integration.

To determine the stationarity of data sets and avoid the issue of spurious results, unit root tests such as the Phillips-Perron test and the Augmented

Dickey-Fuller test are used. The lag selection for the ARDL model was based on the Akaike information criterion. The null hypothesis of no cointegration was tested.

The following model is specified to determine the long-run co-integration relationship among the variables. The long-run model is specified as follows:

$$\begin{aligned} \Delta \ln ASI_t = & \beta_0 + \lambda_1 \ln ASI_{t-1} + \lambda_2 \ln FDI_{t-1} + \\ & + \lambda_3 \ln FPI_{t-1} + \lambda_4 \ln INTR_{t-1} + \lambda_5 \ln OREC_{t-1} + \\ & + \beta_1 \sum_{i=1}^p \Delta \ln ASI_{t-i} + \beta_2 \sum_{i=0}^p \Delta \ln FDI_{t-i} + \\ & + \beta_3 \sum_{i=0}^p \Delta \ln FPI_{t-i} + \beta_4 \sum_{i=0}^p \Delta \ln INTR_{t-i} + \\ & + \beta_5 \sum_{i=0}^p \Delta \ln OREC_{t-i} + \mu_t. \end{aligned} \tag{4}$$

From equation 4

P – lag length of the model, Δ – first operator difference, μ – error term of white noise disturbance.

Secondly, if the long-run relationship between the variables to be estimated is fulfilled, this means that the relationship is not spurious, then calculating the long-run relationship coefficients and drawing inferences about their values would be the next procedure in the ARDL technique. The stable long-term model is calculated as stable after verifying the presence of long-run relationships between the variables.

$$\begin{aligned} \Delta \ln ASI_t = & \beta_0 + \beta_1 \sum_{i=1}^p \Delta \ln ASI_{t-i} + \\ & + \beta_2 \sum_{i=0}^p \Delta \ln FDI_{t-i} + \beta_3 \sum_{i=0}^p \Delta \ln FPI_{t-i} + \\ & + \beta_4 \sum_{i=0}^p \Delta \ln INTR_{t-i} + \beta_5 \sum_{i=0}^p \Delta \ln OREC_{t-i} + \mu_t. \end{aligned} \tag{5}$$

Thirdly, to assess the stability of the long-run relationship, the error correction model associated with the long-run estimates can in turn be estimated. The ECM shows the short-run dynamics, that is, the speed of correction to long-run equilibrium after certain short-run disturbances. The ECM is illustrated as follows:

$$\begin{aligned} \Delta \ln ASI_t = & \beta_0 + \beta_1 \sum_{i=1}^p \Delta \ln ASI_{t-i} + \\ & + \beta_2 \sum_{i=0}^p \Delta \ln FDI_{t-i} + \beta_3 \sum_{i=0}^p \Delta \ln FPI_{t-i} + \\ & + \beta_4 \sum_{i=0}^p \Delta \ln INTR_{t-i} + \beta_5 \sum_{i=0}^p \Delta \ln OREC_{t-i} + \\ & + \delta ECM_{t-1} + \mu_t, \end{aligned} \tag{6}$$

where ECM_{t-1} – one lagged period of error correction term, δ – the ECM coefficient.

2.3. Data sources and description

The secondary data used in the analysis were collected from the Statistical Bulletin (2017) of the Central Bank of Nigeria and the Statistics Database of the Central Bank of Nigeria (2019) (see Table 1).

Table 1. Description of variables

Source: Central Bank of Nigeria Statistics Database (2019).

Variable	Label	Definition	Source	Measurement
Nigerian Stock Exchange All Share Index	ASI	Measure of the value of economic output adjusted for price changes (i.e., inflation or deflation)	CBN Statistics Bulletin	Points
Foreign Direct Investment Inflows	FDI	Capital inflows in order to secure a long-term relationship and reflecting a lasting interest and control through the purchase of 10% or more of the company's shares	CBN Statistics Bulletin	US Dollars (US\$)
Foreign Portfolio Investment Inflows	FPI	Inflows of foreign funds to the stock market in order to purchase less than 10% stake in companies	CBN Statistics Bulletin	US Dollars (US\$)
Prime lending rate	INTR	This is the benchmark rate at which commercial banks give out loans. They lend to the general public at a certain percentage above or below this rate	CBN Statistics Bulletin	Percentage (%)
Crude Oil receipts	OREC	This is the revenue received by the country from the exportation of crude oil	CBN Statistics Bulletin	US Dollars (US\$)

3. RESULTS

3.1. Descriptive statistics of variables

The statistics adopted in describing the variables include mean, median, maximum, minimum, standard deviation, skewness, kurtosis, and coefficient of variation.

Table 2 shows the characteristics and features of values of the variables (ASI, FDI, FPI, INTR, and OREC). The mean is a measure of central tendency and represents the average of series. Standard deviation measures deviation from the mean. That is, it measures how much the series deviates from the mean. The likelihood of having a small coefficient of variation is high when the mean is more than the standard deviation. When the mean is less than the standard deviation then there is a possibility of having a large coefficient of variation. The mean of ASI, FDI, FPI, INTR, and OREC are 33028.90 points, US\$169 million, US\$436 million, 16.90910%, and US\$5.35 billion respectively and the standard deviation of ASI, FDI, FPI, INTR, and OREC are 10290.26 points, US\$170 million, US\$468 million, 1.025554% and US\$2.05 billion respectively. Skewness measures the shape of a real variable's probability distribution around its average value. Skewness can be positive, negative, or undefined. Skewness is negative if the left tail is longer or left-skewed while it is positive if the right tail is longer or right-skewed. From Table 2, ASI, FDI, FPI, INTR, and OREC are right-tailed.

Table 2. Summary statistics

Stat. /var.	ASI	FDI	FPI	INTR	OREC
Mean	33028.90	1.69E+08	4.36E+08	16.90910	5.35E+09
Median	30527.24	93549409	2.44E+08	16.80000	5.23E+09
Maximum	65652.38	8.21E+08	2.17E+09	19.66000	9.04E+09
Minimum	19851.89	995422.0	76889.50	14.58000	1.98E+09
Std. Dev.	10290.26	1.70E+08	4.68E+08	1.025554	2.05E+09
Skewness	0.989858	1.384719	1.620604	0.590569	0.064488
Kurtosis	3.451154	4.237452	4.935776	3.616396	1.668231
Jarque-Bera	24.73690	55.20645	85.51599	10.65018	10.74147
Probability	0.000004	0.000000	0.000000	0.004868	0.004651
Sum	4756162.	2.43E+10	6.27E+10	2434.910	7.71E+11
Sum Sq. Dev.	1.51E+10	4.14E+18	3.13E+19	150.4018	5.99E+20
Observations	144	144	144	144	144

Source: Authors' elaboration.

The kurtosis is a description of the shape of a probability distribution. When the value is greater than 3, it indicates that the distributions are peaked (leptokurtic) while those with kurtosis less than 3 are flat (platykurtic). From Table 2, OREC is less than 3, which shows that it is flat while ASI, FDI, FPI, and INTR have kurtosis greater than 3, which means they are peaked. Finally, the significance of the Jarque-Bera statistics shows that the series is not normally distributed.

3.2. Econometric analyses

This begins with tests for the existence of unit roots to ascertain stationarity in each of the variables. The study used the Augmented Dickey-Fuller (ADF) test in conducting the unit root. The test indicates that all variables except FDI were not stationary at level. However, a stationary trend was obtained after first differencing. Subsequently, the study proceeds by estimating the Bounds test and the ARDL long-run estimates.

3.2.1. Unit root test

Ascertaining the existence of the unit root test is pertinent because time-series economic and business data have been found to be non-stationary over time. To proceed with the time series econometrics, it is required that the series are stationary. To do this, the Augmented Dickey-Fuller (ADF) test is carried out. This test's ability to yield good results even when dealing with large sample sizes makes it one of the most preferred (Fuller, 1976).

Table 3. Test for stationarity at the level and after the 1st difference

Source: Authors' elaboration.

Series	Level			1 st Difference			
	ADFstat.	CV@5%	Remark	ADFstat.	CV@5%	Remark	order
ASI	2.8178	3.4422	NS	4.7495	3.4422	S	I(1)
FDI	10.0019	3.4415	S	–	–	S	I(0)
FPI	1.9868	3.4422	NS	11.3298	3.4422	S	I(1)
INTR	2.7753	3.4418	NS	9.8996	3.4418	S	I(1)
OREC	2.2561	3.4418	NS	10.1244	3.4418	S	I(1)

Note: Test Assumption: Test includes an intercept and a trend.

The result from this test shows that some variables are stationary¹ at their levels while some are stationary at their first difference. ASI, FPI, INTR, and OREC are stationary after the first difference while FDI is stationary at the level. The order of integration of the regressors which are of I(0) and I(1) are in line with the autoregressive distributed lag criterion.

3.2.2. Bounds tests

The Akaike Information Criterion (AIC) was used, and for the autoregressive distributed lag model, a maximum lag order of 4 was used. The *F*-statistic from the bound test indicates if in the long term the regressors are jointly significant. The Bounds test places certain limitations on the estimated long-term coefficients of all share indexes, foreign direct investment inflows to equities, foreign portfolio inflows to equities, prime lending interest rate, and crude oil receipts. The results for the Bounds test are summarized in Table 4.

Table 4. Bounds test

Source: Authors' elaboration.

Significance	I(0) Bound	I(1) Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06
<i>F</i> -statistic	1.72	–

Note: Case: Intercept and trend number of regressors (K): 4. Optimal lag length of the model: 4.

The null hypothesis is given as $\beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ (there is no long-run relationship) against an alternate hypothesis of $\beta_1, \beta_2, \beta_3,$ and $\beta_4 \neq 0$ (there is a long-run relationship).

¹ The decision rule for Augmented Dickey-Fuller Test. If the absolute value of the ADF t-statistic is greater than the absolute critical value at 5per cents, the variable being tested is stationary. If the absolute value of the ADF t-statistic is less than the absolute critical value at 5 percent, the variable being investigated is non-stationary.

tionship). In the event that the *F*-statistic is greater than the upper bound, then the null hypothesis is rejected, which suggests the existence of co-integration among the variables in the specified model. This evidence also implies that the variables have short-term and long-term relationships. The relationship becomes inconclusive when the *F*-statistic lies between the lower and the upper bound, and in this case, the result is spurious. Alternatively, when the *F*-statistic is below the lower bound critical values, it implies the non-existence of co-integration.

From Table 4, the *F*-statistic is lower than the lower bound at a five percent significance level, therefore the study failed to reject the null hypothesis – which states that despite the fact that there exists a short-term relationship, and the variables in the model are not related in the long run.

3.2.3. Diagnostic tests

The null hypothesis of the test in Table 5 indicates no heteroskedasticity exists in the residual terms. However, if the value of probability is less than 0.05, the null hypothesis is rejected. From Table 5, since the probability value is greater than 0.05 of significance, the study failed to reject the null hypothesis, therefore the residuals are homoscedastic.

Table 5. Test for heteroskedasticity

Source: Authors' elaboration.

<i>F</i> -statistic	1.627786	Prob. F(11,128)	0.0983
Obs*R-squared	17.1809	Prob. Chi-Square(11)	0.1026
Scaled explained SS	22.83113	Prob. Chi-Square(11)	0.0187

Table 6. Test for autocorrelation

Source: Authors' elaboration.

F-statistic	0.540501	Prob. F(2,126)	0.5838
Obs*R-squared	1.190896	Prob. Chi-Square(2)	0.5513

The null hypothesis of the test in Table 6 is that there is an absence of serial correlation. However, if the value of probability is less than 0.05, the null hypothesis is rejected. From Table 6, since the probability of the test is greater than 0.05, the study failed to reject the null hypothesis, therefore there is an absence of serial correlation in the residual terms.

3.2.4. Estimation of the autoregressive distributed lag estimation

From Table 7, the first and fourth-period lags of all share indexes are statistically significant in influencing the performance of the equity market in the short term; the prime lending interest rate, crude oil receipts and the first period lag of crude oil receipts are also statistically significant in affecting the short-run performance of the equity market.

However, contrary to *a priori* expectations foreign direct investment inflows are statistically insignificant in determining short-term equity market performance in Nigeria. This is in line with the estimation output of Musa and Ibrahim (2014), and Abubakar and Danladi (2018). The model has already been stated in log-linear form, the coefficient of the independent variables will therefore be interpreted as elasticity with respect to ASI.

Table 7. ARDL test estimation

Source: Authors' elaboration.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LASI(-1)	0.8525	0.0828	10.2975	0.0000
LASI(-2)	0.1684	0.1127	1.4945	0.1375
LASI(-3)	0.0964	0.1150	0.8379	0.4036
LASI(-4)	-0.1730	0.0800	-2.1627	0.0324
LFDI	0.0036	0.0054	0.6656	0.5069
LFPI	0.0115	0.0050	2.2997	0.0231
INTR	-0.0362	0.0166	-2.1779	0.0312
INTR(-1)	0.0165	0.0238	0.6934	0.4893
INTR(-2)	0.0265	0.0166	1.5999	0.1121
LOREC	0.1880	0.0575	3.2694	0.0014
LOREC(-1)	-0.2035	0.0578	-3.5230	0.0006
C	0.5158	0.5217	0.9886	0.3247

Note: R-squared = 0.9493, F-statistic = 217.9608 (0.0000), Adjusted R-squared = 0.9450, S.E. of regression = 0.0685, S.D. dependent var = 0.2919, Durbin-Watson stat = 1.9276.

In congruence with the earlier stated *a priori* expectations, FPI inflows to the equity market, and crude oil receipts have a positive relationship with the ASI, while a negative relationship is found between the prime lending interest rate and the ASI. The negative interest rate effect is also in accordance with the dividend discount model. In this way, an increase in FPI inflows in the equity market by 1% will trigger a 0.01% increase in the ASI in the short term. In addition, an increase in the prime lending interest rate by 1% will cause a 0.04% decrease in the ASI in the short run.

An increase in crude oil receipts by 1% will end up in a 0.19% increase in the ASI. In the same manner, an increase in the ASI in the preceding period by 1% will stimulate a 0.85% increase in the present ASI. Also, a 1% increase in the ASI 4 periods prior causes a 0.17% decline in the ASI.

Following the Bounds test, it was discovered that the F-statistic of the test is indeed less than the lower bound at the 5% level of significance; hence, the null hypotheses could not be rejected. This implies that the key explanatory variables – FDI and FPI – exhibit no significant effect on equity market performance in the long run.

However, testing for a short-term relationship between the variables, there is an emphasis on the probability values of the two variables in the ARDL estimation output. In the event that the probability value is greater than 0.05, it implies no significant relationship in the long run. For FDI, a probability value of 0.5069 is observed; therefore, implying that there is no significant relationship between FDI and stock market performance in the short run. For FPI, the probability value is 0.0231, which suggests a significant relationship between FPI and stock market performance in the short term.

4. DISCUSSION AND IMPLICATIONS OF FINDINGS

This analysis was adopted with the view to ascertain if a long-term relationship exists between FDI, FPI, and stock market performance. The study employs the ARDL Bounds cointegration approach,

which shows a non-existent long-run equilibrium relationship among the variables. This finding also presents a negation of the relationship in Ghana as investigated by Adam and Tweneboah (2008). This result in the Nigerian clime could be a result of the relatively weak institutional framework in Nigeria. It implies that even though these variables have a short-term influence on stock market performance, it does not translate to equity market performance in the long term.

Another interesting finding in this study is that in the short run, FDI inflows fail to exert a significant impact on the performance of the stock market in Nigeria. However, it is in line with the contributions of Musa and Ibrahim (2014), and Abubakar and Danladi (2018). A possible reason for the insignificance of FDI is the fact that the Nigerian business climate is not as conducive for multinational companies as those of its frontier peers. In addition, many of the large multinational companies that have been set up in the Nigerian economy are still yet to get listed on the Nigerian bourse. These companies consist of telecommunications companies and some oil companies. Therefore, the considerable revenue growth these companies have been experiencing over time in the real economy has not translated into stock market development.

Additionally, the behavior of the stock market in the immediate past period has been found to possess a significant direct impact on stock market performance in the present period. Therefore, there is a lagged influence on stock market performance.

On the other hand, foreign direct and portfolio investments inflows into the Nigerian equity market were found to have a significant positive impact on equity market performance in the short term. It can therefore be inferred that in the period 2008 to 2016 where a decline in stock market performance was observed, the decline in foreign portfolio inflows played a significant role. This implies the need to gear efforts towards ensuring a conducive environment for foreign portfolio investors to ensure significant improvements in stock market performance.

Furthermore, the discovery of a significant positive influence of crude oil receipts on equity market performance justifies the rationale for the inclusion of the variable in the model due to the peculiarity of the Nigerian situation in which the economy is heavily dependent on crude oil receipts. It also explains the significant decline experienced in the Nigerian stock market during periods in which the international crude oil market faced some negative shocks. An example of such shocks was witnessed in early 2000 when there was a sharp decline in global crude oil demand in reaction to the introduction of shale oil to the market as a substitute for crude oil.

Finally, the discovery of an inverse link between lending interest rate and stock market performance implies that the situation in the Nigerian economy is congruent with the postulations of the dividend discount model, which explains that an increase in the lending interest rate will dis-incentivize borrowing and investment, hence resulting in the reduced purchase of equity capital and consequently, reduced stock market returns.

CONCLUSION

The paper assesses the impact of foreign capital – foreign direct and portfolio investments – on stock market performance in Nigeria. To achieve the objectives, the study made use of time series data from January 2007 to December 2018 sourced from the Central Bank of Nigeria Statistics Bulletin. The study adopted the co-integration technique based on ARDL Bound approach to assess the long-run relationship among the variables in the study. The study failed to confirm the existence of a long-run relationship in the model. The empirical evidence reveals that in the short term, FDI is statistically insignificant in determining stock market performance while FPI's positive effect on stock market performance is statistically significant.

The empirical results are useful for policymakers, relevant authorities like the ministry of finance, and the government to embark on the following. The government should increase efforts towards improving infrastructure in order to attract foreigners into the market – both direct and portfolio investors. Despite the sig-

nificant GDP growth the Nigerian economy has experienced in recent times, the level of FDI and FPI inflows to the economy has maintained such a high level of instability. This is due to the high level of risks that foreign investors have taken into consideration when evaluating the Nigerian economy. A huge part of this risk consists of the very high operating costs associated with setting up an enterprise in a nation like Nigeria with an unstable power supply, poor road networks, and so many other infrastructural inadequacies.

The monetary authority of the country needs to make greater strides towards handling the issue of foreign exchange scarcity and exchange rate instability. This is sure to go a long way in providing foreign investors with liquidity and ease of transactions. A notable step is the construction of the Investors and Exporters (I&E) foreign exchange window. More initiatives like this will attract more foreign capital into the country.

Finally, it has been observed that many of the multinational companies set up in Nigeria, especially those in the telecommunications and energy industry, are not publicly listed. This is because of the many bottlenecks they have faced in their attempts to get listed on the stock exchange. Therefore, the regulatory bodies, for example, the Securities and Exchange Commission (SEC) are advised to design more attractive policies so as to entice these enterprises to list on the exchange and hence positively impact stock market returns.

Finally, it was observed that oil receipts have an even humongous effect in determining the level of stock market performance. Considering the volatility in global crude oil prices especially as many economists foresee an irrecoverable crash in the demand for crude oil shortly as a result of the introduction of many substitutes to the market, this result is bothersome. The government, therefore, has to make more efforts at diversifying the economy's revenue sources with the aim of reducing considerably the lofty level of dependence of the Nigerian equity market on crude oil price movements.

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REFERENCES

1. Abdelbaki, H. H. (2013). Causality Relationship Between Macroeconomic Variables and Stock Market Development: Evidence from Bahrain. *The International Journal of Business and Finance Research*, 69-84. Retrieved from <https://ideas.repec.org/a/ibf/ijbfire/v7y2013i1p69-84.html>
2. Abubakar, M., & Danladi, Y. U. (2018). Foreign Direct Investment and Stock Market Development in Nigeria: Evidence from Ardl Bound Test Approach to Cointegration. *Journal of Economics and Finance*, 79-85.
3. Adam, A. M., & Tweneboah, G. (2008). Foreign Direct Investment (FDI) and Stock market Development: Ghana Evidence. *Munich Personal RePEc Archive (MPRA)*, 2-8. Retrieved from <https://ideas.repec.org/p/pramprapa/11261.html>
4. Adaramola, O. A., & Obisesan, G. O. (2015). Impact of Foreign Direct Investment on Nigerian

- Capital Market Development. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(1), 103-108. Retrieved from https://hrmars.com/papers_submitted/1503/Article_12_Impact_of_Foreign_Direct_Investment_on_Nigerian.pdf
5. Adeleye, N., Ogundipe, A. A., Ogundipe, O., Ogunrinola, I., & Adediran, O. (2019). Internal and external drivers of inflation in Nigeria. *Banks and Bank System*, 14(4), 206-218. [http://dx.doi.org/10.21511/bbs.14\(4\).2019.19](http://dx.doi.org/10.21511/bbs.14(4).2019.19)
 6. Adeniyi, O., Ajide, B., & Salisu, A. (2015). Foreign Capital Flows, Financial Development and Growth in Sub-Saharan AFRICA. *Journal of Economic Development*, 40(3), 85-103. Retrieved from https://econpapers.repec.org/article/jedjournal/v_3a40_3ay_3a2015_3ai_3a3_3ap_3a85-103.htm
 7. Alqattan, A., & Alhayky, A. (2016). Impact of Oil Prices on Stock Markets: Evidence from Gulf Cooperation Council (GCC) Financial Markets. *Amity Journal of Finance*, 1-8. Retrieved from [https://www.semanticscholar.org/paper/Impact-of-Oil-Prices-on-Stock-Markets-%3A-Evidence-\(-Alqattan-Alhayky/e96a91d6d3aed3f2978a12a67c479fb6e9b1d2ea](https://www.semanticscholar.org/paper/Impact-of-Oil-Prices-on-Stock-Markets-%3A-Evidence-(-Alqattan-Alhayky/e96a91d6d3aed3f2978a12a67c479fb6e9b1d2ea)
 8. Aquah-Sam, E. (2016). Determinants of Capital Market Development in Ghana. *European Scientific Journal*, 12(1), 251-270. Retrieved from <https://core.ac.uk/download/pdf/328025299.pdf>
 9. Aron, J., Leape, J., & Thomas, L. (2010). Foreign Portfolio Investment and Capital Markets in South Africa. *Centre for Research into Economics and Finance in Southern Africa*, 1-35. Retrieved from <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.19.2.7199&rep=rep1&type=pdf>
 10. Baleseng, A., Juana, J. S., & Gamariel, G. (2016). *Empirical Analysis of Determinants of Stock Market Capitalisation: The Case of Botswana Stock Exchange 2005–2012*.
 11. Chauhan, S. (2013). Impact of Foreign Capital Inflows on Indian Stock Market. *TRANS Asian Journal of Marketing & Management Research*, 2(3-4), 79-90. Retrieved from <https://www.tarj.in/images/download/AJMMR/TAJMMR%20MAR.-APR.2013.COMPLETE%20PDF/3-4.8,%20Santosh%20Chauhan.pdf>
 12. Chenery, H. B., & Stout, A. (1966). Foreign assistance and economic development. *The American Economic Review*, 56(4/1), 679-733. Retrieved from <https://www.jstor.org/stable/1813524>
 13. Choong, C.-K., Baharumshah, A. Z., Yusop, Z., & Habibullah, M. S. (2010). Private Capital Flows, Stock Market and Economic Growth in Developed and Developing Countries: A Comparative Analysis. *Japan and the World Economy*, 22(2), 107-117. <https://doi.org/10.1016/j.japwor.2009.07.001>
 14. De Mello Jr, L. R. (1997). Foreign direct investment in developing countries and growth: A selective survey. *The Journal of Development Studies*, 34(1), 1-34. <http://dx.doi.org/10.1080/00220389708422501>
 15. Domar, E. D. (1946). Capital Expansion, Rate of Growth, and Employment. *The Econometric Society*, 14(2), 137-147. <https://doi.org/10.2307/1905364>
 16. Dritsakis, N., Varelas, E., & Adamopoulos, A. (2004). *The Main determinants of Economic Growth: An Empirical Investigation with Granger Causality Analysis for Greece*. Retrieved from <http://docplayer.net/21040424-The-main-determinants-of-economic-growth-an-empirical-investigation-with-granger-causality-analysis-for-greece-university-of-macedonia.html>
 17. Eniekezimene, F. A. (2013). The impact of foreign portfolio investment on capital market growth: evidence from Nigeria. *Global Business and Economics Research Journal*. Retrieved from <https://www.semanticscholar.org/paper/The-impact-of-foreign-portfolio-investment-on-from-Eniekezimene/4006c34802d3fb15ee51738d6ea4a329a28f8235>
 18. Eriemo, N. O. (2014). An empirical analysis of the determinants of market capitalization in Nigeria. *Developing country studies*, 14(7), 67-78.
 19. Ezeoha, A., Ogamba, E., & Onyiuke, N. O. (2009). Stock Market Development and Private Investment Growth in Nigeria. *Journal of Sustainable Development in Africa*, 11(2), 20-35. Retrieved from https://www.academia.edu/33303774/Stock_Market_Development_and_Private_Investment_Growth_in_Nigeria
 20. Farrell, J. (1985). The Dividend Discount Model: A Primer. *Financial Analysts Journal*, 41(6), 16-25. <https://doi.org/10.2469/faj.v41.n6.16>
 21. Fauzel, S. (2016). Modeling the Relationship between FDI and Financial Development in Small Island Economies: A PVAR Approach. *Theoretical Economics Letters*, 6(3), 367-375. <http://dx.doi.org/10.4236/tel.2016.63041>
 22. Fuller, W. A. (1976). Introduction to statistical time series. New York: Wiley.
 23. Goldstein, I., & Razin, A. (2006). An Information-based trade off between foreign direct investment and foreign portfolio investment. *Journal of International Economics*, 70(1), 271-295. <https://doi.org/10.1016/j.jinteco.2005.12.002>
 24. Gordon, M. (1959). Dividends, Earnings, and Stock Prices. *The Review of Economics and Statistics*, 41(2), 99-105. <https://doi.org/10.2307/1927792>
 25. Harrod, R. F. (1939). An Essay in Dynamic Theory. *The Economic Journal*, 49(193), 14-33. Retrieved from <http://piketty.pse.ens.fr/files/Harrod1939.pdf>
 26. Ifeakachukwu, N. I. (2015). Financial Market Development and Capital Inflows in Nigeria: The Role of Stock Market Development. *Journal of Investment and Management*, 4(6), 369-376. Retrieved from <https://www.econbiz.de/Record/financial-market-development-and-capital-inflows-in-nigeria->

- the-role-of-stock-market-development-ifeakachukwu-nwosa-philip/10011507225
27. IMF. (1993). *Balance of Payments Manual*. Washington: International Monetary Fund.
 28. Jecheche, P. (2011). The effect of the stock exchange on economic growth: a case of the Zimbabwe stock exchange. *Research in Business and Economics Journal*. Retrieved from <http://www.aabri.com/manuscripts/111088.pdf>
 29. Kierkegaard, K., Lejon, C., & Persson, J. (2006). *Practical application of the Modern Portfolio Theory* (Thesis). Jönköping International Business School, Jönköping University. Retrieved from <https://www.diva-portal.org/smash/get/diva2:4384/fulltext01.pdf>
 30. Koojaroenprasit, S. (2012). The Impact of Foreign Direct Investment on Economic Growth: A Case Study of South Korea. *International Journal of Business and Social Science*, 3(21), 8-12.
 31. Levine, R., & Zervos, S. (1998). Stock Markets, Banks, and Economic Growth. *The American Economic Review*, 88(3), 537-558. Retrieved from <https://www.jstor.org/stable/116848>
 32. Makki, S. S., & Somwaru, A. (2004). Impact of Foreign Direct Investment and Trade on Economic Growth: Evidence from Developing Countries. *American Journal of Agricultural Economics*, 86(3), 795-801. <https://doi.org/10.1111/j.0002-9092.2004.00627.x>
 33. Mankiw, G. (1998). *Principles of Economics* (1st ed.). Fort Worth, Texas: Dryden Press.
 34. Markowitz, H. (1952). Portfolio Section. *The Journal of Finance*, 7(1), 77-91. Retrieved from https://www.math.hkust.edu.hk/~maykwok/courses/ma362/07F/markowitz_JF.pdf
 35. Min, K. S., Shyan, T. H., Siang, T. H., Ying, T. X., & Yee, T. M. (2017). *Determinants of Stock Market Performance in Malaysia* (Thesis). Universiti Tunku Abdul Rahman. Retrieved from <http://eprints.utar.edu.my/2449/1/FN-2017-1306066.pdf>
 36. Modigliani, F. (1971). Monetary Policy and Consumption: Linkages via Interest Rate and Wealth Effects in the FMP Model, Consumer Spending and Monetary Policy: The Linkages. *Federal Reserve Bank of Boston Conference Series*. Boston.
 37. Musa, S. U., & Ibrahim, M. (2014). Stock Market Development, Foreign Direct Investment and Macroeconomic Stability: Evidence from Nigeria. *Research Journal of Finance and Accounting*, 5(18), 260-263.
 38. Nagaishi, M. (1999). Stock Market Development and Economic Growth: Dubious Relationship. *Economic and Political Weekly*, 2004-2012.
 39. Njane, R. (2017). *The Effect of Foreign Direct Investment on Stock Market Development in Kenya* (Thesis). University of Nairobi. Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/11295/103350/Njane_The+Effect+of+Foreign+Direct+Investment+on+Stock+Market+Development+in+Kenya.pdf?sequence=1
 40. Nzenwata, A. (2017). Foreign Portfolio Investment and Stock Market Performance in Nigeria. *Research Midas*.
 41. Obadan, M. (2004). Globalization: Elements, Opportunities, Challenges and Risks. *Eleventh DPRS Directors Conference*, 21-25. Ibadan.
 42. Ogundipe, A. A., Adu, O., Ogundipe, O. M., & Asaley, A. J. (2019). Macroeconomic Impact of Agricultural Commodity price volatility in Nigeria. *Open Agriculture Journal*, 13(1), 162-174. <http://dx.doi.org/10.2174/1874331501913010162>
 43. Okafor, I. G., Ugochukwu, U. S., & Chijindu, E. H. (2016). Foreign Capital Inflows and Economic Growth Nexus: A Toda Yamamoto Approach. *European Journal of Accounting, Auditing and Finance Research*, 16-26. Retrieved from <https://www.eajournals.org/journals/european-journal-of-accounting-auditing-and-finance-research-ejaafr/vol-4-issue-3-march-2016-2/foreign-capital-inflows-and-nigerian-economic-growth-nexus-a-toda-yamamoto-approach/>
 44. Okafor, V. I., Egiyi, M., & Eyisi, A. S. (2017). Relationship Between FDI, Capital Market and Nigerian Economy. *Journal of Economics and Sustainable Development*, 8(14), 260-262. Retrieved from <https://www.iiste.org/Journals/index.php/JEDS/article/view/37999>
 45. Olaleye, S. O., Edun, F., & Taiwo, S. B. (2013). Export Diversification and Economic Growth in Nigeria: An Empirical Test of Relationship Using a Granger Casualty Test. *Journal of Emerging Trends in Economics and Management Sciences*, 3(12), 70-79.
 46. Olisaemeka, A. G. (2009). *The Meltdown Of The Nigerian Capital Market: Causes And Consequences*. Retrieved from <https://www.nairaland.com/241080/meltdown-nigerian-capital-market-causes>
 47. Onyiuke, N. O. (2009). A review of market performance in 2009 and the outlook for 2010. *Journal of Nigerian Stock Exchange*, 17-21.
 48. Otchere, I., Soumare, I., & Yourougou, P. (2016). FDI and Financial Market Development in Africa. *The World Economy*, 39(5), 651-678. <https://doi.org/10.1111/twec.12277>
 49. Pal, P. (2006). Foreign Portfolio Investment. *Annual Conference on Development and Change Mission: Promoting Development in a Globalised World*. Sao Paulo.
 50. Pesaran, H., Shin, Y., & Smith, R. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics*, 16(3), 289-326. <https://doi.org/10.1002/jae.616>
 51. Pesaran, M., & Pesaran, B. (1997). *Working with Microfit 4.0_ Interactive Econometric Analysis*. Oxford: Oxford University Press.
 52. Prabagar, S. (2016). Does Domestic Saving Matter for Economic Growth: in case of Chinese Economy. *Journal of Economics and Finance*, 35-42.

53. Ross, S. (1976). The Arbitrage Theory of Capital Asset Pricing. *Journal of Economic Theory*, 13(3), 341-360. [https://doi.org/10.1016/0022-0531\(76\)90046-6](https://doi.org/10.1016/0022-0531(76)90046-6)
54. Shahbaz, M., Lean, H. H., & Kalim, R. (2013). The Impact of Foreign Direct Investment on Stock Market Development: Evidence from Pakistan. *Economic Research*, 26(1), 17-32. <https://doi.org/10.1080/1331677X.2013.11517588>
55. Sharpe, W. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, 19(3), 425-442. <https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>
56. Solow, R. (1956). A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics*, 70(1), 65-94. <https://doi.org/10.2307/1884513>
57. Sultana, S. T., & Pardhasaradhi, S. (2012). Impact of Flow of FDI & FII on Indian Stock Market. *Finance Research*, 1(3), 4-10.
58. Te Velde, D. W. (2006). *Foreign Direct Investment and Development: An historical perspective* (Working Paper). Overseas Development Institute. Retrieved from <https://odi.org/en/publications/foreign-direct-investment-and-development-an-historical-perspective/>
59. Thanh, S. D., Hoai, B. T., & Bon, N. V. (2017). Determinants of stock market development: The case of developing countries and Vietnam. *Journal of Economic Development*, 32-53. Retrieved from <https://digital.lib.ueh.edu.vn/handle/UEH/55157>
60. The Nigerian Stock Exchange. (2013). Domestic and Foreign Portfolio Participation in Equity Trading. *Broker Dealer Regulation*, 1-4.
61. UNCTAD. (2007). *World Investment Report 2007: Transnational Corporations, Extractive Industries and Development*. Retrieved from https://unctad.org/system/files/official-document/wir2007_en.pdf
62. Yaqub, J. O., Adam, S. L., & Jimoh, A. (2013). Foreign Direct Investment and Economic Growth in Nigeria: An Empirical Analysis. *American Academic & Scholarly Research Journal*, 5(1), 74-82. Retrieved from <http://www.naturalspublishing.com/files/published/764sd176i7h3n2.pdf>
63. Yartey, C. A. (2008). *The Determinants of Stock Market Development in Emerging Economies: Is South Africa Different?* (IMF Working Paper No. 08/32). Retrieved from <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/The-Determinants-of-Stock-Market-Development-in-Emerging-Economies-Is-South-Africa-Different-21646>
64. Yartey, C. A., & Adjasi, C. K. (2007). *Stock Market Development in Sub-Saharan Africa: Critical Issues and Challenges* (IMF Working Paper No. 07/209). Retrieved from <https://www.imf.org/external/pubs/ft/wp/2007/wp07209.pdf>