Effect of Foreign Direct Investment on Capital Market Development in Nigeria

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Abstract

The aim of this paper work is to assess the effect of foreign direct investment on Capital market development in Nigeria. The study employed an Augmented Dickey- Fuller (ADF) unit root test and Johansen co-integration test to analyze the secondary data obtained from Central Bank of Nigeria statistical bulletin from 1999-2018. The absence of co-integration between foreign direct investment and market capitalization informed the resort to Ordinary Least Squares (OLS) regression result which shows that foreign direct investment influence positively and significantly on market capitalization. Since foreign direct investment is a significant determinant. Efforts should be made by government and monetary authority to encourage foreign direct investment into Nigeria. However, given the lack of co-integration and low beta weight suggest that emphasis on foreign direct investment as a way of stimulating long run growth in the developing countries like Nigeria does not worth the while.

Keywords: Market Capitalization, Investment, Capital Market, Exchange Rate and Economic Growth

1. INTRODUCTION

The slow spate of development in the third world is usually traceable to inadequate resources to speed up economic growth and development. Saving in this part of the world is usually less than the investment needs. Most economies have resorted to foreign borrowings while others geared efforts toward attracting foreign contributions to stimulate development. Hence, the importance of foreign investment either by private or public agencies in promoting growth and development in developing countries cannot be overemphasized. Foreign investment is expected to serve as a means of complementing Nigeria's domestic resources in order to ensure development and improve the standard of living of the people. Foreign Direct Investment (FDI) is that investment which gives foreign owners control over the behavior of firms in which the investment is made. According to Isiaq and Olufemi (2011), the first the key motives for FDI is to globalize production and competition and second reason is to move some production to more profitable locations. Firms in advanced countries have moved much of their labor-intensive production to developing nations where wages are lower. It is doubtful that many (or any) of today's poor countries could achieve sustained, rapid growth paths without a substantial amount of FDI brought in by foreign owned transnational. Without such FDI, both the transfer of technology and foreign networking would be difficult to achieve.

In essence, the purpose of foreign investments is to complement indigenous efforts. Specifically, foreign direct investment may be defined as a situation whereby the concern of the investing countries is to exercise control over the assets created in the capital importing countries by means of that investment. Also, foreign public investments are investments by governmental entities in another country. It is generally recognized that government in developing economies have not only directed efforts to creating enabling environment for business to grow but also tried to create attractive business environment for foreigners to participate. Financial markets, and especially capital markets, have grown considerably in developed and developing countries over the last two decades this is as a result of rapid financial and political transformation. To increase their share of FDI flows, most of the countries easy restrictions on FDI, strengthened macro stability, privatization of state-owned enterprises, domestic financial reforms, capital account liberalization, tax incentives and subsidies have been instituted. For many emerging countries, the best policy will involve continuing the establishment of sound fundamentals and attracting

FDI, but not necessarily the trading or even listing of securities locally. In addition, capital markets have been established to intermediate funds towards investment projects.

Capital markets are a virtual or physical place for the exchange of long-term financial securities, including shares, long-term debt securities such as debentures, unsecured debt and convertible bonds. In addition, government bonds and other public sector securities such as treasury bills and sharp capitals, are also traded on the capital markets. In fact, the structure of a global capital market has three components: the first component is the primary capital market for new capital issues by firms and other institutions, including governments; the second is the secondary market, for the exchange of existing securities; and the third is the derivatives market, which is used to exchange securities created through exchange and whose value comes from the underlying securities. It can therefore be argued that by functional classification, capital markets play three main roles. Firstly, companies that want to invest, such as financial institutions and private investors, can raise long term funds. By fulfilling this role, they act as primary markets for new equity and debt issues. Secondly, financial markets offer investors a convenient way to sell capitals and bonds they own or buy others to increase their portfolio. In fulfilling this role, capital markets act as secondary markets for the trading of existing securities. Thirdly, the markets provide for future and potential debt swaps based on the value of the underlying assets; hence the derivatives market.

However, at the global level, the evolution of emerging capital markets over the past two decades has been dichotomous; that is to say, the markets have experienced both integration and segmentation. On the one hand, some emerging capital markets have experienced a remarkable increase in foreign direct investment and an entrepreneurial process due to the expansion of privatization, the use of bond instruments in international debt settlements and successful implementation of economic stabilization programs. Thus, foreign capital inflows into mature capital markets have allowed these markets to better integrate into global markets. On the other hand, some very small, less developed capital markets, defined as "frontier markets" by Standard & Poor's International Finance / Emerging Markets database, have not received much of foreign capital. Markets have therefore become segmented into global markets. Consequently, dichotomous integration and segmentation patterns have important consequences for the role played by these markets in emerging economies, particularly in Africa and the CEMAC zone. Foreign direct investment (FDI) refers to an international investment in which the investor acquires a lasting interest in a business in another country.

Although, the drive towards the establishment of capital markets in African countries during the last few decades may be linked to other important developments in the global economy. The financial markets of many advanced countries have undergone tremendous changes and become increasingly integrated. These changes have resulted from the operation of a number of interrelated factors (Cosh, Hughes, & Singh, 1992). Such as; the progressive deregulation of financial markets both internally and externally in leading economies; the internationalization of these markets; the introduction of a number of financial products allowing riskier and bigger financial investments; and the emergence and the increasing role of new actors in the financial markets particularly, institutional investors. These developments in the financial systems of advanced countries have led them to seek liberalization in the international trade and exchange of services in world trade negotiations. The establishment of capital markets in African countries and the liberalization of capital accounts can be seen as parts of this global liberalization trend. Thus, it is expected to boost domestic savings and increase the quantity and quality of investment. More generally, capital markets are seen as enhancing the operations of the domestic financial system in general and the capital market in particular (Kenny and Moss, 1998). Critics, however, argue that the capital market might not perform efficiently in developing countries and that it may not be feasible for all African markets to promote capital markets given the huge costs and the poor financial structures (Singh, 1999). Also, there has been a considerable research on the relationship between financial market development and macroeconomic variables, financial reform, and other country –specific factors, and the relationships among the development of the various parts of a financial system. It is clear from the

previous studies that financial markets tend to develop as the economy grows and financial reform progresses. Capital market development is embodied in the general financial sector development. In other words, capital market complements the development of other parts of the financial system. For instance, Singh (1997) find positive relationship between economic growth and capital market development and a large number of empirical studies on the role of FDI in host countries suggest that FDI is an important source of capital, complements domestic private investment, is usually associated with new job opportunities and enhancement of technology transfer, and boosts overall economic growth in host countries. However, attention has not been centered on joint effect of capital market development and foreign direct investment on growth in Nigeria. Thus, this study intends to fill this gap. In order to realize the major objective of the study, the following hypothesis is formulated:

H_o: Foreign Direct Investment has no significant impact on the Nigerian Capital Market Development

2. LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Capital Market

Capital market is a subset of financial market that deals with the mobilization and channeling of long term funds for investment purposes by bring together economic units requiring funds and economic units desirous of parting with funds for relatively long period of time. It is a framework of institutions that arrange for long term financial instruments entailing shares debentures stocks and mortgages (Adeusi, 2000). Osita, (1990) stressed the element of control in his definition of foreign private investment as "investment in a foreign country where the investing party that is, corporations, firms and so on retain control over the investment. The heart of any Foreign Private Investment is control". According to International Monetary Fund (IMF), Foreign Private Investment is defined as "investment that is made to acquire a lasting business in an enterprise's operation on economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprises". Essentially, the functions of capital market includes the promotion of liquidity and safety of financial assets in order to encourage saving and investment; ensuring a more refund allocation of resources by equating the demand and supply of loanable funds; enabling the transfer of funds from one sector or country to another for economic or commercial growth and enhancing successful implementation or monetary and indigenization policy (Adeusi, 2000). Sustainable economic growth and development can be realized through lot local and foreign investment efforts which made it possible with presence of a well-functioning capital market. (Ekundayo, 2002)

Jenkin and Thomas (2002) are of opinion that FDI is expected to contribute to economic growth include the provision of foreign capital as well as crowding in additional domestic investment. By promoting both forward and backward linkages with the domestic economy, additional employment is indirectly created and further economic activity stimulated. Adegbite and Ayadi (2010) stated that FDI helps fill the domestic revenue-generation gap in a developing economy, given that most developing countries' governments do not seem to be able to generate sufficient revenue to meet their expenditure needs. Other benefits are in the form of externalities and the adoption of foreign technology. Foreign direct investment includes; external resources including technology, managerial and marketing expertise and capital. All these generate a considerable impact on host nation's productive capabilities and the success of government policies of stimulating the productive base of the economy depend largely on her ability to control adequate amount of FDI comprising of managerial, capital and technological resources to boast the existing production capacity (Omankhanlen, 2011). Kumar (2007), described Direct Foreign Investment (DFI) in several ways. First and most likely it may involve parent enterprise injecting equity capital by purchasing shares in foreign affiliates. Second, it may take the form of reinvesting the affiliate's earning. Third, it may entail short-or foreign investment as a share of Gross Domestic Product has grown rapidly, becoming the largest source of capital moving from developed nations to developing nations.

2.2 Empirical Literature

Abel, Ebere and Ndi (2009) conducted a study on nature of relationship between stock market development and levels of domestic or foreign private investment flows in Nigeria. This research revealed a positive link between capital market development and domestic private investment while a negative relationship is found between stock market development and foreign private investment in Nigeria. Afeeze and Kazeem (2010) concluded that there exist a unidirectional relationship between market capitalization and economic growth, and an absence of causal linkage between economic growth and total value traded and bidirectional causality between economic growth and turnover ratio. Ultimately, the result of the granger causality test shows that capital promote economic development. Olawoye (2011) conducted a study on the impact of capital market on economic growth of Nigeria. He used Gross Domestic Product(GDP) as a proxy for economic growth and market capitalization, new issues, value of transaction and total listing as capital market variables. Multiple regression techniques were used for analysis and the results revealed a positive relationship between capital market and economic development.

Okwu and Obiakor (2011) employed Ordinary Least Square to analyze the impact of capital market development on Nigerian Economy Growth from 1981 to 2008. They found that market capitalization gross capital formations of foreign private investment are significant determinant of Nigerian Economic Growth while the volume of share traded relate positively but insignificantly. Baghebo and Edoumiekumo (2012) used group unit root and Johansen co-integration test to examine the relationship between Foreign Private Capital Accumulation and Economic Development in Nigeria from 1970 to 2010. It was discovered that current and lagged Foreign Portfolio Investment(FPI) have positive impact on economic development. However, while the latter is statistically significant, the former is not. Thus formulating policies that encourage such investment would be a way forward. Uremadu (2010) examined the impact of Foreign Private Investment on Capital Formation in Nigeria from 1980 to 2004 using Ordianry Least Square method. The result showed a negative influence of foreign exchange rate, gross national savings, inflation rate, debt service ratio, lending rate, exchange rate all discourage gross capital formation in Nigeria. However cumulative foreign privateinvestment, index of energy consumption and banking system credit to domestic economy showed a positive influence.

Ugochuckwu, Okore and Onoh (2013), investigating the impact of foreign direct investment on the Nigerian economy that from 1981 to 2009 employed Ordinary Least Square method in order to derive the relationship between them. The study found a positive but insignificant relationship between foreign direct investment and growth of Nigerian economy for the period studied and the same hold for interest rate while domestic investment is positive and significant. There exists a long run relationship between capital market and economic growth and bidirectional causation between gross domestic product and value of transactions while only market capitalization causes economic growth. In essence, capital market plays a significant positive role in economic development of less developed countries. However, Kolapo and Adaramola (2012) submitted that continuous flow of foreign investment to developing economies has not been able to solve problems confronting these countries. Osinubi (2010), used secondary data from 1970-2005 to assess the effect of foreign private investment on Nigerian economic growth. Empirical results show that foreign private investment, domestic investment growth and net export growth have significant positive impact on Nigerian economic growth.

2.3 Theoretical Discussion

2.3.1 Capital Market Theory

This theory, also sometimes referred to as the "currency area theory", is considered one of the earliest theories which explained FDI. Based on the work of Aliber (1970; 1971), it postulated that foreign investment in general arose as a result of capital market imperfections. FDI specifically was the result of differences between source and host country currencies (Nayak & Choudhury, 2014). According to Aliber

(1970; 1971), weaker currencies have a higher FDI-attraction ability and are better able to take advantage of differences in the market capitalization rate, compared to stronger country currencies. Aliber (1970; 1971) further adds that source country multinational companies (MNCs) based in hard currency areas can borrow at a lower interest rate than host country firms because portfolio investors overlook the foreign aspect of source country MNCs. This gives source country firms the borrowing advantage because they can access cheaper sources of capital for their overseas affiliates and subsidiaries than what local firms would access the same funds for.

2.3.2 Institutional FDI Fitness Theory

Developed by Wilhems and Witter (1998), the term FDI fitness focuses on a country's ability to attract, absorb and retain FDI. It is this country ability to adapt, or to fit to the internal and external expectations of its investors, which gives countries the upper-hand in harnessing FDI inflows. The theory itself attempts to explain the uneven distribution of FDI flows between countries. Wilhem's institutional FDI fitness theory rests on four fundamental pillars Government, market, educational and socio-cultural fitness. At the base of the pyramid are socio-cultural factors which according to Wilhelms and Witter (1998) are the oldest and most complex of all institutions.

2.3.3 Location Based Theory

Location theory addresses questions of what economic activities are located where and why. Location theory or microeconomic theory generally assumes that agents act in their own self-interest. Firms thus choose locations that maximize their profits and individuals choose locations that maximize their utility Together, modern portfolio theory and capital market theory provide a framework to specify and measure investment risk and to develop relationships between expected security return and risk (and hence between risk and required return on an investment). These relationships are called asset pricing models.

3. METHODOLOGY

This study covers a period of 19 years (1999-2018). For the purpose of this work, data are gathered from published or secondary sources such as publication by the Central Bank of Nigeria, Economic and Financial bulletin, Nigerian Stock Exchange fact books. The ordinary least square regression technique is used to measure the impact of foreign private investment and capital market development in Nigeria. The dependent variable which is the capital market development is proxy by all market share index, while the explanatory variables includes: foreign direct investment and foreign portfolio investment. The hypotheses will be tested using the Ordinary Least Square (OLS) method. Hence the multiple regressions technique is used to estimate the parameters the objective being to minimize the error term with a view of finding the regression equation that explains the data. This is preferred for its unbiaseness, consistency, efficiency and simplicity. The model to be used in testing the above hypothesis contains the dependent and independent variables. This model is specified as follows:

$$MCAP = f(FDI) \quad (1)$$

Presenting equation 1 in linear form

$$MCAP = a_o + b_1 FDI + U \quad (2)$$

Where:

MCAP = market capitalization;

FDI= Foreign Direct Investment;

U= Error term or stochastic term of the estimates; a_o, b_1 are beta weight or regression coefficient.

Representing in time series form, equation 2 becomes:

$$MCAP_t = a_o + b_1 FDI_t + U \quad (3)$$

Where: t = time series

On a priori, the following relationships are expected:

$$\delta \text{ MCAP} > \text{positive relationship} \qquad (4)$$
$$\Delta \text{fdi}$$

β_1 is expected to be > 0. On a priori, we expect that the relationship between market capitalization and foreign direct investment to be positive. The sign of the estimated coefficient is thus expected to be greater than zero since rise in foreign direct investment will lead to an increase in market capitalization.

4. RESULT AND DISCUSSIONS

Table 1. Results of the ordinary least square regression

Model specification MCAP	Constant	FDI
B	-789.7491	0.017021
Standard Error t-statistics	318.0557	0.001335
	-2.483052	12.74767
F= 162.5032, DW= 1.6398, R^2 = 8586		

Source: computation using E-view 6 stat package

MCAP= -789.7491+ 0.017021FDI

This equation shows that constant relates negatively with MCAP. That is, if FDI were taken to be constant, for every unit rise in other factors other than FDI, MCAP will be reduced by 789.749 units. However, FDI relates positively with MCAP such that a unit rise in FDI will bring about 0.017021 units rise in MCAP. It must be noted however that the slope of the constant parameter is very high which means that there are various other factors which affect GDP that are not included in the study, hence there is room for further studies. f-statistics with appropriate probability value of 0.0000 shows that the model is fit. The correlation coefficient (R=0.9212) shows a very high positive correlation between MCAP and FDI. The degree of determination (R^2=0.8486) shows that FDI accounts for 84.86% of the variation in MCAP while the degree of non-determination (1-R^2=0.1514) shows that FDI cannot account for 15.14% of the variation in GDP. Moreover, the degree of alienation ($\sqrt{1-R^2}$=0.3891) shows that 38.91% of variation in GDP is alien to FDI.

Standard Error Test

Table 2: Result of Standard Error Test

Variables	Coefficient	coefficients/2	Standard Error	Remark
FDI	0.017021	0.0085105	0.001335	Significant

Source: computation using E-view 6 stat package

The standard error result in table 2 shows that FDI has a significant impact on Nigerian Capital Market growth because the average of the coefficient of FDI in greater than the standard error

Unit Root Test

Table 3.Result of ADF Unit Root Test

Variables	ADF test statistics	Mackinnon Critical Value @ 5%	Order of Stationarity	Remark
MCAP	2.502288	-2.998064	1(0)	Stationary
FDI	3.242743	-2.998064	1(0)	Stationary
ECM	-1.856664	-2.998064	-	Not
ECM	-1.491626	-2.991878	-	Stationary
ECM	-5.408563	-2.998064	1(2)	Not

				Stationary Stationary

Source: computation using E-view 6 stat package.

From table 3, it can be seen that MCAP and FDI are stationary at level, because the ADF test statistics are greater than Mackinnon critical value at 5%. Only ECM is stationary at 2nd difference.

Johansen Co-integration test

Table 4: Johansen Co-integration test Results

Hypothesized number of EC(s)	Eigen Value	Trace Statistics	5% Critical Value	Probability **
None* at most 1	0.375333 0.009800	13.93116 0.285609	15.49471 3.841466	0.0849 0.5930

Source: computation using E-view 6 stat package

The result of Johansen Co-integration test shows that there is no Co-integration between MCAP and FDI in the long run, because the Trace statistics is less than 5% critical value at none hypothesized. The implication is that there's no long run relationship between the two variables.

5. CONCLUSION AND RECOMMENDATION

The Ordinary least Square result revealed the existence of positive relationship between Foreign Direct Investment and Capital Market Development in Nigeria. The coefficient of multiple determination shows that the model has a good fit while the degree of determination shows that FDI accounts for 84.86% of the variation in MCAP. Co-integration test however shows a lack of long run relationship between market capitalization and foreign direct investment and hence the reliance on regression results for our discussion. Durbin Watson shows that data are free from serial autocorrelation.

The fundamental objective of this research work is to assess the effect of foreign direct investment on Nigerian capital market development. The result of the analysis shows that the relationship between capital market development and foreign direct investment is positive and significant in the short run. This is consonance with apriori expectation and in agreement with the findings of Ugochuckwu, Okore and Onoh (2013) and Baghebo and Edoumiekumo (2012) even though they use GDP as dependent variables. The effect would be the same through a multiplier process. Ideally, the objective of foreign direct investment is to encourage growth and development of the receiving economy. One could never have thought of the absence of long run relationship between market capitalization and foreign direct investment as revealed by the result of the co-integration test. The implication of this is that emphasis on foreign direct investment as a way of stimulating growth in the developing country like Nigeria does not worth the hype given the relationship that does not last. For instance, special concession offered by the host countries government to encourage direct foreign investment by the way of free tax, free landscape and so on will only drain our limited resources that should have been committed to development project. As if that is not enough, competition between foreign and local firms reduces the profit of the later and affects their abilities to make further investment that would have enhanced the trading activities in the stock exchange. Lastly, foreign firms having become established are found continuously repatriating profit to their home country rather than reinvestment.

This research work has been able to discover that a significant relationship exists between foreign direct investment and capital market development in Nigeria. It is therefore recommended based on research

findings that the present democratic dispensation should be sustained so as to have more foreign inflows into Nigeria because the attraction of foreign investment, no matter under any policy measure depends largely on the economic and political situation of the country. As a corollary to this, a sustained democratic dispensation will boost foreign investors' confidence in Nigeria and this will lead to more inflow of foreign investment.

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