Foreign Direct Investment and Human Capital Development in a Developing African Economy: A Study of the Nigerian Economy 1987-2018

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ABSTRACT

The passion and scramble for foreign capital by developing and less developed economies to supplement their domestic resources cannot be overemphasized. The existing and growing mismatch between domestic capital stock of developing and less developed economies and their capital requirements for investment purposes has been adduced as the cause for this scramble. Various studies have attempted to explore the reasons for the appetite and hunger for foreign capital especially by developing and less developed countries with mixed findings. Foreign direct investment (FDI) is an aspect of international capital inflows and refers to investment that confers controlling ownership of a business in one country to a different entity in another country. For this study, FDI is proxied by Gross Fixed Capital Formation, \exchange Rate, Interest Rate and Market Capitalisation The main objective of this study is to explore the effect of FDI on human capital development in Nigeria. The specific objectives are to explore, determine, assess, examine and ascertain the effect of foreign direct investment, gross fixed capital formation, exchange rate, interest rate and market capitalization respectively on human capital development in Nigeria. The study adopted ex-post facto research design and sourced data from the Central Bank of Nigeria Statistical Bulletin and Annual Reports and the World Bank Development Indicators were analyzed using Descriptive Statistics, Augmented Dicker Fuller tests for unit roots and Autoregressive Distributive Lag (ARDL) for the hypothesis. The study found that foreign direct investment has no long run effect on human capital development Nigeria but rather has positive and significant short run effect on human capital development in Nigeria. It is recommended that government should reduce emphasis on foreign direct investment and rely on it strictly for short term plans as it does not have long run effect on human capital development in Nigeria.

KEYWORDS: *Foreign Direct Investment, Human Capital Development, Economic Growth, Economic Development and Market Capitalization*

INTRODUCTION

Foreign direct investment (FDI) relates to the investment that confers controlling ownership of a business in one country to a different entity in another country. The United States Department of Commerce defines foreign direct investment to include all 'foreign business organizations in which a U.S citizen, organization or affiliated group owns an interest of ten (10) percent or more'. The United Nations defines foreign direct investment as 'investment in enterprise located in one country and effectively being controlled' by residents of another country'.

World Bank (1996) sees FDI as 'investment made to acquire a lasting management interest (normally ten percent of the voting stock) in a business enterprise operating in a country other than that of the investor defined according to residency'. In line with this, the

United Nations Conference on Trade Agreement and Development (UNCTAD) defined FDI as 'an investment involving management control of a resident entity in one economy by an enterprise resident in another country'. The Organization for Economic Cooperation and Development (OECD) Benchmark's definition of foreign direct investment (fourth edition) defines direct investment as "a category of cross-border investment made by a - resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) that is resident in an economy other than that of the direct investor".

Human capital refers to the abilities and skills of human resources of a country, while human capital development refers to the process of acquiring and increasing the number of persons who have the skills, education and experience that are critical for economic growth and development of a country's economy (God'stime & Uchechi, 2014).Investment is one important factor for ensuring economic growth and welfare of the citizens. A nation's state of development depends largely on the quality of its workforce and its human capital development. By international measure, Nigeria is rated as "less developed country" because its gross domestic product is low with poor standard of living, low literacy rate, poor health, high infant mortality rate and it is not surprising that economic growth and development is one of Nigeria's goals (Adegboye, Ogbebor, & Egharvba, 2014). For many years, Nigeria has been stressing the importance of education, health and human development. The study by Sanusi (2002), stressed the importance of human capital development for Nigeria. This work also stressed the need for the Nigerian economy to be efficient and competitive in the new world order in which the national frontier no longer constitute barrier to human, material and capital flows.

The Harrod-Domar Model has posited that savings as well as investment rates must be between 18% - 20 % to sustain a 6% growth of GDP (Jhingan, 2005). However, like Nigeria, most less developed countries are entrapped by the vicious circle of poverty. They lack the capital resources and the incomes of the people are very low. Because of low incomes, the savings ratios also remain low, resulting in low investment levels. At the same time, due to low incomes, the taxable capacity remains low resulting to government earnings capacity being low. In such situations, the less developed countries face savings – investment gap as well as deficit in their balance of payments.

Nigeria is one of the largest receivers of all forms of international capital. However, Nigeria like most developing economies have been bedevilled by the twin economic crises of mounting debt burden and foreign investment inadequacies occasioned by corruption, misappropriation and poor articulation of projects as well as more than proportionate foreign direct investment income remittance (Ezirim, Anoruo & Muoghalu, 2006). Furthermore, Iheke (2012) maintains that Nigeria faces immense challenges in accelerating growth, reducing poverty and meeting the Millennium Development Goals (MDGs). Unfortunately, as Nkoro and Furo (2012) put it, the growth experience of many of the economies such as Nigeria has not been very satisfactory and as a result, they accumulate huge external debt in relation to gross domestic product and face serious debt servicing problems. Ezirim, Anoruo & Muoghalu (2006) observed that foreign investors come in with a small amount of money, which is further magnified by the depreciating exchange rates, and end up carting away huge sums of money out of the host countries in form of investment income.

International capital inflows ensure that recipient countries outperform countries that fail to attract it economically. However, massive international capital inflows put pressure on the exchange rate of the domestic country's currency (Ghosh, 2010), thereby reducing the trade competitiveness of the economy. It is against the obvious savings gaps in developing economies, the challenges of governments in the past in areas of exchange rate deterioration, increasing external debt and worsening economic environment while using international capital inflows like the foreign direct investment to attempt to influence human capital development as evidenced by the mixed findings in past studies in this area that compelled this researcher to embark on this study.

Review of Related Literature
Conceptual Framework
Foreign direct investment (FDI) is a variant of international capital inflows and relates to investment that confers controlling ownership of a business in one country to a different entity in another country. This type of investment has become an increasing significant part of the world economic order over the past three decades and an important source of fund to support investment not only in developed but also developing countries. Open economies with skilled workforces and good growth prospects tend to attract larger amounts of foreign direct investment than closed, highly regulated economies. Conducive business environment and strong legal system have been identified as a major attraction of foreign

investment. Irrespective of how vibrant a capital market may be, an unfriendly business environment and weak legal system would not attract foreign portfolio investment.

Market capitalization refers to the total market value of all stocks or shares traded on the stock exchange market. It is also called market cap and is calculated by multiplying the total number of issued and fully paid shares of companies traded on the stock market by the respective market prices of the companies' shares and summing up their products. Market capitalization is therefore a function of market price and number of issued and fully paid shares. The number of shares issued and paid in the capital market is dependent on availability of funds to supplement savings shortfall which are endemic in developing countries through international capital inflows like foreign portfolio investment. Political stability, openness to the world, accountability and good governance is critical to high market capitalization.

Interest rate refers to the amount charged by a lender on the amount it provided as loans and advances. In the context of this study, it is conceptualized as the amount charged by foreign portfolio investors on the amount it has invested in the recipient country. Interest rate is charged as a percentage of the principal sum provided by the investor. The rate charge as interest is expected to be higher than the investor's average cost of capital for it to profitable to the investor. Where it is impractical for the portfolio investor to earn an interest higher that its average cost of capital, the investor will opt out of the investment. Foreign portfolio investors scout to take advantage of interest rate differentials through arbitrage.

Exchange rate refers to the rate at which one currency can be exchanged for another. In the Nigerian context, it refers to the rate at which the Naira can be exchanged or converted for any other currency. Exchange rate is critical in any international transaction as it determines the flow of finance. International investors like foreign portfolio investors always scout for investment outlets where they will take advantage of exchange rate differentials arbitrage to improve on their profit positions.

Economic development is one of the most frequently used concepts by world economies. It refers to the process by which the economic well being and quality of life is improved. Economic development seeks to achieve long-term sustainable development in a nation's standard of living, an increase in the per capita income of every citizen, adjusted for purchasing power parity (Porter, 1998). Economic development leads to the creation of more opportunities in the sector of education, health sector, research, human development and environmental conservation. It equally implies an increase in the per capita income of the citizenry.

Theoretical Framework
The theoretical framework is anchored on the Industrialization theory on Foreign Direct Investment and Spillover Effects. Hymer's (1976) pioneering study on Multinational Companies (MNCs) drew attention to neglected aspects of MNCs' role as global industrial organizations. Hymer's view was a major departure from the orthodox theoretical economic literature. The standard neoclassical trade theory of Heckscher and Ohlin, for example, carried restrictive assumptions about the immobility of factors of production and identical production functions across national boundaries. It postulated that no international difference existed at the scientific and technological levels, not to mention technology transfer and spillovers. In the neoclassical financial theory of portfolio flows, multinational enterprises had been viewed as simply an arbitrageur of capital in response to changes in interest rate differentials. Capital is seen to flow from countries where returns are low to those where it is higher to earn arbitrage rents.

This theory did not distinguish between the roles played in a country's development by portfolio and FDI capital inflows. Hymer's major contribution was to shift attention away from neoclassical financial theory. In his view, FDI is more than a process by which assets are exchanged internationally. It also involves international production. By putting forward the idea that FDI represents not simply a transfer of capital, but the transfer of a "package" which capital, management, and new technology are all combined. Most industrialized countries attribute part of their success to massive investment in human capacity in the areas of technical skills and competencies needed for industrialization. This theory of industrialization is therefore apt for this study.

Empirical Review
Various literatures were reviewed by the researcher to analyze the effect of foreign direct investment on human capital development in Nigeria in order to establish their nexus. Kanu (2015) assessed the impact of foreign capital inflows on the economic growth of Sub Saharan Africa (SSA), with emphasis on Nigeria, Ghana and South Africa using multiple regression technique. Outcome of the study revealed that there was no significant long run relationship between foreign capital inflows and the level of economic growth in Nigeria and South Africa. It was only the lagged value of GDP (In the immediate past year), taken as an independent variable that was

found to be positively significant. Other Inflow indicators that were hitherto significant in the short run, turned out to be insignificant in the long. The scenario was almost the same for Ghana except for FDI and the lagged value of GDP (in the immediate past year), taken as independent variable that were positively significant in the long run. It was also revealed that, there exist causality relationships between capital inflow indicators and economic growth in the aforementioned countries.

Nwosa and Amassoma (2014) explored the causal nexus between capital inflows (Foreign Direct Investment and Foreign Portfolio Investment) and Exchange Rate in Nigeria. The study employed both granger causality and error correction modeling techniques. The causality estimates showed no causal link between capital inflows (foreign direct investment and foreign portfolio investment) and exchange rate within this period. The long run regression estimate revealed that foreign direct investment had negative effect on exchange rate while portfolio investment had positive impact on exchange rate.

Korhan, Gokmenoglu, Apinran, and Taspinor (2018) looked at the impact of foreign direct investment on human development index in Nigeria from 1972-2013 with foreign direct investment as the dependent variable and life expectancy, gross national income and school enrollment as the independent variables. They employed Johanson Co-integration and Tamamoto tests. They found bidirectional causality between FDI and life expectancy and national income and concluded that FDI has impact on HDI in Nigeria during the sample period.

Raheem and Adeniyi (2015) assessed both the total effect and the individual effects of the sources of capital inflow [foreign direct investment (FDI), official development assistance (ODA), remittances and debt] as well as capital outflows (capital flight) on economic growth for 33 countries in Sub-Saharan Africa (SSA) for the period spanning 1970 to 2010. Using system generalised method of moments (Sys GMM), the findings showed that FDI and remittances significantly contributed to growth with the later taking the lead.

Adegboye, Ogbebor and Egharvba (2014) using the Vector Error Correction Mechanism (VECM) Technique analysed quarterly data covering the period 1981 to 2012. The VECM procedure was employed to empirically show the dynamic relationships existing between economic growth and the foreign capital factors of foreign direct investment (FDI), external debt and short term capital inflows. The relevance of external capital to development

efforts in a domestically starved economy like Nigeria was well established in the study. Results from the empirical analysis showed that the categorization of foreign capital inflows into direct and portfolio has significant relevance in terms of their effects on economic growth in Nigeria.

Ali (2014) noted that Pakistan economy had received large inflows of foreign capital, in the form of foreign debt, FDI and worker's remittances, over the years, and then aimed to examine the effects of these flows on economic growth in Pakistan. Johansen co-integration technique and Granger causality test were used for the analysis for the sample period of 1972-2013. The results revealed negative impacts of these flows on economic growth of the economy in long run. Short run analysis confirmed unidirectional causality running from debt service, FDI, inflation and literacy rate to growth. Causality from domestic investment was not concluded but it run from growth to domestic investment. Bidirectional causality between remittances and growth had been found.

Muhammad, Saleem, Zalina, Namasivayam and Farah (2015) empirically evaluated the impact of foreign direct investment (FDI) along with some other control variables such as: GDP per capita, international remittances, and exports on human capital, measured by gross secondary school enrolment for 34 developing countries over the time period ranging from 1981-2013. The results of fixed-effects model revealed that the inward FDI had statistically positive impact on human capital. Therefore, this study rejected the null hypothesis that there was no significant positive relationship between inward FDI and human capital, whereas it accepted the alternative one.

Orji, Uche and Ilori (2014) employed the Seemingly Unrelated Regression Estimation (SURE) technique to examine the implications of four different types of foreign capital inflows namely; Foreign Direct Investment (FDI), Official Development Assistance (ODA), Foreign Private Investment (FPI) and Remittances (REM) on output growth of the West Africa Monetary Zone (WAMZ) economies over the period 1981-2010. The findings showed that there are differences in the growth impact of the various forms of foreign capital inflows in the WAMZ countries. The result also showed that more than one form of capital inflow contributed positively to output growth in Nigeria. Again, it was found out that ODA positively contributed more to output growth in Sierra Leone and Ghana, whereas, FDI fostered more output growth in Nigeria and Gambia. Remittances have the highest contribution in Liberia and finally none of the inflows positively impacted on Guinea's economic growth.

Nweke (2015) examined the impact of foreign capital inflows on economic growth and self-employment in Ethiopia. The study employed a descriptive statistic and Granger causality Wald tests for data analyses. In the first part, 1961 to 2010, the findings indicated that there was an increase in the average growth rates, especially in the six economic sectors, agriculture, mining, trade services, construction, transport services and dwellings.

Okafor, Ugwuegbe and Ezeaku (2016) investigated the relationship between foreign capital inflows and economic growth in Nigeria for the period 1981-2014. In this study, foreign capital inflows had Foreign Direct Investment, Foreign Portfolio Investment and Foreign Aid as proxies, while economic growth had Gross Domestic Product (GDP) as proxy. The study employed annual data generated from CBN statistical bulletin and Toda Yamamoto test of causality was used to determine the relationship between foreign capital inflow and economic growth in Nigeria. The result revealed that there is bi-directional causality running from GDP to FDI as well as from FDI to GDP. Finally, the joint causation between all the components of foreign capital inflow i.e. FDI, FPI, FA and GDP indicates that an increase in foreign capital inflow causes GDP to increase positively.

Model Dimension
The study adopted the ex-post facto research design. The Secondary data used in this study were sourced from the archives of the World Bank Development Indicators and the Central Bank of Nigeria (CBN), Statistical Bulletin from 1987 to 2018.

The model used for this investigation is the adaptation and modification of the works of Uchenna and James (2016). They examined the effect of foreign direct investment on human capital development in Nigeria. Their model is stated thus: HDI = f (FDI,GFCF,EXR)

Their model is modified as follows: HDI = f (FDI, GFCF, EXR, ITR, MKC)

The econometric equation for the model is:

$$HDI = \beta_0 + \beta_1 FDI + \beta_2 GFCF + \beta_3 EXR + \beta_4 ITR + \beta_5 MKC + U_t$$

Where:
HDI = Human capital development index
FDI = Foreign Direct Investment
GFCF = Gross Fixed Capital Formation
EXR = Exchange Rate
ITR = Interest Rate
MKC = Market Capitalisation
β_0 = Intercept of relationship in the model constant
b_1 - b_5 = the coefficients of the explanatory variables
U_t = Stochastic Disturbance (Error Term)

A priori Expectation
The theoretical expectation of the study is that foreign direct investment will have positive effect on human capital development. The relationship is $\beta_1 > \beta_2 > \beta_3 > \beta_4 > \beta_5 > 0 < \beta_6$

Methods of Analysis
The data was analyzed with econometric techniques using descriptive statistics, diagnostic test using Augmented Dickey Fuller test and the Auto Regressive Distributive Lag (ARDL test) (Bounds test). Descriptive statistics was used to describe the basic features of the data in the study as they provide simple summaries of samples and their measures. Augmented Dickey fuller test was applied to carryout diagnostic test for unit roots and the ARDL was used in testing the short run and long run relationships between the dependent and the independent variables.

Results and Discussion of Findings
Descriptive Statistics of variables of the study

	HDI	FDI	GFCF	MKC	EXR	ITR
Mean	0.453000	3.154246	3575.155	138.5466	130.0147	18.81645
Median	0.475000	2.697492	1358.200	54.20470	129.0041	17.98000
Maximum	0.500000	10.83256	11076.10	899.8630	150.2980	29.80000
Minimum	0.350000	0.652160	6.000000	1.933200	111.9433	10.50000
Std. Dev.	0.053759	2.308008	4159.263	234.5915	12.21667	3.836578
Skewnes	1.241875	1.746330	0.829723	2.094772	0.442803	0.913481
Kurtosis	2.913926	6.017820	2.000906	6.165754	2.366218	4.446283
Jarque-Bera	2.573511	27.52014	4.846271	35.61678	0.494157	7.013135
Probability	0.276165	0.000001	0.088643	0.000000	0.781079	0.030000
Sum	4.530000	97.78164	110829.8	4294.944	1300.147	583.3100
Sum Sq. Dev.	0.026010	159.8070	5.19E+08	1650995.	1343.224	441.5799
Observations	31	31	31	31	31	31

Source: *E-views 10.0 Output*

The result of the mean show that average growth rate of the human capital development in Nigeria is 0.453%. This figure is low enough to insinuate that the level of human capital development Nigeria is not improving. The maximum and minimum values for the variables showed 0.5000% and 0.350% for HDI respectively. Also the standard deviation of 0.054% show that there is a very wide variation in human capital development which signifies that human capital development is unstable in Nigeria. The mean of exchange rate (EXR) showed that 130% of human capital development (HDI) in Nigeria is affected by the exchange rate. This value is pegged at 139% for MKC, 19% for ITR, The maximum and minimum values for the variables showed 150% and 111% for EXR respectively; and the standard deviation is 12%., indicating high variation in exchange rate (EXR) confirming that the Nigerian economy is relatively unpredictable and risky and capable of discouraging investment in the country. The mean of interest rate (ITR) is 18.81645%, standard deviation of 3.836578% with minimum and maximum values of 10.50000% and 29.80000% respectively. This also asserts that the Nigerian economy is unpredictable and risky.

Augmented Dickey-Fuller Unit Root Test

Variables	ADF Statistic	Order Of Integration	Level of Significance
HDI	-4.668720	1(1)	5%
GFCF	-5.369621	1(1)	5%
EXR	-6.000361	1(0)	5%
ITR	-6.657659	1(0)	5%
MKC	-5.589936	1(0)	5%

Source: *Researchers compilation using E-views 10.0 output*

The variables used in the analysis were subjected to Augmented Dickey Fuller (ADF) Tests, to confirm their stationarity. The test aimed to understand the state at which the variables could be held stable for regression analyses. The result of the ADF test indicated mixed stationarity with some variables being stationary at 5% level [1(0)] while others were stationary at first difference [1(1)].

Auto Regressive Distributive Lag Test (Bounds Test)

The Auto Regressive Distributive Lag (ARDL) test is used because it is the most suitable tool of analyses that accommodates both the short and long run trends in testing the relationship between the dependent and independent variables.

Auto Regressive Distributive Lag Test (Bounds) Test Result

ARDL Bounds Test

Date: 10/18/19 Time: 15:05

Sample: 1987 2018

Included observations: 31

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	2.13454	4
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

The result of the bound test shows that the F-statistic is 2.13454 is less than the lower bound at 1%, 2.5%, 5% and at 10% significant levels and clearly shows a case of no co-integration between the variables. This implies that there is no long run relationship between foreign direct investment and human capital development in Nigeria.

Short Run Relationship Result

Dependent Variable: HDI
Method: ARDL
Date: 10/18/19 Time: 15:04
Sample (adjusted): 1987 2018
Included observations: 31 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic):
Fixed regressors: C
Number of models evaluated: 1875
Selected Model: ARDL

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
HDI(-1)	4.802931	0.316268	2.538769	0.0354
HDI(-2)	6.363963	1.288493	3.261603	0.0018
FDI	3.610199	2.510272	2.438171	0.0042
FDI(-1)	7.565170	1.812875	2.362141	0.0026
FDI(-2)	322.9638	1.698009	-1.902015	0.0896
GFCF(-1)	1.224529	4.259021	4.856901	0.0047
GFCF(-2)	3.214576	1.858411	2.842744	0.0325
EXR	1.135233	0.472942	2.400363	0.0399
EXR(-1)	0.403888	0.488474	3.826836	0.0497
EXR(-2)	0.157569	0.601321	0.262038	0.7992
EXR(-3)	-0.350325	0.560356	-0.625183	0.5474
EXR(-4)	-1.502368	0.566028	-2.654227	0.0263
ITR	3.001000	1.001916	2.522059	0.0042
MKC	5.456371	1.239654	3.174820	0.0002
MKC(-1)	1.105181	9.838467	2.123326	0.0014
MKC(-2)	7.364920	2.213962	3.120276	0.0069
MKC(-3)	9.961166	1.154773	3.088084	0.0038
MKC(-4)	-2.011176	1.116474	-1.801365	0.1052
C	5.378284	5765.054	0.932911	0.3752

R-squared	0.672460	Mean dependent var	32780.59
Adjusted R-squared	0.641681	S.D. dependent var	36084.32
S.E. of regression	1310.582	Akaike info criterion	17.41649
Sum squared resid	15458637	Schwarz criterion	18.32049
Log likelihood	224.8309	Hannan-Quinn criter.	17.69285
F-statistic	11.36603	Durbin-Watson stat	2.601601
Prob(F-statistic)	0.82310		

From the ARDL test result, the regression equation for foreign direct investment and human development index is presented thus: HDI = 4.802931 + 3.610199 FDI + 1.224529 GFCF + 1.135233 EXR + 3.001000 ITR + 1.105181 MKC + U.

The ARDL revealed that the constant parameter (HDI) is positive at 4.802931 which implies that if all the independent variables are held constant, HDI as the dependent variable will grow by 4.802931 units. The result of the analysis indicates that human capital development is an endogenous variable in the model of the effect of foreign direct investment on human capital development in Nigeria.

Foreign Direct Investment (FDI): The coefficient of FDI is positive at 3.610199 with t-statistics of 2.438171 and probability value (p. =0.0042< 0.05) shows that FDI has positive and significant effect on human capital development in Nigeria. This implies that a unit increase in foreign direct investment leads to further growth in human capital development in Nigeria by 4.80%. Gross Fixed Capital Formation (GFCF): The coefficient of GFCF which is positive at 1.224529 with t-statistics of 4.856901 and probability value (p. =0.0047< 0.05) shows that GFCF has positive and significant effect on human capital development in Nigeria. This implies that a unit increase in GFCF leads to further growth in human capital development in Nigeria by 1.22%.

Exchange Rate (EXR): The coefficient of EXR which is positive at 1.135233 with t-statistics of 2.400363 and probability value (p. =0.0399< 0.05) shows that EXR has positive and significant effect on human capital development in Nigeria. This implies that a unit increase in EXR leads to further growth in human capital development in Nigeria by 1.14%. Interest rate (ITR): The coefficient of ITR which is positive at 3.001000 with t-statistics of 2.522059 and probability value (p. =0.0042< 0.05) shows that ITR has positive and significant effect on human capital development in Nigeria. This implies that a unit increase in ITR leads to further growth in human capital development in Nigeria by 3.00%. Market Capitalisation: (MKC): The coefficient of MKC being positive at 5.456371 with t-statistics of 3.174820 and probability value (p. =0.0002< 0.05) shows that MKC has positive and significant effect on human capital development in Nigeria. This implies that a unit increase in MKC leads to further growth in human capital development in Nigeria by 5.45%.

Diagnostic Tests:
The result of the study indicates that all the Variance Inflation Factor (VIF) are below five (5) which means that there is absence of Multi-collinearity in the model. The p. value of the model is greater than 0.05, which connotes that the model is serially correlated at 5% significance level. The results show that the probability values are greater than 0.05. The study therefore submits that model is not Heteroskedastic and the result obtained from the estimated model is unbiased. RESET test result shows that the p. value is less than 0.05 which asserts that the model is well specified and is good for estimation.

Test of Hypothesis
The test is carried out at 0.05 level of significance.

Ho$_1$: Foreign direct investment has no positive and significant effect on human capital development in Nigeria.

H$_1$: Foreign direct investment has positive and significant effect on human capital development in Nigeria.

The F-statistics for Bound test (2.13454) is less than the lower (2.45) and upper (3.52) critical bounds values indicating no long run effect in the model. The F-statistics for short run ARDL model is 11.36603 with p.value of 0.82310. The p.value is greater than 0.05. The study therefore concludes as follows:

➤ Long Run Effect: Foreign direct investment has no long run effect on human capital development in Nigeria.

➤ Short Run Effect: Foreign direct investment has positive and significant short run effect on human capital development in Nigeria.

The study revealed that foreign direct investment has no long run effect on human capital development Nigeria but rather has positive and significant short run effect on human capital development in Nigeria. The result of our findings is consistent with the work of Muhammad, Saleem, Zalina, Namsivayan and Farah (2015) and Nweke, (2015). The findings are in tandem with the expectation of this study. The level of human development is not growing and unstable due to the unpredictable of the Nigerian economy which also is not supportive of long term planning.

Conclusion and Recommendation
The objective of this study is to examine the effect of foreign direct investment on human capital development in Nigeria: 1987-2018. The specific objectives are to examine, determine, assess, explore and ascertain the effects of foreign direct investment (FDI), gross fixed capital formation (GCFC), market capitalisation (MKC), exchange rate (EXR) and interest rate (ITR) on human capital development in Nigeria. The analysis carried out included Descriptive statistics, Augmented Dickey Fuller test for unit roots, Autoregressive Distributive Lag and Diagnostic tests. The results of the Augmented Dickey Fuller stationarity test indicates that both the dependent and independents variables attained stationarity at level 1(0) and first differences 1(1) of stationarity which necessitated the use of Autoregressive Distributive Lag (ARDL) for the analysis. Again the study carried out diagnostic test to analyse the reliability of the models with the Normality, Serial Correlation, Multi-collinearity, Heteroskedasticity, and Ramsey RESET Tests. The results of the Autoregressive Distributive Lag (ARDL) indicated the existence of short run relationships. The adjusted R-Squared is 0.641681 which means that 64% of the total variables of Human Development Index (HDI) can be explained by the dependent variables of FDI, GCFC, MKC, ITR and EXR while the remaining 36% is due to stochastic variables. Foreign domestic investment therefore has Foreign direct investment therefore has no long run effect on human capital development but has positive and significant short run effect on human capital development in Nigeria.

Government should lay less emphasis on foreign direct investment and rely on it strictly for short term plans as it does not have long run effect on human capital development in Nigeria. This may also explain why a lot of foreign firms are divesting and exiting the Nigeria space. Exchange rate should be allowed to float but guided to a reasonable extent by government

because total exchange rate control will suggest to foreign portfolio investors that Nigeria is highly volatile and unpredictable. Government should aim at instilling good governess that would achieve political stability, accountability and openness to the world which will have positive influence on market capitalization and attract more foreign portfolio investment.

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