THE GROWTH IMPACT OF FOREIGN PRIVATE CAPITAL IN NIGERIA

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Abstract

This study examined the impact of foreign private capital (which is the portmanteau for foreign direct investment and foreign portfolio investment) on economic growth in Nigeria, using secondary data for the period 1990 to 2019. Foreign private capital flow consists of net foreign direct investment and portfolio investment. The study used the gross domestic product as the independent variable and a proxy for economic growth while foreign direct investment, foreign portfolio investment, exchange rate, real interest rate, gross fixed capital formation, and inflation rate were used as explanatory variables. The data on the study variables covering the period 1990 to 2019 were collected from the CBN Statistical Bulletin. The study employed the descriptive statistics and empirical estimation techniques (which consist of Augmented Dickey Fuller, Johansen co-integration, and Error correction model as method of data analysis. The results of analysis revealed that all the explanatory variables used in the study had a positive and significant impact on economic growth. However, foreign private capital (foreign direct investment and foreign portfolio investment) was not significant at 5%. Based on the results of the empirical analysis, the study concluded that foreign direct investment and foreign portfolio investment have positive impact on the growth of the Nigerian economy. Nevertheless, the Federal government needs to create more conducive and investment-friendly climate to attract enough foreign investors into the productive sectors of the economy (by identifying and eradicating the root cause of terrorism in Nigeria and its sponsors). The study therefore recommended that the monetary and fiscal authorities in Nigeria should formulate formidable economic policies and create the enabling business environment that is capable of attracting foreign investment into Nigeria.

Keywords: Foreign direct investment, Foreign portfolio investment, Foreign private capital, GDP

1.0. Introduction

The pursuit of economic growth is one of the key macroeconomic goals of all the economies of the world. A developing economy can further experience growth by establishing its business presence in foreign countries, after satisfying domestic demand. The Establishment of a country's business presence in a foreign country by its citizens is mainly through foreign private capital investment which can either be by way of foreign direct investment or foreign

portfolio investment. Foreign investment in Nigeria could be traced back to the colonial period when the colonial masters established multinational corporations in Nigeria and used the country's human capital to further stimulate their economy's development (Macaulay, 2012).

Foreign direct investment (FDI) is an investment that allows foreign investor to have a voice in the management or control of a firm operating in a different country. Foreign direct investment (FDI) is an investment made to acquire a long-term managerial stake (typically 10% of voting shares) in a company that operates in a nation other than the investors' country (World Bank, 1996). Foreign direct investment is a direct investment into a nation's production or business by an individual or firm from another country, either via the purchase of a company in the target country or the expansion of an existing company's activities in that country. Foreign direct investment generally involves fusions, acquisitions, the establishment of new production facilities, reinvestment of earnings from transactions in foreign establishments and intra-company loans (Adeleke et al ,2014),

Foreign portfolio investment (FPI) on the other hand, is a type of foreign capital movement that involves the transfer of financial assets such as cash, stocks, or bonds across international boundaries for a profit. It happens when investors buy a majority stake in a foreign company or buy securities. The major distinction between FDI and FPI is that FPI is a short-term investment in a host country's shares and bonds and it is generally speculative while FDI involves a long term investment that requires the purchase or establishment of facilities and equipment for production. FPI is also characterized by the lack of influence over the affiliate company because it is frequently classed as an indirect investment while FDI is a direct investment (Jones & Wren, 2016).

The quest of nations to know the value of direct and indirect inflows of funds across international boundaries as shown in their balance of payments is germane in the determination

of value of their economic growth. Direct investment is the process of establishing factory as well as moving technology and capital to a host country while indirect investment involves investment in shares and bonds .in a foreign country, thereby shifting the burden of direct ownership of the company to other assets managers in a host country and reducing financial and tax complexities associated with direct ownership, although both direct and indirect investments in a country spur rapid economic growth. It is against this backdrop that the study examined the impact of foreign private capital on the growth of the economy.

2.0 Literature Review

Foreign direct funding represents a veritable supply of overseas alternate and technological transfer, mainly to a developing economy like Nigeria. It can be analyzed in terms of inflow of new fairness capital (change in foreign share capital), re- invested earning (unremitted profit), alternate and supplier's credit, net inflow of borrowing and other obligations from the parent company or its subsidiaries. Nigeria is seen as Africa's third largest FDI host country behind Egypt and Ethiopia.

Foreign Portfolio Investment (FPI) is a component of international capital flows that consists of the transfer of financial assets such as cash, stock, or international bond (Onuorah & Akujuobi, 2013). FPI occurs when investors acquire non-controlling stake in overseas firms or acquire foreign bonds, short-term securities or government bonds and long term securities. Foreign portfolio investment is referred to as indirect investment. It is anticipated that FDI will increase domestic capital, therefore increasing the productivity of domestic investments (Borensztein et al., 1998). Ireti and Clement (2022) used the ARDL bound test to examine the impact of FDI on the Nigerian economy. And found that FDI has a positive and significant impact on economic growth in Nigeria

The effects of FDI on the Nigerian economy for 1980-2009 are dealt with by Omankhanlen (2011). He experimentally studied whether the following growth determinants influencing the

current-account economy-balance (balance of payment), inflation, and foreign-direct investment influences. Chowdhury & Mavrotas (2006), using time series data for China, Malaysia and Thailand, look at a causal link between FDI and economic development. The study employed the causality test technique of Toda and Yamamoto. The findings show that GDP drives FDI in Chile, rather than vice versa, whereas there is significant evidence of bi-directional causation between the two variables for both Malaysia and Thailand. The impact of FDI on Nigerians' economic growth has been explored by Olokoyo, (2012). The study used a regression approach for testing time series data from 1970 to 2007 using Ordinary Least Square (OLS). The model assumes that the economic progress of Nigeria is related to the real gross domestic product (RGDP), Foreign Direct Investment and foreign portfolio investment. The findings of the regression analysis clearly do not support the idea, as already indicated by existing research, of a strong relationship between FDI and economic development in Nigeria. Although the conclusion does not indicate that FDI is irrelevant, the finding of the study decreases confidence and shows that FDI in Nigeria has an independent growth effect.

Cuadros, Orts & Alguacil (2001) investigated the nature of the causal linkages in Latin American nations, Argentina, Brazil and Mexico from mid-seventies to 1997, between production levels and foreign direct investment. The study shows a considerable influence on economic growth and trade in the examined nations from foreign direct investment using the Vector Autoregressive Model (VAR). The impacts of foreign direct investment on development from 1980 to 1997 are examined by Ayashagba & Abachi (2002). The conclusion from the study showed that direct foreign investment has substantial impact on economic growth in Nigeria. The research indicates, however, that the LDCs, in particular in Nigeria, are not completely beneficial in foreign direct investment. Makki and Somwaru (2004), in another line of inquiry, examined the roles of foreign direct investment and trade within the endogenous growth theory framework for developing nations on economic growth. The study employed

cross-sectional data on a sample of 66 developing provinces across three decades. The results indicated that external direct investment and trade contribute to the development of economic growth in developing nations and that foreign direct investment is frequently the major conduit for the transfer sophisticated technologies to developing countries. Felix (2021) submits in his empirical study that FDI has positive and significant influence on real economic growth in Nigeria.

The influence of FPI on economic growth was analyzed with annual time series data from the Nigerian economics by Saibu and Keke (2014). The study used approaches from the Co-integration and Error Correction Mechanism (ECM) to evaluate the link between foreign investment and economic development and to derive policy conclusions from the association discovered. The analysis found that 116% and 78% of past imbalance between long-term economic development and foreign private investments received significant response. However, a tiny fraction (22%) of the net capital inflows invested contributed substantially to economic growth in the economy of Nigeria.

Data from the panel from 40 developing countries from 1975 to 1995 have been utilized by Bailliu and Jeannine (2000). This study, which shows that capital inflows foster greater currency growth over and above any effect on the financing rate, but only in economies where the banking region has reached a sure stage of development, was based on a model that has the potential for endogenous explanatory variables and result.

3.0 Methodology.

The data used in the study are secondary data sourced from the Central Bank of Nigeria (CBN) statistical bulletin in 2020. The study employed the Ordinary Least Square (OLS) and other empirical estimation techniques such as Augmented Dickey Fuller Test (ADF), Johansen Co-integration Test, Error Correction Model (ECM), Unit Root Test and Granger Causality Test to examine the impact of foreign direct investment and portfolio investment on economic

growth in Nigeria from 1990 to 2019.

3.1 Model Specification

The model of the study is hereby specified in a functional form as follows:

GDP =f (FDI, FPI, EXR, INT, GFCF, INFR) ……..……Equ i

Rewriting the model in linear form

$GDP_t = \beta_0 + \beta_1 FDI_t + \beta_2 FPI_t + \beta_3 EXR_t + \beta_4 INT_t + \beta_5 GFCF_t + \beta_6 INFR_t + \mu_t$ ….Equ ii

Rewrite the model in Log Linear Form

$LOGGDP_t = \beta_0 + \beta_1 LOGFDI_t + \beta_2 LOGFPI_t + \beta_3 LOGEXR_t + \beta_4 LOGINT_t + \beta_5 LOGGFCF_t + \beta_6 INFR_t + \mu_t$

Equ iii

Where:

GDP = Gross Domestic Product, FDI = Foreign Direct Investment, FPI = Foreign Portfolio Investment, Real Exchange Rate, INT= Real Interest Rate, GFCF= Gross Fixed Capital Formation, INFR=Inflation Rate

β_0 = Slope of the regression

$\beta_{1,2,3}$ .... = Coefficients of the variables

μ = Error term

3.2 Apriori Expectations

This involves theoretical expectation drawn from economic principles and theories of growth. These will be used to determine the a-priori signs and magnitudes of the parameters. As regards the signs of the parameters, the following are expected.

$$GDP_t = \beta_0 + \beta_1 FDI_t + \beta_2 FPI_t + \beta_3 EXR_t + \beta_4 INT_t + \beta_5 GFCF_t + \beta_6 INFR_t + \mu_t$$

$$f^i(FDI) > 0,\ f^i(FPI) > 0, (EXR) < 0,\ f^i(INT) < 0, f^i(GFCR) > 0, (INFR) < 0$$

It is expected that increase in foreign direct investment, foreign portfolio investment and gross fixed capital formation will spur economic growth while high interest rate, exchange rate and inflation rate will have adverse effects on economic growth.

4.0 Data presentation and analysis.

The data collected and analysed are presented and interpreted in this section. The variables used in this study are, real Gross Domestic Product (GDP), Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), Exchange Rate (EXR), Real Interest Rate (INT), Gross Fixed Capital Formation (GFCF), Inflation Rate (INFR).

4.1 Descriptive Statistics

Table 4.1: Descriptive Statistics of the Variables

	GDP	FDI	FPI	EXR	INT	GFCF	INFR
Mean	36055.83	492.9486	352.1264	115.2945	5.468241	4679.846	0.184955
Median	17321.30	258.4000	51.07913	125.8100	6.050000	863.0726	0.125600
Maximum	127762.6	1360.300	2604.330	306.0800	80.74900	24550.24	0.728400
Minimum	499.6769	10.43600	-698.2908	8.040000	-31.45000	40.12131	0.053900
Std. Dev.	39581.11	444.9983	739.1168	83.09417	17.99952	6679.069	0.171429
Skewness	0.914564	0.465044	1.867570	0.576466	2.228199	1.397059	2.019633
Kurtosis	2.496028	1.769770	5.888509	2.995632	12.15070	3.964203	5.907723
Jarque-Bera	4.349635	2.874057	26.93948	1.606201	125.1770	10.55694	29.93105
Prob	0.113629	0.237633	0.316765	0.447938	0.074411	0.081070	0.067651
Obs	30	30	30	30	30	30	30

Source: Eviews output, 2021

The descriptive statistics indicated that the mean values of variables (GDP, FDI, FPI, EXR, INT, GFCF and INFR) were 36055.83, 492.9486, 352.1264, 115.2945, 5.468241, 4679.846 and 4679.846 respectively. The maximum values of the variables between the study periods were 127762.6, 1360.300, 2604.330, 306.0800, 80.74900, 24550.24 and 0.728400 for GDP, FDI, FPI,

EXR, INT, GFCF and INFR respectively. The standard deviations for each variable indicated that data were widely spread around their respective means. Generally, skewness measures the symmetry of the distribution and explains whether the mean is at the centre of the distribution with a skewness value 0 (if considered normal). Therefore, negative value indicates a skew to the left and a positive value indicates a skew to the right (right tail is longer than the left one. The descriptive statistics from Table 4.1 revealed that the variables were all asymmetrical. In this study, all variables are positively skewed, meaning that their right tails are longer than their left ones.

The study used the Kurtosis as a statistical measure to ascertain the extent to which the data was peaked or flat in relation to the normality of the distribution. A normal distribution has a value of 3. A kurtosis >3 indicates a sharp peak with heavy tails closer to the mean (leptokurtic). A kurtosis < 3 indicates the opposite a flat top (platykurtic). Looking at the results shown in Table 4.1, the distributions of some of the variables such as GDP, FDI, EXR were platykurtic while the distributions of other variables such as FPI, INT, GFCF and INFR were leptokurtic and the p-value of the Jarque-Bera test statistic for all variables were lesser that the 0.05 critical values. The statistical implication of the Jarque Bera test statistic indicated that the null hypothesis was rejected, and the alternative hypothesis was accepted, since the residuals were normally distributed.

4.2: Unit Root Test

Times series data useful for decision making must be stationary, as non-stationary data leads to misleading inferences. Therefore, the unit root test is required to test for stationary nature of the time series data employed in this study. The Augmented Dickey Fuller (ADF) test unit root tests were employed for this purpose. Table 4.2 shows the result of the test for the ADF unit root test.

Table 4.2.: Augmented Dickey-Fuller Test

Variabls	Test at Levels			Test at 1st difference			Inference
	ADF statistic	t-statistic	Prob.*	ADF statistic	t-statistic	Prob.*	
GDP	-2.448528	-2.981038	0.1391	-3.188540	-2.976263	0.0147	I(1)
FDI	-2.104579	-2.967767	0.2444	-7.612640	-2.971853	0.0000	I(1)
FPI	-1.570612	-3.098896	0.4704	-4.902736	-3.098896	0.0021	I(1)
EXR	-1.837231	-2.971853	0.3556	-4.879361	-2.976263	0.0006	I(1)
INT	-3.226044	-3.320969	0.0567	-3.912708	-2.986225	0.0065	I(1)
GFCF	-0.230117	-2.967767	0.9237	-5.922371	-2.976263	0.0000	I(1)
INFR	-2.330902	-2.967767	0.1696	-4.434413	-2.971853	0.0016	I(1)

Source: E-views output 2021

The ADF test shows that all the variables are not stationary at levels, as the absolute value of their respective t-statistics are less than the absolute 95% critical value in both tests. However, after testing them at their first difference they were all stationary. This implies that all the variables are integrated of the same order 1(1).

4.3. Co-integration Test

Two or more times series variables are co-integrated if they share a change of the average value. Nelson and Plosser (1982) posit that time series data evolve over time such that their mean and variance are not constant.

Table 4.3: Long-run Co-integration relationship

Normalized cointegrating coefficients (standard error in parentheses)

GDP	FDI	FPI	EXR	INT	GFCF	INFR
1.000000	-3.346144	0.499498	137.4184	773.1969	0.791398	1991.574
	(4.50217)	(2.41439)	(36.8177)	(106.239)	(0.38653)	(9194.21)

Source: E-views output 2021

Table 4.3 also shows the long-run relationship between the variables used. The normalized co-integrating coefficient for foreign direct investment (FDI) is negative with values of -3.346144.

Also, foreign portfolio investment (FPI) interest rate, exchange rate (EXR), interest rate (INT), gross fixed capital formation (GFCF) and inflation rate (INFR) had a long run positive relationship with the gross domestic product (GDP). Thus, in the long run, foreign direct investment (FDI) is expected to increase as gross domestic product (GDP) and vice-versa. foreign portfolio investment (FPI) interest rate, exchange rate (EXR), interest rate (INT), gross fixed capital formation (GFCF) and inflation rate (INFR) on the other hand is expected to increase with increase in gross domestic product (GDP) and vice versa in the long run.

4.4: Error Correction Model

This section deals with examination of the relationship that exist between the variables identified in the study. The model formulated earlier is tested using the error correction model.

Table 4.4: Error Correction Model

Dependent Variable: D(LGDP)

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.014871	0.011935	-1.246001	0.3012
D(LGDP(-1))	0.658188	0.074632	8.819122	0.0031
D(LFDI(-1))	0.035834	0.016388	2.186530	0.0466
D(LFPI(-1))	0.009344	0.002594	3.602370	0.0367
D(LEXR(-1))	0.178817	0.034801	5.138189	0.0143
D(LINT(-1))	0.046435	0.003555	13.06156	0.0010
D(LGFCF(-1))	0.130975	0.010017	13.07565	0.0010
D(LINFR(-1))	0.066079	0.010080	6.555704	0.0072
ECT(-1)	-0.588276	0.142786	-4.119994	0.0259
R-squared	0.995283	Mean dependent var		0.133905
Adjusted R-squared	0.982703	S.D. dependent var		0.056554
F-statistic	79.11914	Durbin-Watson stat		2.081551
Prob. (F-statistic)	0.002108			

Source: E-views output, 2021

The coefficient of the speed of adjustment towards equilibrium in the real GDP equation in table 4.3.3 is -0.59, this implies that significantly, 59% rate of errors are corrected in each period before the model returns to long run equilibrium. The periods it will take for the errors to be corrected and the model to converge in the long run.

The error correction coefficients are the short run coefficients of the lagged variables. It is required that for a significant relationship to exist among the variables, the probability of each of the coefficient must be lesser than 5% critical value. The results suggest foreign direct investment (FDI), foreign portfolio investment (FPI), exchange rate (EXR), interest rate (INT), gross fixed capital formation (GFCF) and inflation rate (INFR) positively correlate with GDP in the one lagged period. These findings imply that a change in foreign direct investment will lead to a greater change in economic growth in the short run. The finding of the study also corroborates the findings of Igberaese (2015). Furthermore, the R-squared (0.982703) which is the coefficient of determination shows that the independent variables cumulatively accounts for up to 98% of the GDP equation, this implies that the GDP model is fit, and the explanatory variables are appropriately selected.

Table 4:5 Granger causality test

Pairwise Granger Causality Tests			
Date: 04/17/21 Time: 02:04			
Sample: 1990 2019			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Probability
D(LOGGDP)) does not Granger Cause D(LOG(FDI))	30	0.92392	0.49884
D(LOG(FDI)) does not Granger Cause D(LOG(GDP))		2.97720	0.03037
D(LOG(FPI)) does not Granger Cause D(LOG(GDP))	30	1.90521	0.13222
D(LOG(GDP)) does not Granger Cause D(LOG(FPI))		2.69857	0.04562
D(LOG(GDP)) does not Granger Cause D(LOG(GFCF))	30	0.32706	0.85712
D(LOG(GFCF)) does not Granger Cause D(LOG(GDP))		3.08594	0.03402

Source: Eviews Output, 2021.

In table 4.5, the direction of causality between changes in foreign direct investment, foreign portfolio investment and gross domestic product run from changes in one variable to another at 5% critical level. This is because we rejected the null hypothesis which states that changes

in foreign direct investment and foreign portfolio investment does not Granger causes changes in gross domestic product since the probability value is less than 0.05. Granger causality was also done to other variables used in the study.

4.9. Discussion of Findings

The findings from the study show that FDI has significant impact on economic growth in Nigeria. The ECM coefficient further shows that FDI is positively associated with economic growth (GDP). This implies that an increase in FDI will spur economic growth in Nigeria. The finding also shows that Foreign Portfolio Investment has a positive and significant impact on economic growth in Nigeria. This further suggests that an increase in foreign portfolio investment will lead to an increase in economic growth in Nigeria Also, the findings from the study show that gross fixed capital formation has a positive and significant impact on economic growth in Nigeria. The implication of this finding is that an increase in gross fixed capital formation will engender a rise in economic growth in Nigeria. Again, the ECM coefficient further shows that exchange rate is positively associated with economic growth in Nigeria. This suggests that an increase in exchange rate will bring about an rise in economic growth in Nigeria. Lastly, the findings from the study also revealed that both interest rate and inflation rate have positive and significant impact on economic growth in Nigeria. This indicates that an increase in the rates of interest and inflation will bring about a rise in gross domestic product in Nigeria.

5.0 Conclusions and Recommendations.

From the regression result of the study, foreign private capital has both significant and positive impact on the economic growth in Nigeria. This implies that foreign private capital (a combination of foreign direct investment and foreign portfolio investment) spurs economic growth and fosters increased economic activities in Nigeria. This means that a well-functioning bank encourages foreign private capital inflows through technological innovation. From the findings above, the study therefore concludes that foreign private capital spurs economic

growth in Nigeria and hence recommends that the government should initiate policies that will promote long-rum growth of the economy and capital market development, since foreign private capital has a positive feedback effect on the economic growth of Nigeria. This will go a long way in attracting long-term fund To the country. The government should also put in place, a stable macroeconomic policies management that will enhance the performance of the financial sector.

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