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A Critical Assessment of the Nexus between Foreign Direct Investment and Economic Growth in the Nigerian Context



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ABSTRACT: Foreign Direct Investment (FDI) is the interaction of the rest of the world with a domestic economy. These interactions influence economic growth, depending on a number of determinants, such as: foreign trade policy, corruption, security, form and system of government, exchange rate, monetary and fiscal policy, economic equipment, infrastructure and availability of human capital, etc. The amount of FDI a sector will attract will be empirically determined, and its importance to the country will go a long way in determining the country's focus on continued economic growth. This study examined the impact of FDI on Nigeria's economic growth. The study focused on two key variables, namely FDI inflow and Nigeria's economic growth. Economic growth, the independent variable, is represented by three substitutes; Gross domestic product, gross investment and labor productivity. The investigation period extended from 2010 to 2019. In this study, the correlative research design was chosen. Descriptive statistics, Pearson's correlation, and regression analysis with SPSS 23 were used to analyze the secondary data collected from the National Bureau of Statistics' Reports. The study found out that FDI has a negative but insignificant association with Nigeria's economic growth. The study, therefore, made the following recommendations: the government should encourage economic growth through start-ups, entrepreneurship and innovation; Nigeria should invest and accumulate knowledge, human/physical capital and promote the adoption of technologies; finally, domestic savings should be mobilized by the government through tax cuts, job creation, and improving the financial system to increase capital formation.

KEYWORDS: Capital Formation, Gross Domestic Product, Investment Behavior, Labour Productivity, Portfolio Investment, Trade Policy

INTRODUCTION

Economic activity in the world today is growing at an alarming rate with the increasing involvement of many countries around the world. A notable feature of the world economy since World War II has been the globalization of economic activity. A breakdown of the inflow of foreign direct investment (FDI) into the various sectors shows that the inflow of foreign direct investment (FDI) into the various sectors shows that the inflow of foreign direct investment (FDI) into the various sectors shows that the inflow of foreign direct investment (FDI) into the oil sector has had a dominant position for years and has a low inflow in all other sectors. Foreign direct investment is crucial for developing and emerging countries in Nigeria. Nigerian companies need the funding and expertise of multinational corporations to expand their international sales. They need private investments in infrastructure, energy and water to increase jobs and wages. Foreign direct investment benefits the entire Nigerian economy. It offers the best returns with the lowest risk, and capital flows into the companies with the best growth prospects (Robbock & Simmons, 2019).

International trade shows the extent of globalization with increasing spatial dependencies between elements of the world economy and their degree of integration. These interdependencies imply numerous relationships in which flows of capital, goods, raw materials, people and services are built up between regions of the world. The nature of what can be termed international trade has changed, particularly with the emergence of global value chains. This trend obviously reflects the strategies of multinational corporations positioning their manufacturing facilities to reduce costs and maximize new market opportunities. About 80% of world trade takes place within value chains managed by multinational corporations. International trade has grown faster as a result. The structure of global trade flows has shifted as many developing countries have a growing participation in international trade with an increasing proportion of manufacturing activities (Atorishe & Nsouli, 2018).

However, the increase in trade has exposed the need for international accounting; the harmonization and convergence of accounting standards and practices; and a growing number of professionally qualified accountants. The globalization of accounting rules and practices has become so important that narrow national views on accounting and financial reporting can no longer be sustained (Robbock & Simmonds, 2018). It means integrating a country's economy into the world economy. The

globalization of an economy is influenced by factors such as; the phenomenal growth of communication resulting from the rapid development of communication technology; improved transportation services; a level of economic activity that has outgrown national markets through industrial and trade groupings crossing national borders, etc. From a financial reporting perspective, the two most important aspects of globalization are international trade and the inflow of FDI (Munim, Ziaul & Schramm, 2018).

Hence, the need for comparative international accounting to facilitate international trade. Foreign direct investment is typically made in open economies that offer a skilled workforce and above-average growth prospects for investors, as opposed to highly regulated economies (Oyinlola, 2015). The volume of exchanges of goods and services between nations is playing an increasing role in wealth creation, mainly by offering economic growth opportunities in new regions and by lowering the cost of a wide range of manufactured goods. Growth of this magnitude was made possible by globalization. In a global economy, no nation is self-sufficient; Each nation is involved in trade at different levels, in order to sell what it produces, to buy what it lacks, and in some sectors of the economy to produce more efficiently than its trading partners (Kolawole & Henry, 2009).

Foreign direct investment (FDI) from developing countries has risen sharply over the past two decades. Many countries and continents (especially developing countries) now view the attraction of FDI as an important element of their economic development strategy. In Africa, the rate of FDI inflows continues to rise, and several African countries (e.g. Nigeria, Angola, Côte d'Ivoire and South Africa) are making efforts to improve their business climate out of a desire to attract FDI. Nigeria is one of those economies with great demand for goods and services and has attracted foreign direct investment into the communications industry over the years. As a country, Nigeria is qualified to be a major recipient of FDI in Africa because of its natural resource base and large market, and is in fact one of the top three African countries to have consistently received FDI over the past decade. As a developing country, Nigeria is plagued by controversy over its suitability as a receptive host for Foreign Direct Investment (FDIs), considering various conditions associated with developing countries in Africa. For many reasons, ranging from the country's negative image to currency shortages and an unfriendly macroeconomic political environment, FDI is sparsely concentrated in Nigeria. However, this study tries to determine that, despite these factors, Nigeria has sufficient natural resources and a favorable climate for FDI (Oseghale & Amonkhienan, 2017).

Multinational corporations are constantly on the lookout for profitable investment opportunities. You are looking for opportunities for capital appreciation, income returns, and sustainable growth. For some companies, opening new firms and manufacturing facilities in another country is attractive because of the opportunities for larger markets, cheaper production, labor, and lower or less taxes, while most investors who want to diversify their investments across multiple countries are attracted by the rising share price abroad. Other reasons for foreign investment could be: lower currency risk, transaction costs and a favorable political climate (Rodriguez, 2017).

Investors (companies and individuals) are risk averse. They make their capital and assets available for investment and therefore carry several risks that could affect their investments. Since they are willing to make risky investments and potentially lose money, they try to maximize their returns. However, the host country (Nigeria) is exposed to exploitation by foreign companies. As investors make profits and maximize their investments, this study also looked at the extent to which these investments contribute to the growth of the Nigerian economy. However, the question that arises is whether these FDIs are actually contributing to Nigeria's economic growth. Therefore, this study focused on seeking answers to this all-important question in the literature by examining the impact of foreign direct investment on economic growth and the development of the Nigerian economy. The following research questions were suggested in this study:

1. How do foreign direct investment inflows affect the gross domestic product in Nigeria?

2. To what extent has the influx of foreign direct investment affected gross investment in Nigeria?

3. How does foreign direct investment inflows affect labor productivity in Nigeria?

The following hypotheses were formulated for the study:

Ho₁: There is no significant relationship of foreign direct investment inflows on gross domestic product in Nigeria.

Ho₂: Foreign direct investment has no significant effect on capital formation in Nigeria.

Ho₃: There is no significant effect of foreign direct investment inflows on labor productivity in Nigeria.

The main aim of the study was to determine the impact of foreign direct investment on economic growth in Nigeria.

REVIEW OF RELATED LITERATURE

Nigeria is endowed with rich human and natural resources due to its wealth of economic potential. It is ironic that Nigeria is still considered to be one of the poorest economies in the world. It is true that Nigeria has great economic potential, but its low economic naivety leaves it disadvantaged and at the end of the increasingly competitive global market (Achugamonu, Ikpefan, Taiwo, & Okorie, 2016).

For the past four decades, Foreign Direct Investment (FDI) in regions (Nigeria, South Africa, Ghana, Niger, Cameroon and Rwanda) in Africa has been unpredictable and chaotic. The volume of FDI in these African regions has increased relatively over the past four decades. However, the flow pattern was a sharp increase, followed by a sharp decline in subsequent years. The influx of foreign direct investment into African regions has also decreased over the years compared to other developing regions of the world; therefore, the fluctuations are considered here to be relative (Helpman, 2015).

It is found that there is a strong correlation between the growth situation in developing countries and their success in attracting foreign direct investment (OECD, 2012: 16) (ORCD, 2012). Unlike other sources of foreign investment, according to Obwona and Arios (2010), FDI is accompanied by the following benefits:

- 1. The provision of management knowledge and skills, including organizational skills and access to the foreign market.
- 2. It provides a range of goods and services to the residents of the recipient country.
- 3. It enables technology transfer from developed economies.

The above and several other benefits of FDI have led developing countries, including Nigeria, to view it not only as a conduit for increasing overall investment but also as an engine of economic growth. This could explain past and present moves by developing countries to attract FDI by removing structural barriers and encouraging foreign investors. These include incentives such as income tax exemptions, import duty exemptions and subsidies for foreign companies. In Nigeria, for example, the Nigeria Investment Promotion Decree (NIPC) was largely enacted to encourage foreign investment and the use of capital in the productive sectors (manufacturing, agriculture, oil and gas, construction, transportation and trade), promote and coordinate to improve the economy (Kindleberger, 2014).

Concept and Meaning of Foreign Direct Investment

According to Laura (2013), Foreign Direct Investment (FDI) is an investment in the form of a controlling stake in a company in one country by a company based in another country. Broadly, foreign direct investment includes "mergers and acquisitions, building new facilities, reinvesting profits earned from overseas operations, and intra company loans.

According to Nwankwo (2017), FDI is a type of investment, be it in tangible or financial assets, across the investor's borders with the aim of maximizing the objective function of investors, that of individuals, companies or the government.

According to the World Bank (2016), FDI is an investment made to acquire a permanent management stake (usually 10% of the voting rights) in a company that is based in a country other than that of the investor. Such investments can take the form of either Greenfield investments (also known as mortar and brick investments) or mergers and acquisitions (M&A), which are the acquisition of existing interests rather than new investments. FDIs include not only mergers and acquisitions and new investments, but reinvested profits and loans and similar capital transfers between parent companies and their affiliates. Countries could host FDI projects in their own country as well as participants in investment projects in other countries.

According to the OECD definition (2012:16), FDI reflects the goal of obtaining permanent participation by a resident of one economy (direct investor) in a company that is based in another economy (the direct investment company). The enduring interest implies the existence of a long-term relationship between the direct investor and the direct investment company and a significant influence on the management of the latter.

The Financial Times (2017:1) defines FDI as an investment from one country to another (usually by corporations rather than governments) that involves setting up operations or acquiring property, plant and equipment, including interests in other companies. It is the purchase or construction of income generating assets abroad that gives rise to control over the operation or organization.

The Concept of Economic Growth

Economic growth is defined as the increase in a nation's per capita income and involves analyzing this process, particularly in quantitative terms, with a focus on the functional relationships between the endogenous variables; in a broader sense, it is about the increase in the gross domestic product and the gross national product (Haller, 2012).

Basically, economic growth is the process of enlarging an economy, whereby the macroeconomic indicators, in particular GDP, per capita income, in ascending, but not necessarily linear, direction with positive effects on the economic-social sector, while development shows us how growth affects society by increasing the standard of living (Angelescu & Socol, 2015).

According to Haller (2012), economic growth can be: positive, zero, negative: positive economic growth is recorded when the annual average rhythms of the macro indicators are higher than the average growth rhythms of the population. If the annual average growth rates of macroeconomic indicators, especially GDP, correspond to those of population growth, then we can speak of zero economic growth.

Negative economic growth occurs when the rhythms of population growth are higher than those of the macroeconomic

indicators. Economic growth is a complex, long-term phenomenon subject to constraints such as: excessive population growth, limited resources, inadequate infrastructure, inefficient use of resources, excessive government intervention, institutional and cultural models that make growth difficult, etc.

Economic growth is achieved through the efficient use of available resources and through an increase in a country's production capacity. It facilitates the redistribution of income between the population and society. The cumulative effects, the small differences in the rates of increase, become large for periods of a decade or more. In a dynamic, growing society, it is easier to redistribute income than in a static one. When economic growth is high, the production of goods and services increases, and consequently the unemployment rate decreases, the number of job opportunities increases and the standard of living of the population increases (George, 2012).

Foreign Direct Investment and Gross Domestic Product

FDI play an important role in influencing gross domestic product growth. Developing countries have placed great emphasis on FDI since the late 1980s and especially the 1990s. Assuming that the flow of investment from developed countries has a necessary consequence on economic growth; More and more programs and policies developed in countries should attract emerging economies. It is thus agreed that FDI generates economic growth and that there is a clear cause and effect relationship with common sense. This is because when a country has an inflow of FDI, its GDP will grow (Encinas-Ferre & Villegas-Zermeño, 2015). Foreign Direct Investment and Gross Capital Formation

Bakare (2011) describes capital formation as the proportion of current income that is saved and invested in order to increase future production and income. It usually results from the acquisition of a new factory along with machinery, equipment and all productive capital goods. Capital formation is synonymous with increasing a nation's physical capital stock by investing in social and economic infrastructure.

Economic theories have shown that FDI plays a crucial role in capital formation (Ugwuegbe, Modebe & Onyeanu, 2014). This view, termed capital fundamentalism by Yotopoulos and Nugent (2016), is reflected in the macroeconomic performance of many countries. It is clear that even mildly robust growth rates can only be sustained over long periods if countries are able to keep capital accumulation within a significant portion of GDP.

Foreign Direct Investment and Labor Productivity

Another variable of economic growth is labor productivity. Economists and policymakers are interested in the factors of production used in producing such outputs and the efficiency associated with those inputs. The productivity of the inputs used in the production process, for example capital and labor, is an important indicator of the relationship between macroeconomic performance and other aspects of the economy, such as the labor market, money market, capital market, etc. (Bogheana & Michaela, 2015).

Thiam (2018) analyzes the relationship between FDI and labor productivity in 14 countries in Sub-Saharan Africa, assuming that there is a direct relationship. One effect of FDI is believed to be the increase in average labor productivity due to the introduction of new production technologies and the introduction of efficient management. It is very important to quantify these effects because of the costs involved, which tend to attract FDI in the host country.

THEORETICAL REVIEW

The Eclectic Theory of FDI

The theory seeks to provide a general framework for determining the size and patterns of both foreign-owned production operated by the country's own companies and domestic production owned or controlled by foreign companies. Borenzstein, De Gregoria and Lee (2018) claim that the eclectical theory of international production extends the theoretical framework by including both home and host country features as international explanatory factors.

The eclectic paradigm, also known as the OLI model or OLI framework (OLI stands for Ownership, Location, and Internalization), is a further development of the internalization theory; it argues that the size, shape, and pattern of international production are determined by the configuration of three benefits perceived by businesses. First, Ownership (O) advantage; 2nd, Location (L); and 3rd Internalization (I) advantage in order for the firm to transfer its ownership advantages across national borders.

- 1. Ownership-Specific Advantages: Refer to the competitive advantages of companies seeking Foreign Direct Investment (FDI). The greater the competitive advantages of the investing firms, the more likely they are to participate in their foreign production.
- 2. Location Specific Advantages: Location attractions refer to the alternative countries or regions to carry out the value

creation activities of multinational companies (MNEs). The more the immobile, natural or created resources that companies must use together with their own competitive advantages favor a presence in a foreign location, the more companies will choose to increase or use their specific advantages by engaging in foreign direct investment.

3. Internalization - Specific Advantages: Companies can organize the development and use of their core competencies. The greater the net benefits of internalising cross-border intermediate product markets, the more likely a company will prefer to produce itself abroad rather than license the right to do so.

The theoretical framework on which this study is based is the Eclectic Theory of FDI, which argues that the scope, form, and pattern of international production are determined by the configuration of three groups of benefits (ownership, location, and internalization) as defined by the company.

Empirical Review

Andy, Isiaq & Rowland (2020) examined how FDI improved economic growth by using data from 30 leading global economies between 1998 and 2017, as well as appropriate gross fixed capital formation to complement FDI for sustainable economic growth potential. To sum up, studies examining the impact of FDI on productivity growth in Nigeria are still sparse. And, in particular, empirical studies of the effects of FDI inflows into the Nigerian economy are still a topic of discussion in a developing economy like Nigeria, which aims to achieve all 17 United Nations Sustainable Development Goals by 2030, contributing to knowledge on this aspect.

Trang, Duc, Anh and Thang (2019) also carried out a study on foreign direct investment and economic growth. The study aimed to assess and estimate the impact of FDI on economic growth in 30 developing countries that belong to the lower middle income group in 2000-2014, in both the short and long term. The results of this study show that FDI stimulates economic growth in the long term, but has a negative impact on the countries examined in this study in the short term. Other macroeconomic factors also play an important role in explaining economic growth in these countries. The money supply has a positive effect on growth in the short term, while overall lending to the private sector has a negative effect. In addition, long-term economic growth is driven by the money supply, human capital, total domestic investment, and domestic private sector lending.

Borensztein, De Gregoria & Lee (2018) examined the role of FDI in the economic growth of developing countries. Their results show that FDI has been an effective mediator between technology and economic growth. They also stated that the role of FDI in an economy would be more effective if the country in question had a high human capital.

A study by Seng (2017) found a positive growth effect of FDI in Colombia in 1980. Wajid & Zhang (2017) analyzed the contribution of FDI to economic growth in Pakistan. The study found a long-term significant positive effect of FDI on economic growth in Pakistan. Based on the co-integration test, the study also found that economic growth and FDI are linked over the long term, and FDI had a significant impact on the labor force. In the short term, however, there was no significant impact due to adverse political frameworks and political measures creating uncertainties in the economy and in return on investment.

Studies by Akanegbu and Chizea (2017) and Ozekhome (2017) have shown that economic growth is positively related to the inflow of foreign direct investment into Nigeria. In contrast to the positive relationship between FDI and economic growth mentioned above, a negative one was found in Jyun-Yi & Chih-Chiang (2017). They found no relationship between FDI and economic growth for 62 countries in the period 1975–2015.

Yotopoulos & Nugent (2016) claimed that foreign direct investment was one of the major drivers of economic growth in 20 countries of the Organization for Economic Co-operation and Development (OECD). In addition, their empirical results showed that in these countries the level of development of the financial markets was important for the relationship between FDI and economic growth.

The results of Ndiaye & Xu (2016) showed that foreign direct investment had a positive influence on economic growth in the countries of the West African Economic and Monetary Union (WAEMU) and on trade and liberalization, economic cooperation and the increase in jobs and prosperity through an improved business environment.

Jilenga, Xu & Gondje-Dacka (2016) used an autoregressive distributed lag model and a bounds test approach to examine the effects of external debt and FDI on the growth of the Tanzanian economy. The results showed that debt fueled economic growth over the long term, while FDI had a negative impact. The results show no directional causality between debt and economic growth or between FDI and economic growth.

METHODOLOGY

For the purposes of this study, a correlative research design was chosen. Secondary data from reports from the NBS Reports and some other websites from 2010-2019 was used for the study. The choice of this method was determined by the particular variables

used for the purpose of the study and the need to establish statistical analysis techniques necessary to study the relationship between variables.

The study used descriptive statistics and Pearson's correlation coefficient to analyze the data in this study to determine the relationship between and the effect of FDI on Nigeria's economic growth. The study also performed panel data regression analysis to test the hypotheses in this study. This is because the study combines time series and cross-sectional data. The study also used descriptive statistics, Pearson's correlation coefficient, and regression analysis to scientifically estimate the data using the Statistical Package for Social Sciences (SPSS) 23.

Model Specification

The model for this study focused on the impact of the foreign direct investment inflows on economic growth in Nigeria. The model specification is as follows:

The functional relationship is given as

NFDII=f (RGDP, LP, GCF) ------ (1)

The econometric relationship to be estimated is specified as:

NFDII= $β_0$ + $β_1$ RGDP+ $β_2$ LP+ $β_3$ GCF +U_t ------(2)

Where: NFDII= Net foreign direct investment inflows

RGDP= Real gross domestic product

LP= Labour productivity

GCF= Gross capital formation

Model Estimation

The key variables in the study are grouped into dependent variables, namely economic growth (EC) represented by real gross domestic product (RGDP), labor productivity (LP) and gross capital formation (GCF), while net foreign direct investment inflows (NFDII) are the independent variable. The data of the variables used for the study are estimated in detail in the model specification below:

$\Delta \sum \text{NFDII} = \beta_1 + \beta_2 t + \beta_3 \sum \text{NFDII}_{t-1} + \sum_{t-1}^{m} \alpha_t \Delta \text{NFDII}_{t-1} + U_t - \dots - (3)$
$\Delta \sum RGDP = \beta_1 + \beta_2 t + \beta_3 \sum RGDP_{t-1} + \sum^{m} t_{-1} \alpha_i \Delta RGDP_{t-1} + U_t - \dots $ (4)
$\Delta \sum LP = \beta_1 + \beta_2 t + \beta_3 \sum LP_{t-1} + \sum_{t=1}^{m} \alpha_t \Delta LP_{t-1} + U_t - \dots $ (5)
$\Delta \sum GCF = \beta_1 + \beta_2 t + \beta_3 GCF_{t-1} + \sum_{t=1}^{m} \alpha_t \Delta GCF_{t-1} + U_t - \dots - $
Where:

 Δ = First difference operator of the variables,

t = time or trend taking the value of 1, 2, till the end of sample, and;

ut = white noise error term.

A priori Expectation

The priori expectation of the model was β 1>0 β 2>0 β 3>0

This implies that the coefficient of the real gross domestic product (RGDP), labor productivity (LP) and gross capital formation (GCF) will be to be positive. The variables in this study are explained through descriptive analysis and this appears in the form of mean, median, maximum, minimum and standard deviation.

FINDINGS AND DISCUSSIONS

Table 1: Summary of Net FDI inflows, real GDP, Gross Capital Formation and Labour Productivity in Nigeria for the period, 2010–2019

Year	Net FDI Inflows	Real GDP	Labour Productivity	Gross Capital Formation
	In Naira (N)	In Naira (N)	In Naira (N)	In Naira (N)
2010	905,745,839,577.30	8,208,223,306.25	419.7	1,441,536,631,612,670.00
2011	1,360,639,449,648.90	8,850,949,328.40	471.94	1,589,663,496,399,790.00
2012	1,113,510,577,410.00	9,438,958,153.80	551.7	1,704,611,125,819,980.00
2013	875,037,561,355.10	9,944,303,512.43	594.83	1,899,184,974,894,520.00
2014	744,441,221,035.20	10,650,431,834.22	639.34	2,259,111,052,174,960.00

2015	589,546,097,129.60	13,280,204,120.46	718.14	2,836,578,274,990,220.00
2016	1,127,753,794,459.50	17,727,568,308.26	684.43	3,988,849,050,865,240.00
2017	1,071,217,134,259.80	20,944,541,787.97	792.62	5,437,089,260,674,750.00
2018	611,430,209,006.50	21,365,762,230.90	709.23	7,829,116,373,384,480.00
	- / /	,, - ,		11 -11
2019	1,012,489,334,732.70	5,675,843,638.77	650.83	11 712 440 200 026 600 00
2019	1,012,409,554,752.70	5,075,845,058.77	030.85	11,713,449,390,936,600.00

Source: NBS Reports (2021)

DATA ANALYSIS

The study presents the analysis of the relationship between FDI and economic growth in Nigeria based on the above data. This data analysis has two sections. Descriptive statistics first, then correlation analysis and multiple regression analysis.

Table 2: Descriptive Statistics.

	Ν	Minimum	Maximum	Mean	Std. Deviation
Net_FDI_Inflows	10	589546097130	1360639449649	941181121861.46	244759834998.08 7
Real_GDP	10	5675843638.77	21365762230.90	12608678622.146 0	5531290753.0971 7
Labour_Productivity	10	419.70	792.62	623.2760	115.51807
Gross_Capital_Formation	10	1441536631612670	117134493909366 00		33763529327832 99.000
Valid N (listwise)	10				

Source: Researcher's computations from secondary data using SPSS 23 (2021)

Descriptive Statistics

The records are summarized in Table 2 above, which contains the descriptive statistics showing the minimum, maximum, mean, and standard deviation of all variables in the study. Table 2 shows that FDI has took a nosedive from ¥1,360,639,449,649 in 2011 to ¥589,546,097,130 in 2015, indicating a decline of 130.79%. The average foreign direct investment in the years 2010 to 2019 was ¥941,181,121,861.46. Meanwhile, Nigeria's GDP peaked in 2018 (¥21, 365,762,230.9) but plunged in 2019 to its all-time lowest (¥5,675,843,638.77). On average, GDP in the years 2010 to 2019 was ¥12,608,678,622.15. It is also shown that gross investment was its highest in 2019, at ¥11,713,449,390,936,600 in 2019 which previously showed a steady increase of (¥1,441,536,631,612,670, in 2010). Gross capital formation averaged ¥4,069,918,963,175,320 during years 2010-2019. Finally, Nigeria's labor productivity was highest in 2017 (¥792.62), but lowest in 2010 (¥419.70), a growth of 47.05%, and an average of ¥623.28 over the period. The above analysis clearly shows that all four variables have increased and decreased phenomenally over the period, albeit at different rates.

Correlation Matrix

The correlation matrix used for this study is known as the Pearson Product Moment Correlation Coefficient. The correlation between the independent variables (real GDP, labor productivity and gross investment) and the dependent variables net FDI inflows, as well as between the independent variables themselves, is shown in Table 3 below:

Table 3: Correlations

		Net FDI Inflows		LabourProducti vity	Gross Capital Formation
Net_FDI_Inflows	Pearson Correlation	1	036	807**	646*
	Sig. (2-tailed)		.922	.005	.043
	Ν	10	10	10	10
Real_GDP	Pearson Correlation	036	1	.254	650 [*]
	Sig. (2-tailed)	.922		.478	.042
	Ν	10	10	10	10

Labour_Productivity	Pearson Correlation	807**	.254	1	.460
	Sig. (2-tailed)	.005	.478		.180
	Ν	10	10	10	10
Gross_Capital_Formation	Pearson Correlation	646*	650*	.460	1
	Sig. (2-tailed)	.043	.042	.180	
	Ν	10	10	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher's computations from secondary data using SPSS 23 (2021)

From the above analysis, the correlation between FDI and GDP has a coefficient (r) of -0.036 and a significance level of 0.922, indicating a negative and insignificant correlation between the two variables. This means that FDI is not really affected by Nigeria's GDP. When analyzing the relationship between FDI and labor productivity, the above correlation result shows a significantly negative correlation of -0.807 (significant at the 0.05 level) between FDI and labor productivity in Nigeria, showing that the more FDIs, the worse the Labor productivity will. The correlation result shows a negative correlation of -0.646 (significant at the .043 level), which indicates a significantly negative correlation between the two variables (FDI and gross investment), which explains that the higher the FDI, the lower the gross investment in Nigeria.

Regression Analysis

Table 4: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	193ª	0372	.697	1137795585.947	2.174

a. Predictors: (Constant), Gross Capital Formation, Labour Productivity, Real GDP

b. Dependent Variable: Net FDI Inflows

Source: Researcher's computations from secondary data using SPSS 23 (2021)

The model summary in Table 4 shows a coefficient labeled R = -.193, which shows a negative effect of the dependent variable (net FDI inflows) on the independent variables (gross domestic product, gross investment and labor productivity). It also showed the R-square (R2) i.e. H. the coefficient of determination used to explain the percentage of variation in the dependent variable that is explained by the independent variable. The model summary table R2 = -. 372 or 37.2% shows that the variation in the dependent variable (FDI) of around 37.2% is explained by the independent variables (gross domestic product, gross investment and labor productivity). While about 62.8% can be attributed to other variables that were not recorded in the model. This suggests that the model does not fit well.

Table 5: ANOVA^a

Mode	l	Sum of Squares Df	Mean Square	F	Sig.
1	Regression	307120162577687060 00.000	102373387525895680 00.000	7.908	.017 ^b
	Residual	776747277240877360 0.000	129457879540146227 0.000		
	Total	384794890301774800 00.000			

a. Dependent Variable: Net_FDI_Inflows

b. Predictors: (Constant), Gross_Capital_Formation, Labour_Productivity, Real_GDP *Source:* Researcher's computations from secondary data using SPSS 23 (2021)

The ANOVA table shows how good the model is. It shows that the F-statistic of 7.908 and a significance of 0.017 is less than 0.05, which shows that the variables are statistically significant.

Table 6: Coefficients^a

				Standardized Coefficients		
Model		В	Std. Error	Beta	т	Sig.
1	(Constant)	.795	2687654338.194		5.777	.001
	Real_GDP	111	56.272	520	-1.231	.264
	Labour_Productivity	297	6471672.029	281	778	.466
	Gross_Capital_Formation	076	.000	855	-1.857	.113

a. Dependent Variable: Net_FDI_Inflows

Source: Researcher's computations from secondary data using SPSS 23 (2021)

The non-standardized coefficient table shows the relevant number for the regression model, which indicates how a change in the unit of the independent variable affects the dependent variable. Taken together, the independent variables have a negative association and a statistically significant effect on foreign direct investment (p-value of 0.001) at a 5% significance level.

Findings

The study used regression analysis to summarize its results. Linear regression attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data. Each value of the independent variable x is associated with a value of the dependent variable y. The analysis shows that FDI has a negative but statistically insignificant effect on economic growth, represented by GDP, although the effect is insignificant. This is derived from the coefficient of -0.111, where a p-value of 0.264 is valid at 5% significance. This means that an increase in FDI leads to an insignificant decrease in GDP. This means that an increase in FDI will have a negative but insignificant impact on the level of GDP in Nigeria.

Labor productivity also shows a negative, but not statistically significant, relationship with foreign direct investment. This is derived from the coefficient of -.297 and the p-value of .466 at a significance level of 5%, which means that an increase in FDI leads to a decrease in labor productivity, although the decrease could be insignificant.

The third hypothesis also shows an insignificant negative relationship between FDI and gross investment in Nigeria. This result is significant at a 5% level. The result shows that capital formation in Nigeria decreases with increasing FDI inflow, but insignificantly.

Discussion of Findings

Using multiple regression analysis, the above results show that FDI has a negative but insignificant impact on GDP and capital formation in Nigeria. In addition, the above result also shows that FDI has a negative and insignificant impact on labor productivity in Nigeria. Thus, the results are in line with the a priori expectation of a negative relationship between the variables, as discovered in Thiam (2018) and Trang, Duc, Anh & Thang (2019), among others. Other studies contradicting the above results found a positive relationship between the variables: Andy, Isiaq & Rowland (2020), Wajid & Zhang (2017), Carmen & Mihaela (2015) and so on. The null hypothesis that there are no significant relationships between FDI and GDP, capital formation and labor productivity is therefore accepted. In essence, this study shows that FDI has a negative, but insignificant, association with Nigeria's economic growth. This discovery was made using multiple regression analysis in SPSS 23 (Statistical Package for Social Science).

CONCLUSION

From this research carried out, it can be concluded that foreign direct investment, no matter how large its shape; does not necessarily have a relative impact on the growth of the Nigerian economy. In other words, FDI in Nigeria alone will not lead to sustainable economic growth unless it is combined with the right structures and infrastructures that could produce fruitful results. Hence, policies that focus on improving the productive base of the economy would be in a better position than further foreign direct investment crusades. It is therefore recommended that the Nigerian government pursue policies aimed at improving the domestic economy, particularly economic stability.

RECOMMENDATIONS

Based on the above knowledge and conclusions, it is recommended that in order to improve the economic growth and

development of the Nigerian economy:

- 1. The Nigerian government can spur economic growth through new startups, entrepreneurship and innovation. Innovations and start-ups fuel economic growth. Measures to improve the skills of the workforce are also crucial for increasing productivity. This will automatically increase the gross domestic product of Nigeria.
- 2. Nigeria should invest in and accumulate human and physical capital; and promote the knowledge and adoption of technologies necessary to fuel and sustain economic growth for a successful development experience. With rising prices for goods and services, workers in Nigeria must also be encouraged by raising the minimum wage.
- 3. There is also a need to reduce capital flight out of the country. Inflows should be tied to specific, relevant and targeted projects. This will help create employment opportunities in the long term. Prudence and reasonable accountability should be the watchwords in managing the provision for official capital inflows and transfers. Such funds are expected to be channeled by governments in power into productive endeavors, not waste. Finally, domestic savings should be mobilized by the government through tax cuts, job creation and improving the financial system to increase capital accumulation.

REFERENCES

- 1) Abello, N. M. (2010). Relationship between Foreign Direct Investment and Economic Growth in Argentina. *National University of the Rio Cuarto, 4*(1), 15-27.
- Achugamonu, B. U., Ikpefan, A., Taiwo, J. N., & Okorie, E. (2016). Constraints to FDI: The Nigerian Experience (1980–2015). 844th International Conference on Economics and Finance Research (pp. 1-20). Lagos: VI Publishers.
- 3) Akinlo, A. (2014). Foreign direct investment and growth in Nigeria: An empirical investigation. *Journal of Policy Modeling,* 26(2), 627–639.
- 4) Angelescu, C., & Socol, C. (2015). *Political Economics, 4th Edition*. Bucharest: Economica Publishing House.
- 5) Aremu, J. (2019). Forty years of flow of foreign direct investment into Nigeria: Too many defects. *Financial Standards Newspaper*, pp. 38-39.
- 6) Asiedu, E. (2009). On the Determinants of Foreign Direct Investment to Developing Countries in Africa Different? *World Development Perspective, 30*(1), 107–119.
- 7) Bakare, A. S. (2011). A Theoretical Analysis of Capital Formation and Growth in Nigeria. *Far East Journal of Psychology and Business, 3*(1), 382-392.
- 8) Basu, P., Chandana, C., & Derrick, R. (2013). Liberalization, FDI, and growth in developing countries: A Panel Co-integration Approach. *Economic Inquiries, 41*(1), 510-516.
- 9) Bodenstein, M. (2010). International asset markets and real exchange rate volatility. *Revisit Economic Dyn,* 11(6), 688–705.
- 10) Bogheana, C., & Michaela, S. (2015). The relation between foreign direct investments (FDI) and labour productivity in the European Union countries. *Procedia Economics and Finance, 32*(1), 278-285.
- 11) Borensztein, E., De Gregoria, J., & Lee, J. (2018). How does foreign investment affect economic growth? *Journal of International Economics*, 45(1), 115–35.
- 12) Caporale, G. M., Donadelli, M., & Varani, A. (2015). International capital markets structure, preferences and puzzles: A "US-China World". *Journal of International Financial Market Inst. Money*, *36*(2), 85–99.
- 13) Carkovic, M., & Levine, R. (2012). *Does foreign direct investment accelerate economic growth?* Minneapolis: University of Minnesota Working Paper.
- 14) Coleman, A., & Nicholas-Biekpe, N. (2019). Does FDI and GDP Matter for an Economy's Performance? A Comparative Analysis of Economies in Africa. *Journal of Business Management, University of Stellenbosch Business School (USB), Cape Town, South Africa 13 (1),* 46-48.
- 15) Eboh, M. (2011). Systematic planning and marketing will attract FDI to Nigeria. Vanguard, p. 14.
- 16) Encinas-Ferre, C., & Villegas-Zermeño, V. (2015, December 21). Foreign Direct Investment and Gross Domestic Product Growth. *Research Gate*, pp. 198-207.
- 17) Findlay, R. (2019). Relative backwardness, direct foreign investment and the transfer of technology: A simple dynamic model. *Quarterly Journal of Economics*, 92(1), 1–16.
- 18) George, O. (2012). *The Perfect Economy*. Bucharest: Polirom Publishing House.
- 19) Georgescu, G. (2012). The FDI flows under the global crisis effects, Munich Personal RePEc Archive, MPRA Paper No. 40842,. Retrieved May 2020, 20, from MRPA: Retrieved from:http://mpra.ub.unimuenchen.de/40842/1/The_FDI_flows_under_the_global_crisis_effects.pdf. Available on 8th June, 2010

- 20) Haller, A. (2012). Concepts of Economic Growth and Development. Challenges of Crisis and of Knowledge. *Research Gate*, 2(2), 66-71.
- 21) Helpman, E. (2011). A simple theory of international trade with multinational corporations. *Journal of Political Economy*, *92*(1), 451-471.
- 22) Helpman, E. (2015). Multinational Corporations and Trade Structure. *The Review of Economic Studies, 52*(1), 443-457.
- 23) Helpman, E., & Krugman, P. (2015). Market structure and Foreign Trade. Cambridge, Massachusetts: MIT Press.
- 24) ICAN. (2009). Audit and Assurance. Lagos: VI Publishers.
- 25) Jyun-Yi, W., & Chih-Chiang, H. (2008). Does foreign direct investment promote economic growth? Evidence from a threshold regression analysis. *Economic Bulldog*, *10*(1), 1–10.
- 26) Kindleberger, C. P. (2014). *Indicators of Foreign Direct Investment Regulation in 87 Economies*. Retrieved May 20, 2020, from Investing Across Borders: Retrieved from: http://www.investingacrossborders.org. Available on 1st June, 2010
- 27) Kolawole, O., & Henry, O. (2009). Foreign Direct Investment, Non-Oil Exports, and Economic Growth in Nigeria: A Causality Analysis, JEL Classification:C33, C32, F43, F21. *Department of Economics and Development Studies Covenant University, Ota, Nigeria*, pp. 14-16.
- 28) Konings, J. (2011). The Effects of Foreign Direct Investment on Domestic Firms. Economic Transition, 9(1), 619–633.
- 29) Koojaroenprasit, S. (2012). The impact of foreign direct investment on economic growth: A case study of South Korea. *International Journal of Business Social Science*, *3*(1), 8–19.
- 30) Kose, M. A., Prasad, E. S., & Terrones, M. E. (2009). Does financial globalization promote risk sharing? *Journal of Development Economics*, 89(3), 258–270.
- 31) Laura, A. (2013). Foreign Direct Investment and Growth: Does the Sector Matter? New York: Harvard Business School.
- 32) Levine, R. (1997). A Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature,, 35*, 688-706.
- 33) Lyroudi, K., John, P., & Vamvakidis, A. (2009). Foreign direct investment and economic growth in transition economies South-East. *European Journal of Economics*, 2(1), 97-110.
- 34) Markusen, J. (2015). The boundaries of multinational enterprises and the theory of international trade. *Journal of Economic Perspectives*, 9(2), 169-189.
- 35) Nwankwo, A. (2017). The determinants of foreign direct investment inflows (FDI) in Nigeria. *Journal of Finance & Economics,* 9(1), 29-34.
- 36) Obwona, M., & Arios, B. (2010). Determinants of FDI and their Impact on Economic Growth in Uganda. *African Development Review*, *3*(1), 46–48.
- 37) Odozi, V. A. (2015). An Overview of Foreign Investment in Nigeria 1960-1995. Occasional Paper No. 11 Research Department, Central Bank of Nigeria, 9-15.
- 38) Organization for Economic Co-operation Development (2012). Foreign Direct Investment for Development and Maximizing Benefits. *Office for National Statistics*, 12-18.
- 39) Omran, M., & Bolbol, A. (2003). Foreign direct investment, financial development, and economic growth: Evidence from the Arab countries. *Middle East Economic Finance*, 231-49.
- 40) Oseghale, B. D., & Amonkhienan, E. E. (2017). Foreign debt, oil export, direct foreign investment (1960-1984). *The Nigerian Journal of Economic and Social Studies, 29*(3), 359-380.
- 41) Oyinlola, O. (2015). External capital and economic development in Nigeria (1970–1991). *The Nigerian Journal of Economic and Social Studies*, *37*(2&3), 205-222.
- 42) Robock, J., & Simmonds, J. (2019). International Business and Multinational Enterprises . London: Link Publishers.
- 43) Shahbaz, M., & Rahman, M. M. (2010). Foreign capital inflows-growth nexus and role of domestic financial sector. *Journal of Economic Research*, 15(1), 2017-2031.
- 44) The Financial Times. (2017, September 20). *The Financial Times*. Retrieved May 20, 2020, from The Financial Times: lexicon.ft.com/Term?term=foreign-direct-investment
- 45) Thiam, H. N. (2018). Foreign direct investment and productivity: Evidence from sub-Saharan Africa. New York: United Nations Industrial Development Organization, Research and Statistics Branch.
- 46) Tiwari, A. K., & Mutascu, M. (2011). Economic growth and FDI in Asia: A panel-data approach. *Economic Analysis Policy*, 41(1), 173-187.
- 47) Ugwuegbe, S. U., Modebe, N. J., & Onyeanu, E. (2014, April). The impact of foreign direct investment on capital formation in Nigeria: A co-integration approach. *International Journal of Economics, Finance and Management Sciences, 2*(2), 188-196.

- 48) Vo, D. H., Anh, T. V., & Zhaoyong, Z. (2019). Exchange Rate Volatility and Disaggregated Manufacturing Exports: Evidence from an Emerging Country. *Journal of Risk Financial Management*, *12*(12), 16-28.
- 49) Wacker, K. M., & Vadlamannati, K. C. (2011). Do Multinationals Influence Labor Standards? A Close Look at US Outward FDI, CRC-PEG Discussion Papers, No. 98. Retrieved from Ideas: Retrieved from: http://www2.vwl.wiso.unigoettingen.de/courant-papers/CRC-PEG_DP_98.pdf
- 50) World Bank. (2016). *World Debt Tables: External Finance for Developing Countries*. Retrieved from Analysis and Summary Tables of World Bank, Vol. 1: Retrieved from: http://data.worldbank.org/country. Available on 22nd March, 2012
- 51) Yotopoulos, P., & Nugent, J. (2016). *Economics of Development: Empirical Investigations*. New York: Harper and Row.



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