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IMPACT OF MACROECONOMIC VARIABLES ON FOREIGN DIRECT INVESTMENT IN NIGERIA

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ABSTRACT

This study investigated the impact of macroeconomic variables on foreign direct investment in Nigeria. Specifically, the study analyzed the relative impact selected macroeconomic variables on foreign direct investment inflow.Macroeconomic variables considered in the study included lending rate, inflation rate, terms of trade, total investment, gross domestic product growth rate, real gross capital formation and trade openness. The study covered a period 45 years (1970-2014). Secondary data collected in the study were analyzed using time series techniques of analysis including unit root test, co-integration test, error correction model analysis. Result showed that macroeconomic instability in Nigeria has the tendency of impeding the level of Foreign Direct Investment inflow into the country on the short run while the negative influence fizzles out along the passage of time. Allocation of government national resources to capital oriented expenditure in an attempt to ensure rapid development of infrastructural facilities in the country will undoubtedly spur the rate of Foreign Direct Investment inflow into the country especially on the long run when such expenditure had succeeded in stabilizing other macroeconomic variables. it was also succinctly concluded in the study that economic policy geared towards increasing the terms of trade of Nigeria either by increasing the bulk of exportable goods and services from all quarters of production (primary, secondary and tertiary), or reducing the level of importation into the country, has the capacity of spurring the inflow of Foreign Direct Investment into the country. Hence government should extensively analyze the economy vis-a-vis developed economies in other to deduce the best economic management style that can guaranty that inflow of Foreign Direct Investment into the country add more values to the country than it take from it. there is need for government to ensure tranquility in the political interplay of the country in other to regulate the rate of social unrest, and politically driven insurgencies in the country. Finally government should earmark greater percentage of the budget to capital expenditure in other to foster high level of capital formation through sustained infrastructural development.

Keywords: *Macroeconomic variables, foreign direct investment, Nigeria*

Introduction:

Foreign Direct Investment is consequently crucial for a number of reasons: first, consistent inflow of foreign investment provides an important source of foreign exchange earnings needed to supplement domestic savings and raise investment levels; and Second, import-substituting investment would serve to reduce import bill as investment in export industries will directly increase the country's foreign exchange earnings. Foreign investment also assists in the creation or expansion of local industries to

supply inputs to the newly established plant. It contributes to a rise in the overall level of domestic demand and through taxation, boosts state revenues and facilitates the transfer of labour (including management skills and technology).Foreign Direct Investment is seen as a major stimulus to economic growth in developing countries. This is because of its ability to deal with two major obstacles; shortages of financial resources and modern technology or skills. By and large, inward FDI fosters efficiency in the domestic economy. Due to this variety of benefits provided by Foreign Direct Investment, African countries participate in the increased competition between developing countries to attract Foreign Direct Investment in other to either enter into or consolidate their positions within an increasing global world economy. Given the ascribed importance of FDI in developing countries, the main thrust of this study is to analyze the determinants of Foreign Direct Investment in manufacturing sector of Nigeria.

The effect of FDI specific variables, such as GDP, exchange rate, exchange rate volatility, lending rate, wage in manufacturing, labour productivity, real export, real import, openness to trade on FDI inflow has not received much attention in literature, hence creating a problem in the determinants of FDI in manufacturing company in Nigeria. The trend of FDI inflow to manufacturing sub–sector has been quite unimpressive. For instance, in a recent study the total inflow of FDI into manufacturing sector has increased in absolute terms but when the inflow is assessed as a percentage of GDP, it has declined tremendously. The percentage of GDP which stood at 19% in 1970 declined to 7.3% in 1980. This figure also declined to 3.9%, 3.4% and 1.8% in 1990, 2000 and 2009, respectively showing that growth in the economy is not replicated with FDI inflows into the manufacturing sub sector. Moreover, with respect to ratio of FDI in manufacturing as a percentage of GDP, this ratio fell from 4.2% in 1970 to 3.0% in 1980 after which 2.7%, 1.1% and 0.7% were recorded in 1990, 2000 and 2009, respectively.(CBN Statistical Bulletin). Premise on the background this study set out to analyze impact of some selected macroeconomic variables on inflow of foreign direct investment in Nigeria.This study specifically set out to analyze the:

(i) trend of foreign direct investment inflow in Nigeria and
(ii) the relative impact of selected macroeconomic variables on foreign direct investment inflow in Nigeria

Conceptual Clarification

Foreign Direct Investment (FDI)

Hardwick et al. (1986) defined FDI as the actual setting up and control of enterprises in foreign country. Griffith and Wall (1993) maintained that the rationale for FDI has changed over the years; the authors observed that in the past, emphasis was on the need to invest abroad in other to supply foreign markets, or in other to exploit natural resources located in the host country such as oil, rubber or minerals. However, nowadays companies invest abroad as a part of a worldwide company strategy which takes into account the cost and revenue factors. International investors also emphasized regional or global specialization both in process and product.Process specialization, on the one hand, occurs when a company producing complex product, requiring different stages of production locate such stages in the most profitable geographical area. For instance, companies can locate labour-intensive processes in low-wage countries, with the final stage of the production process located near to the projected markets of the advanced countries. Product specialization, on the other hand, arises when companies produce standardized products in their entirety in specific geographical locations, before distributing to intended markets. Although

standardized, each product is differentiated according to market requirements.

Dunning (1993) and Rugman (1998) reported that FDI takes place when three sets of influential factors exist concurrently. These factors are popularly known as OLI, meaning ownership specific advantages, internalizing incentive advantages and location specific advantages. Ownership specific advantages occur from the access to markets and firm's size and access to markets and resources, the ability of the firm to harmonize corresponding activities, such as manufacturing and distribution, and the ability to take advantage of differences between countries. Internalization incentive advantages arise from exploiting imperfection in external markets. These comprise transaction costs and the reduction of uncertainty and in other to generate knowledge more efficiently and the reduction of state-generated imperfections such as foreign exchange controls and tariffs, and subsidies. Furthermore, location specific advantages involve differences in country natural endowments, macroeconomic stability cultural factors, transport costs, and government regulations.Empirical evidence had shown that firms increase investment in response to the expansion of sales associated with a rise in GDP. Bandera and White (1968) found a statistical significant correlation between US FDI to the European Union (EU) and EU Gross Domestic Products (GDP) and concluded that a reason to invest out of the country can be summarized as a desire to break through a growing market defined in terms of the level of growth of GDP in foreign countries.

Macro-economic Variables and foreign direct investment(FDI)

Various macroeconomic variables had been identified in literature as determinants of foreign direct investment. These includes exchange rate, lending rate, real gross domestic product, inflation, manufacturing export, real import, real export, net inflow, trade volume, term of trade, domestic investment, investment in percentage of gross domestic product, capital expenditure, expenditure in percentage of gross domestic product, commercial bank loan, real gross domestic product growth rate, real gross domestic capital formation, population, trade openness to mention but few. Fundamentally the influence of macroeconomic variables identified in the study differs across studies. While some factors exert significant impact on foreign direct investment inflow, impact of some of the variables tends to be untraceable in the discourse of foreign direct investment. For instance, Vijayakumar*et al* (2010) found that macroeconomic variables such as market size, labour cost, infrastructural currency value and gross capital formation exerts significant influence on the inflow of foreign direct investment of a country, specially developing countries, while impact of variables such as inflation rate, trade openness, and industrial production does not significantly influence foreign direct investment. Albulescu*et al* (2010) found out that macroeconomic variables including population, trade openness, labour productivity and lending rate goes a long way in the determination of foreign direct investment inflow in a country. Nickanem (1991) found that macroeconomic variables such as percentage change in real GDP, level of government deficit and the level of net foreign investment in previous year are significant determinants of foreign direct investment inflow. Grosse and Trevino (1996) found that bilateral trade, home country GDP and the exchange rate are important determinants of Foreign direct investment inflow.

Empirical Review

Nickanem (1991) explored the determinants of capital imports in the U. S. and estimated how much of the variation in the net U.S foreign investment can be explained by her macroeconomic conditions and combined U.S government

sector budget deficit by employing ordinary least squares regression. The data used in this study covered the period 1953 to 1989. The study established that the percentage change in real GDP, level of government deficit and the level of net foreign investment in previous year are significant determinants of U.S foreign investment. Evidence also showed that growth in real GDP since 1973 reduces net foreign investment. The study suggested that large net U.S. import of capital since 1982, by itself was not a problem.

Grosse and Trevino (1996) examined the macroeconomic determinants of FDI. They specified foreign direct investment as a function of existing bilateral trade, size of home country market, per capital income, political risk, distance from United States, relative cost of borrowing, relative rate of return and exchange rate. In estimating the model Ordinary Least Squares technique was used, and result revealed that that bilateral trade, home country GDP and the exchange rate are important determinants of FDI in USA.

Azam (2010) Carried out an investigation on the economic determinants of Foreign Direct Investment in Kyrgyz, Armenia, Turkmenistan: theory and evidence. The study analyzed the effect of different economic determinants of Foreign Direct Investment (FDI) for three central Asia countries identified above. Secondary data for the period of 1991 to 2009 sourced from world development indicator (various issues) was used. Simple econometric model in log form and the least square technique was used. It was revealed that there is a positive effects of official development assistance and market size, on FDI and negative effect of inflation on FDI. However, in case of Armenia, the effect of official development assistance on FDI has been found insignificant and such as in case of Kyrgyz Republic, the effect of inflation on FDI has been found insignificant with expected negative sign. Thus, the study recommended that market size and official development assistance needs to be encouraged and inflation needs to be managed in order to achieve higher level of FDI and accelerate the process of economic development.

Mohamed and Sidiropoulos (2010) investigated on the determinants of Foreign Direct Investment in MENA countries sampling a total number of thirtysix countries, twelve of which are MENA countries and twenty four major recipient of Foreign Direct Investment in their respective regions in developing countries. The study employed panel data analysis to investigate whether the determinants of Foreign Direct Investment are similar in MENA countries and other FDI receiving developing countries. The study revealed that the key determinants of Foreign Direct Investment inflow in MENA countries are the government size, natural resources, size of the host economy, and the institutional variables. The study came to conclusion that countries that are receive fewer foreign investments could make themselves more attractive to potential foreign investors, as such policy makers in the MENA region should remove all barriers to trade, build appropriate institutions, develop their financial system.

Cheng and Kwan (2000) conducted an empirical investigation on the determinants of the location of Foreign Direct Investment, with focus on the Chinese experience. The study estimated the effects of the determinants of Foreign Direct Investment in twenty-nine Chinese regions from 1985 to 1995. The study discovered that good infrastructure, large regional market and preferential policy had a positive effect but wage cost had a negative effect on FDI. The effect of education was positive but not statistically significant.Furthermore, there was also a strong self-reinforcing effect of FDI on itself. There was no convergence in the equilibrium FDI stocks of the regions between 1985 and 1995, but there was convergence in the deviations from the equilibrium FDI stocks.

Mottaleb and Kalirajan (2010) conducted a research on comparative analysis of the determinants of Foreign Direct Investment in developing countries. The study employed panel data from 68 low-income and lower-middle income developing countries, the study strived to identify the factors that determine FDI inflow to the third world nations. Based on a comparative discussion focusing on why some countries are successful in pulling Foreign Direct Investment while others are not, the study reflected that countries with larger GDP, higher proportion of international trade and high GDP growth rate, and with more business friendly environment are more successful in attracting FDI.

Braga and Mendonca (2004) analyzed the determinants of Foreign Direct Investment in third world countries, in an attempt to undertake the objectives of the study, an econometric model based on panel data for 38 developing countries for the 1975 - 2000 was estimated. The study discovered that Foreign Direct Investment correlate to the level of schooling, economy's degree of openness, risk and variables related to macroeconomic performance like inflation, risk and average rate of economic growth. The study equally discovered that Foreign Direct Investment has been strongly related with stock market performance. Lastly the study revealed that there is unidirectional causal relationship running from gross domestic product to Foreign Direct Investment.

Benacek, Gronicki, Holland and Sass (2000) analyzed the determinants of the effect of Foreign Direct Investment in Central and Eastern Europe. The study focused on Hungary, Poland and the Czech Republic, drawing information from survey studies. and econometric studies considering how each of the sources of information add to the field of research, whether they give contradictory or complementary information, and how this information can be best exploited. The study discovered that econometric studies tends to support result from survey studies that market seeking has been the primary motive of investors, and the presence of overseas firms has increased productivity output in Central Europe, though only to a degree.

Nikula and Kotilainen (2012) carried out an analyses on the determinants of Foreign Direct Investment in the Baltic Sea Region. They analyzed the inflow of Foreign Direct Investment into the Baltic Sea region consisting of countries including Germany, Denmark, Lithuania, Estonia, Finland, Latvia,Poland, Russia and Sweden, from 1995 to 2010. Two basic models were used in the study. The first one treats comprehensive Foreign Direct and the second dealt with the bilateral FDI flows between country pairs. Because of the limitations in data insuficiency, the second model was built for a lesser group of countries. The result of the analysis conducted revealed that macroeconomic factors such as corporate taxes are important determinants for FDI flows. We become aware that these factors and their effects vary between the Baltic Sea Region countries. Foreign trade with the investing country is also a statistically significant determinant for FDI, i.e. the countries that have trade with each other also invest in every other. Apart from this distance between countries doesn't give details of FDI flows. Institutional factors such as EU membership or a general currency are not statistically important in our estimations.

Khrawish and Saim (2010) investigated the determinants of Foreign Direct Investment in Jordan. The study examined the impact of economic and financial risk on Foreign Direct Investment inflow into Jordan from 1997 to 2007. The study used a version of the model developed by Chan and Gemayel (2004) by employing multiple linear regressions model. The analysis discovered that there exist significant and positive relationship between Foreign Direct Investment flows into the economy of Jordan and economic

and financial variables. The thus recommended that for further FDI promotion in the economy incentives that can attract new investment should be put in place. Incentives identifies in the study include specific subsidies, cash grants, tax concessions, and improving domestic infrastructure; promoting local skills development to meet investor needs and expectations; establishing broad-reaching FDI promotion agencies and improving the regulatory environment and decreasing red tape.

Methodology

This study employed secondary data spanning a forty-fiveyears period covering 1970 to 2014. The data were sourced from sources including statistical bulletin of the Central Bank of Nigeria (CBN), National Bureau of statistics (NBS), World Bank data base e.t.c. the study purposively identified macroeconomic variables acclaimed to be influential on the inflow of foreign direct investment. Identified variables included lending rate, inflation rate, terms of trade, total investment, gross domestic product growth rate, real gross capital formation and trade openness. The variables were transformed into the standard form by and their relative impact on foreign direct investment inflow was analyzed using unit root test, co-integration, and error correction model estimation techniques. Model estimated in the study are presented in linear forms below:

Long Run Model

$$FDI_t = \alpha_0 + \alpha_1 GDPGR_t + \alpha_2 INF_t + \alpha_3 INVEST_t + \alpha_4 LENR_t + \alpha_5 RGCAF_t + \alpha_6 TOT_t + \alpha_7 TROP_t + \mu_i ----(i)$$

Short Run model

$$\mathrm{FDI_t} = \beta + \sum_{i=1}^{n} y_i \mathrm{FDI_{t-i}} + \sum_{j=1}^{n} \delta_j \mathrm{GDPGR_{t-j}} + \sum_{k=1}^{n} \varepsilon_k \mathrm{INF_{t-k}} + \sum_{p=1}^{n} \epsilon_n \mathrm{INVEST_{t-p}} + \sum_{z=1}^{n} \vartheta_z \mathrm{LENR_{t-z}} + \sum_{u=1}^{n} \theta_u \mathrm{RGCAF_{t-u}} + \sum_{e=1}^{n} \mu_e \mathrm{TOT_{t-e}} + \sum_{h=1}^{n} \gamma_h \mathrm{TROP_{t-h}} + ECM(-1) ---(ii)$$

Where:

FDI=Foreign Direct Investment, GDPGR=Gross Domestic Product Growth Rate, INF=Inflationrate, INVEST= Domestic Investment, LENR=Lending Rate, RGCAF=Real Gross Capital Formation, TOT= Term of Trade, TROP = Trade Openness

Data Analysis and Interpretation:
Trend Analysis

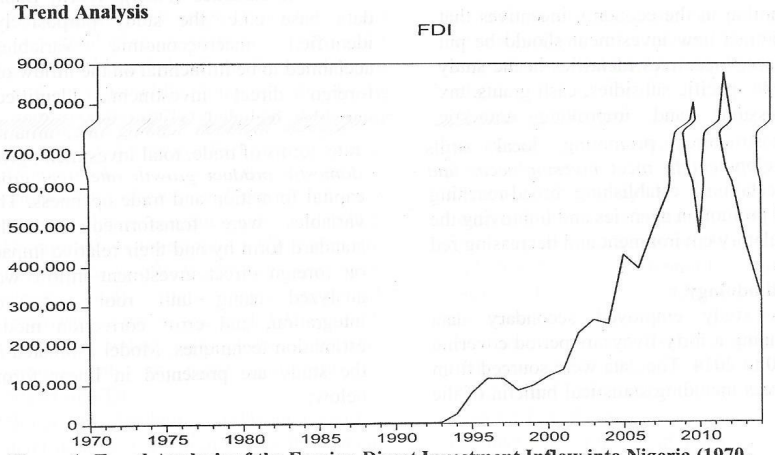

Figure 1: Trend Analysis of the Foreign Direct Investment Inflow into Nigeria (1970-2014)

Figure 1: Presents the trend of foreign direct investment in Nigeria for 45 years spanning from 1970 through 2014. The figure shows the trend of stock of foreign direct investment in Nigeria in millions of US dollars. In 1970 the stock of foreign direct investment in Nigeria stood at 205 million, and started rising in a very mild rate from that year through 1989, specifically the stock of foreign direct investment rose from 205 million in 1970 to 470.12 million in 1975, showing a percentage increase of about 129% in the stock of foreign direct investment in the country, which could be traceable to the boom that characterized the oil sector of the country in the early 70's. The oil boom ignited a great deal of Greenfield foreign direct investment inflow by resource-seeking multinational oil companies. Observably there was a mild decline in the stock of foreign direct investment in 1976, 1978 and 1979 which could be attributed to unrest in the political arena of the country, such as the military coup of July 1975 and that of February 1976 led by BukaDimka. However following the return of government from military rule to civilian rule which normalized the political interplay in the

country in the late 70s and early 80s, the stock of foreign direct investment peaked from 310 million in 1979 to 739 million in 1980. The stock of foreign investment in the country as shown in figure 4.1 declined from 739 million in 1980 to 542.33 million in 1981 and continued to decline in the early 80s till it settled at a base value of 193.22 million in 1986. However the trade liberalization and deregulation policy that accompanied the adopted structural adjustment program (SAP) of the 1986 could have led to the sharp increase in the stock of foreign direct investment from 193.22 million in 1986 to 610.55 million in 1987, 1884.25 million in 1989 and 1345.37 million in 1993. However the trend peaked sharply in the 90s when the stock of foreign direct investment rose from 1345.37 million in 1993 to 22229.20 million and 75940.60 million in 1994 and 1995 respectively. The stock of foreign

direct investment continue rising at an increasing rate through the later years of the 90s till it settle at a peak value of 115952.20 million in the year 2000. Figure 4.1 shows a consistent rise in the flow of foreign direct investment into the country for periodscovering 2001 to 2005. Specifically the stock of foreign direct investment recorded in the country stood at 132433.70, 225224.80, 258388.60, 248224.60, 423336.00 for 2001, 2002, 2003, 2004 and 2005 respectively. This consistence increase in the inflow of foreign direct investment could answer to the privatization policy of the early years of the new millennium e.g. the privatization of the telecommunication sector of the country that attracted the interest of some foreign investors to buy lasting interest in some government own enterprise as well as the increase in the communication flow between foreign investors and domestic players. However, there is a noticed sharp decline in the stock of foreign direct investment in the country in 2006, specifically the stock of foreign direct investment declined from 423336.00 in 2005 to 388626.90 in 2006. This decline could be attributed to the economic shock ignited by the consolidation reform of the banking sector in 2005, whichreformed the capital base and operations of commercial bank of the country. Observably the stock of foreign direct investment in Nigeria peak at 491142.70 million in 2007 and continue to rise till it settled at 802624.00 in 2009. However foreign direct investment inflow into the country drop to 475117.40 in 2010 and later peaked at 877109.60 in 2011being the highest values recorded for the period understudied, before it declines mildly to 636138.90 in 2012, 451042.80 in 2013 and 317903.90 in 2014. Notably however it is crystal clear that stock of foreign direct investment in Nigeria has tended upward over the years with spontaneous response to economic reforms and policies in the country

Unit Root Test

Table 1: Augmented Dickey Fuller Unit Root Test of all Variables (1970-2014)

Variables	ADF stat	1% critical value	5% critical value	Order of integration	Remarks
FDI	-4.234718*	-3.5930	-2.9320	I(1)	Stationary
LENR	-7.550653*	-3.5930	-2.9320	I(1)	Stationary
INF	-6.662904*	-3.5930	-2.9320	I(1)	Stationary
TOT	-4.154137*	-3.6576	-2.9591	I(1)	Stationary
INVEST	-3.850771*	-3.6576	-2.9591	I(1)	Stationary
GDPGR	-7.512406*	-3.5930	-2.9320	I(1)	Stationary
RGCAF	-4.655858*	-3.5930	-2.9320	I(1)	Stationary
TROP	-5.340423*	-3.5930	-2.9320	I(1)	Stationary

Note: * (**) denotes significance at 1%(5%) significant levels respectively

Source: *Author's computation (2018)*

Result of the unit root test presented in table 1 reveal the ADF statistics corresponding to each of the variables, alongside the critical values used for the evaluation of the result for rejection or acceptance of the null hypothesis of no unit root. The result shows that all the variables used in the study are non-stationary series that only became stationary after first differencing, meaning that are all integrated series of other one. By implication it stands that all the series used in the series tends to retain innovative shock passed on them only for a short period of time after which they let go. Therefore, given the order of integration of the series, it stands that on the short run linear combination of the variables might produce a misleading result. Hence confirmation of the presence of non-stationary variables in the series, which brings to book the possibility of spurious

relationship in the short run due to the presence of random walk, suggest that long run associationship test should be carried out, to test for the presence of co-integrating equation amidst the multivariate series in the long run. The co-integration test was done using Johansen trace statistics approach

Co-integration Analysis

Table 2: Co-integration Result

Series: *FDI GDPGR INF INVEST LENR RGCAF TOT TROP*

Eigen Value	Trace statistics	5 Percent Critical Value	Probability	Hypothesized No of CE(s)
0.778265	231.8400	159.5297	0.0000	None *
0.749287	167.0702	125.6154	0.0000	At most 1 *
0.688906	107.5820	95.75366	0.0060	At most 2 *
0.436432	57.37257	69.81889	0.3248	At most 3
0.340816	32.71351	47.85613	0.5727	At most 4
0.166567	14.79318	29.79707	0.7933	At most 5
0.116254	6.958473	15.49471	0.5825	At most 6
0.037518	1.644301	3.841466	0.1997	At most 7

Trace test indicates 3 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level

Source: *Author's computation (2018)*

Table 3:The normalized long run equation is thus estimated as:

FDI	GDPGR	INF	INVEST	LENR	RGCAF	TOT	TROP
1.000000	0.713785	2.721005	-1.451749	-1.129089	2.000059	1.919402	-0.543417
	(0.30411)	(0.25448)	(0.43301)	(0.35460)	(0.35855)	(0.83830)	(0.82774)

Source:*Authors' Computation (2018)*

Co-integration test result presented in table 2 above is the summary of co-integration analysis using Johansen trace statistics approach. This test statistic strongly rejects the null hypothesis of no co-integration, in favor of three co-integrating equations at 5 percent significance level. This depicts that even though there is no short run equilibrium equation as a result of the presence of non-stationary series in the model, on the long run there is equilibrium relationship, meaning linear combination of all the series will produce a stationary error term on the long run. The normalized long run estimation result presented in table 3 above shows the relative impact of each of the determinants selected from the principal component analysis on foreign direct investment inflow. The estimated long run equation presented in the table above reveal that GDP growth rate, inflation, real gross capital formation, and term of trade

positively influence the inflow of foreign direct investment into the country while the impact of impact of domestic investment, lending rate, and trade openness on foreign direct investment inflow into Nigeria is negative. Placing the determinants on same footing by analyzing their influence on foreign direct investment inflow into Nigeria based on standardized measure of change, the study discovered that one standard deviation change in the growth rate of gross domestic product has will lead to 0.713785 standard deviation increase in the inflow of foreign direct investment into the country,

one standard deviation increase in inflation on the long run engenders about 2.721005 standard deviation increase in the inflow of foreign direct investment into Nigeria. One standard deviation increase in real gross capital formation has the tendency of boosting foreign direct investment by about 2.000059. The result also reveals that increase in the term of trade by one standard deviation will spur increase in foreign direct investment by about 1.919402 standard deviations. However the result revealed on the contrary that increase in investment, lending rate and trade openness in the Nigeria by one standard deviation has the capacity to impede the inflow of foreign direct investment into the country by -1.451749 standard deviation for domestic investment, -1.129089 standard deviation for lending rate and -0.543417 standard deviation for trade openness. Comparative analysis of the determinants shows that among the determinants of foreign direct investment inflow in Nigeria, inflation is the most key determinant of foreign direct investment in the country followed by real gross capital formation, term of trade and the growth rate of gross domestic product on the positive side, with level of domestic investment, lending rate and trade openness on the negative side.

Analyzing the level of significance of the impact of each determinant using the standard error approach, in which it is expected that the standard error of corresponding to the coefficient of a significant variable will be so low such that half the estimated coefficient will still be greater than the standard error. From post estimation calculation of half the coefficients of variables it was discovered that the observed relative impact of all the variables on foreign direct investment tends to be significant except for trade openness.

Error Correction Model (ECM)

Table 4: Parsimonious (ECM)

Series: *FDI GDPGR INF INVEST LENR RGCAF TOT TROP*

Variable	Coefficient	Std Error	t-statistics	Prob.
D(FDI(-2))	0.431845	0.147412	2.929509	0.0062*
D(INF)	-0.121787	0.061801	-1.970633	0.0575
D(INF(-1))	0.113609	0.056096	2.025278	0.0512
D(INVEST(-2))	-0.211281	0.086543	-2.441346	0.0203*
D(LENR(-1))	-0.157571	0.096186	-1.638192	0.1112
D(RGCAF(-1))	-0.161969	0.110489	-1.465929	0.1524
D(TOT(-2))	-0.682920	0.258406	-2.642823	0.0126*
D(TROP)	0.366913	0.099703	3.680079	0.0009*
D(TROP(-2))	0.382615	0.215245	1.777575	0.0005*
ECM(-1)	-0.346621	0.118822	-2.917137	0.0064*

R-Squared=0.598377

Adjusted R-Square=0.485421

Durbin Watson stat=1.804516

The result of parsimonious error correction model presented in table 4.9 above showed the coefficient of the parameter estimates, alongside the standard errors, t-values and the probability values. The result reveals that there existed pronounced feed-back of the previous period disequilibrium from the long-run trend. Specifically, the result indicated feed-back of about 34%. Notably the reported ECM(-1) coefficient is significant and correctly signed, thus validating the presence of long run relationship amidst the variables and that about 34% of the short run inconsistencies

are corrected and incorporated into the long run dynamics annually.

Parsimonious estimation presented in the table above shows the short run relative impact of the determinants of foreign direct investment into the country. The reported that inflation exerts negative impact on the inflow of foreign direct investment in Nigeria. The relative short run impact of inflation on foreign direct investment stood at about -0.121787 standard deviation decrease in foreign direct investment for every one standard deviation increase in the value of inflation. Notably however there is positive dynamic interrelationship between inflation and foreign direct investment in Nigeria as captured by the reported standard deviation increase in foreign direct investment as a result of one standard deviation increase in the lagged value of inflation. Specifically, table 4.9 reveals that one standard deviation increase in the value inflation lagged by a period will culminate into about 0.113609 standard deviation increase in foreign direct investment in the country. The result shows that foreign direct investment exerts dynamically influence on itself, as evidence by the reported standard deviation increase in the current level of foreign direct investment as a result of one standard deviation increase in the lagged value of foreign direct investment in the country. Specifically, the result shows that one standard deviation increase in foreign direct investment lagged by a period will culminate into about 0.431845 standard deviation increase in the current level of foreign direct investment in the country.

Investigation of the short run connection between foreign direct investment and other determinants reveals only trade openness exert positive static and dynamic influence on the level of foreign direct investment in the country, other determinants exert negative dynamic impact on foreign direct investment on the short run. Specifically the estimated parsimonious model shows that a one standard deviation increase in the lagged value of domestic investment, lending rate, real gross capital formation and term of trade will reduce the level of foreign direct investment inflow into the country by 0.211281standard deviation, 0.157571 standard deviation, 0.161969 standard deviation, 0.682920 standard deviation for domestic investment, lending rate, real gross domestic product and term of trade respectively. comparative analysis of the influence of the identified determinant on the inflow of foreign direct investment into the country shows that on the short run term of trade, trade openness, as well as level of domestic investment influence inflow of foreign direct investment into the country more as compared to other determinants like inflation, lending rate and real gross capital formation. From the parsimonious result the reported probability statistics shows the level of significance of the short run impact of each of the determinants on foreign direct investment. The study discovered that domestic investment, term of trade and trade openness significantly influence the inflow of foreign direct investment into the country. The reported R-square of 0.598377 implies that about 60% of the systematic variation in foreign direct investment inflow into the country can be explained by included determinants such as inflation, domestic investment, lending rate, term of trade, real gross capital formation, and trade openness. Durbin-Watson statistics reported in the parsimonious result stood at 1.804516. The closeness of this statistics to 2 indicate acceptance of the null hypothesis of no significant correlation between successive values of error term.

Conclusion and Recommendations

This study established that macroeconomic instability in Nigeria has the tendency of impeding the level of Foreign Direct Investment inflow into the country on the short run while the negative influence fizzles out along the passage of time. Allocation of government national

resources to capital oriented expenditure in an attempt to ensure rapid development of infrastructural facilities in the country will undoubtedly spur the rate of Foreign Direct Investment inflow into the country especially on the long run when such expenditure had succeeded in stabilizing other macroeconomic variables. it was also succinctly concluded in the study that economic policy geared towards increasing the terms of trade of Nigeria either by increasing the bulk of exportable goods and services from all quarters of production (primary, secondary and tertiary), or reducing the level of importation into the country, has the capacity of spurring the inflow of Foreign Direct Investment into the country. Rate of growth of gross domestic product of Nigerian (market size prospect) is a key determinant of Foreign Direct Investment in the country, thought its relative influence pays homage to those of inflation, real gross capital formation, terms of trade, domestic investment and lending rate in Nigeria context. It was also concluded in the study that Foreign Direct Investment inflow in Nigeria has hither-to been provoked by declining level of investment. The study also established that if inflow of Foreign Direct Investment must get on the increase there must be a considerable level of openness to trade at least on the short run, which could bait prospective foreign investors. Hence government should extensively analyze the economy vis-a-vis developed economies in other to deduce the best economic management style that can guaranty that inflow of Foreign Direct Investment into the country add more values to the country than it take from it. There is need for government to ensure tranquility in the political interplay of the country in other to regulate the rate of social unrest, and politically driven insurgencies in the country. Finally, government should earmark greater percentage of the budget to capital expenditure in other to foster high level of capital formation through sustained infrastructural development.

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