Foreign Capital Flows And Economic Growth In Nigeria

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Abstract **-** *This study examined the effect of foreign capital flow on economic growth in Nigeria from 1999 to 2020. The independent variable is foreign capital flows measured by foreign debt inflows and foreign remittance inflows), foreign medical services and education and foreign direct investment outflows, while the dependent variable is economic growth measured by real gross domestic product per capita growth rate. The study collected data from CBN Statistical Bulletin, World Bank Data Bank, and the International Monetary Fund (2020). The study adopted the Ordinary Least Square regression techniques through the instrumentality of Econometric Views version 9.0. Specifically, the study reported that both foreign debt inflows and foreign medical services and education exerted a significant negative effect on economic growth. Meanwhile, foreign remittance inflows exerted a significant positive effect on economic growth in Nigeria. Meanwhile, foreign direct investment outflows though exerted a positive effect on economic growth but were not statistically significant. Hence, the study concludes that foreign remittance inflows are instrumental to economic growth, especially if the foreign debt is well utilized and that foreign direct investment outflows and expenses on foreign Education and Health are well accounted for. Thus, the study recommends that the Nigerian government must ensure that borrowed funds are used for the purpose for which it was borrowed. Lastly, the study advocates that the Nigerian government should track all forms of illegalities arising from foreign remittance inflows and expenses on Foreign Education and Health.*

Keywords **-** *Foreign Capital Flows, Economic Growth, Foreign Direct Investment, External Debt, Foreign Remittances.*

I. INTRODUCTION

One of the central goals of policymakers in developing economies is to achieve macroeconomic objectives of economic growth. All over the world, capital inflows are used by countries to bridge both savings-investment and foreign exchange gaps. Apart from the need to use capital inflows to solve savings-investment and foreign exchange gaps, economic growth and developments are equally very important. In contrast with the developed world, developing countries leverage more on capital inflows, and over recent years African countries have received more than US$568 billion from inflows of foreign capital (Anetor, 2019). This has largely increased the level of economic development of Africa to about 15%. Consequently, foreign capital inflows into the regions of Africa and Nigeria, in particular, require proper management in order to boost eminent economic growth and development.

Acquah and Ibrahim (2020) submitted that foreign capital inflows drive economic growth and development through the improvement of human capital development, enhancement of the borrowing power of emerging countries, facilitation of the importation of capital goods, increased mobility of technology, and in turn, guarantee increased productivity and innovation. However, Afees and Kazeem (2017); Adeola (2017) equally submitted that capital inflows *vis-à-vis* foreign direct investment, foreign portfolio investment, foreign remittance, and foreign aids could not compensate for the huge amount of capital that is exported from Sub-Saharan African countries yearly. Unfortunately, while the Nigerian economy does not appear to have adequate funds to fill her savings-investment gap, a huge amount of funds are being smuggled abroad by electronic transfers (Orimolade and Olusola, 2018; Adeola, 2017; Adedayo and Ayodele, 2016). This has made the capital flow construct a matter of urgent attention in Nigeria.

Although Nigeria ranks among some of the world's top crude oil producers and generates a large amount of foreign cash from crude oil exports, the Nigerian economy still lacks the financial resources to develop, repair, and update its infrastructure because the largest part of the funds is flown abroad in the guise of medical and foreign education expenses (Acquah and Ibrahim, 2020).

Previous studies conducted by Orimolade and Olusola (2018), Lawal, Kazi, Adeoti, Osuma, Akinmulegun, and Ilo (2017), Adedayo and Ayodele (2016), and others have criticized foreign capital flows by arguing that one of the factors which give rise to a huge amount of funds smuggled and illegally electronically transferred abroad is poor institutional frameworks. Hence, it is perceived that the economy will continue to experience capital flight if the issue of poor institutional frameworks is not addressed.

Extant literature on the linkage between foreign capital flows and economic growth shows a focus either on the relationship between foreign capital inflows and economic growth or between foreign capital outflows and economic growth. This study examined the influence foreign capital flows have on economic growth in Nigeria from 1999 to 2020, given that Nigeria returned to democratic governance in 1999. Economic growth is measured in the study using Real Gross Domestic Product per Capital (RGDPC) while foreign debt (FD), foreign remittance (FR), foreign portfolio investment (FPI), and expenses on foreign education and health (EFEH) are used to proxy for foreign capital flows. The issues which form the centre point for study, therefore, include the extent to which foreign debt inflows have affected real gross domestic product per capita in Nigeria; what effects foreign remittance inflows have on real gross domestic product per capita in Nigeria; the extent to which foreign portfolio investment inflows have affected real gross domestic product per capita in Nigeria; and how the expenses on foreign education and health have real gross domestic product per capita in Nigeria.

II. LITERATURE REVIEW
A. Concept of Foreign Capital Flows
Divergent views have been expressed about the concept of capital flows, especially the concept of foreign capital outflows by way of capital flight/export. The term capital, in its simplest term, consists of assets used for the production of goods and services. In its broadest sense, capital can be defined as anything that confers value or benefit to its owner. Foreign capital flows refer to the movement of capital in and outside the shores of a country. As such, the difference between capital inflows and outflows lies in whether capital is being exported or received (Igwemma, Egbulonu and Nneji, 2018).

The International Monetary Fund (2019) notes that, though inflows of foreign capital bring about economic development, if it is not properly managed, it may result in economic depression, domestic currency devaluation, which in turn may eventually lead to large foreign capital outflows.

Foreign Capital Outflows has both legal and illegal manifestations. The legal component is generally after-tax money, properly documented and remaining on the books of the entity from which it is transferred. There is evidence that

such flows broadly enhance economic growth (Acquah and Ibrahim, 2020). Such free-market operations are accepted as largely beneficial to investment, trade and development, leaving aside the question of the utility of short-term capital controls (Olatunji and Oloye, 2015). Hence, capital outflows are viewed here as the movement of capital abroad through legal means.

The Illegal Manifestations are consequent upon abnormal or illicit capital outflows, which present in the illicit movement of huge financial assets and capital from one country to another. The illegal component is usually improperly documented or linked to preceding falsified transactions, which then disappear from any record in the country of origin. The destructiveness of this flow for both originating and receiving countries has gained a long-overdue action (World Investment Report, 2019).

Onodugo, Kalu, Anowor, and Ukweni (2014) asserted that the motivations for these two forms of capital outflows differ. The legal component is normally fleeing to safety and can be expected to return to the countries of origin when investment conditions are attractive. The illegal component is fleeing to secrecy to be accumulated in a hidden manner and rarely returns to the country of origin. The greater proportion, probably upwards of 90%, constitutes a permanent outward transfer.

B. Concept of Economic Growth
The term economic growth refers to the extent to which a country is able to experience outstanding growth in gross domestic product and national income over a period of time (World Investment Report, 2019). Since developing economies like Nigeria is exposed to economic vagaries, which tend to affect their ability to withstand shocks coupled with the fact that the economy is starved of human capital as most of her young generation migrate abroad in search of greener pasture.

This study considers the real gross domestic capital per capita as the surrogate for measuring economic growth. The term real gross domestic product per capita growth rate accounts for a percentage of the real GDP per capita by dividing GDP at constant prices by the population of a given country (World Investment Report, 2019). In other words, real gross domestic product per capita is a global measure for gauging the prosperity of countries of the world and is used by economists along with the gross domestic product to analyze the prosperity of a country.

C. Theoretical Exposition of Relationships between Hypotheses Variables
The study links Foreign Debt Inflows, Foreign Remittances, Foreign Direct Investment Outflows, and Foreign Education and Health Services with economic growth, measured in terms of Real Gross Domestic Product.

a) External Debt Servicing and Economic Growth

Capital flows are often seen as a major contributor to rising foreign debt and impeding product development in developing countries (Adeola, 2017). Clearly, the outflow of economic funds leaving underdeveloped countries reduces the availability of capital for investment, which could help promote growth in the economy (Acquah and Ibrahim, 2020). When this occurs, emerging countries secure external borrowings to supplement domestic finances in order to stimulate sustainable growth, resulting in the weight of debt servicing, which may potentially plunge the country into a state of continuous poverty (Adedayo and Ayodele, 2016).

Hypothesis One is proposed and presented in the null form to guide this study as follows:

$H0_1$: Foreign debt inflows have no significant influence on real gross domestic product per capita in Nigeria,

b) Remittance Outflow and Economic Growth

Komla (2018) indicated that foreign remittance flows serve as a conduit through which countries all over the world experience undeniable economic growth and global competitiveness. Conceptually, remittances refer to all transfers from abroad in cash or in goods/services received in a country by residents or non-residents. It is an expanding source of external finance, which is a form of private capital that goes to individuals. The total remittances to a country are from three sources of funds which include migrant remittances, compensation of employees and personal transfers (Ighosewe and Agbogun, 2020).

Migrants and Workers Remittances are classified as current private transfers from migrant workers resident in the host country for more than a year, irrespective of their immigration status, to recipients in their country of origin (World investment report, 2019), while employee compensation is the income of migrants who have lived in the host country for less than a year (Ighosewe and Agbogun, 2020).

A personal transfer is the net worth of migrants who are expected to remain in the host country for more than one year that is transferred from one country to another at the time of migration (Ighosewe and Agbogun, 2020). Hypothesis two is proposed and presented in the null form to guide this study as follows:

$H0_2$: Foreign remittance inflows have no significant influence on real gross domestic product per capita in Nigeria,

c) Foreign Direct Investment Outflows and Economic Growth

Dwi and Muhammad (2018) maintain that foreign direct investment flows to developing countries serve as a major source of capital flows. One of the major justification for capital export, as raised Gunter (2017), is that investors in rich countries actually respond to investment options since the business environment is investor's friendly. Meanwhile, investors in developing countries seek to avoid the significant risk they perceive at home by investing outside the country. Hence, they are not ready to prefer to send their funds overseas. The third hypothesis of this study presented in the null form to guide this study as follows:

$H0_3$: Foreign direct investment outflows have no significant influence on real gross domestic product per capita in Nigeria.

d) Foreign Education and Health Services and Economic Growth

Persistent capital flight occurs in Nigeria as a result of reliance on international hospitals for hospital treatment and foreign schools and colleges for education. This is connected to the private use of money obtained through corruption and transferred to offshore bank accounts (Niyi, 2015). As a result of this aspect, there is a brain drain and governmental officials in Nigeria divert monies to their own pockets (Adedayo and Ayodele, 2016). This, to a large extent, affects the growth of the economy. The fourth hypothesis of this study presented in the null form to guide this study as follows:

$H0_4$: Expenses on foreign education and health have no significant influence on real gross domestic product per capita in Nigeria.

D. Theoretical Framework

The Investment Diversion Theory and Lucas Paradox theory are used to underpin this study. The investment diversion theory initially identified by Pastor (1989) and Ajayi (1992) pertains to capital flight in an economy. The theory suggests that due to macroeconomic uncertainties (especially in underdeveloped countries) and positive investment options in advanced countries, some unscrupulous representatives and bureaucrats would unduly capture the situation to divert funds. Consequently, the funds become inaccessible for investment at home and this results in decreasing economic outputs and increasing economic hardships accompanied by increased unemployment, rising dependency ratios, and short life expectancy. The negative macroeconomic consequences on the economy often require external borrowing for the purpose of domestic industry resuscitation. Quite often still, the borrowed funds are again siphoned, leaving the country in persistent external borrowing and external capital dependence.

If the government operates a floating exchange rate, the liquidity restriction or 'crowding-out' effect may cause local currency value decline (Ajayi, 1992). At this point in time, an attempt to preserve the external exchange rate plummets in the loss of capital inflows (Pastor, 1989). One of the very negative repercussions of capital outflows on the countries

affected is the manifestation of investors/investment diversions.

Lucas paradox capital flight theory on its own suggests that it is expected that capital should flow from upstream (advanced) countries to downstream (poor) countries. Unfortunately, this, in reality, is a mirage because money actually flows from developing to developed countries (Qolbi and Kurnia, 2015). This theory is used along with "Investment Diversion Theory" to underpin this study because it articulates that the rationale for capital which ought to flow from developed countries to developing economies, turns the other way round. This explains why the Nigerian economy remains under-developed with huge capital outflows abroad.

E. Prior Empirical Studies

Acquah and Ibrahim (2020) examined the relationship among foreign direct investment, economic growth and financial sector development of 46 African countries from 1980 to 2016. Using the two-system generalized method of moments reveals an ambiguous effect of FDI on growth, though, for the most part, higher FDI is associated with higher growth. Thus, the precise effect of FDI on economic growth is conditioned on the model specification. Interestingly, the study revealed that financial sector development diminishes the positive effect of FDI on economic growth.

Anetor (2019) examined the effect of macro-economic fundamentals on capital flight in the Sub-Saharan Africa (SSA) sub-region. The study spanned from 1985 to 2015. Data for the study were obtained from Word bank global development indicators for the periods under study. The study adopted the ARDL model techniques to examine the determinants of capital in SSA sub-regions. The result indicated that economic growth has a negative but significant effect on a capital flight in both the short and long-run. However, foreign portfolio outflows, foreign direct investment, trade openness, and external debt had a positive and significant impact on a capital flight in both the long-run and on the short-run.

Igwemma, Egbulonu and Nneji (2018) examined the impact of capital flight on the Nigerian economy from 1986-2016. Political instability, amount of looted funds, interest rate differentials, expenses on foreign medical services and education abroad, and domestic investment were used as the independent variable. The Central Bank of Nigeria (CBN) Statistical Bulletin, the World Bank Development Index, the Economic and Financial Crimes Compensation Bulletins, Tertiary Education Trust Fund publications, and the Federal Ministry of Communications annual briefings and extracts (various editions) were used to compile data for these different factors. The characteristics were shown to be

integrated in mixed order. Thus the co-integration tests were used to confirm the long-term link between the variables.

Egbuwalo and Abere (2018) investigated the impact of capital flight on the growth of the Nigerian economy. In order to examine both short and long-run relationships between variables, the autoregressive distributed method and top Johansen co-integration test were conducted. The outcomes of the study show that there is a long-run negative association between GDP and all of the capital flight factors.

Bredino, Fiderikumo and Adesuji (2018) examined the impact of capital flight on economic growth in Nigeria, 1980 – 2012.The study considered time series data released by the National Bureau of Statistics and the Central Bank of Nigeria's Statistical Bulletin provided data on the gross domestic product (GDP), exchange rate, capital flight, and external debt. The study used a combination of global techniques, such as the Artificial Neural Network (ANN) as a prediction methodology, as well as Ordinary Least Square (OLS) and co-integration/error-correcting methods. The study showed that capital flight has a negative influence on GDP, whereas the exchange rate has a positive impact on GDP.

Muhammad and Dwi (2018) examined the effect of capital flight on the economic growth of Indonesia. The budget deficit ratio, economic expansion, inflation, currency rate and dummy government rating are also the variables. The study used the Ordinary Least Squares (OLS) regression method. The study showed that capital flight in Indonesia surged rather significantly from the first quarter of 2009 to the second quarter of 2011, as compared to subsequent periods.

Egbuwalo and Abere (2018) investigated the impact of capital flight on the growth of the Nigerian economy. A model of GDP was specified explaining capital flight from Nigeria in line with the World Bank residual approach to the measurement of capital flight. The Autoregressive Distributed Lag approach top co-integration was used to analyze both short and long-run relationships between variables. The findings reveal that there is a Long run negative relationship between GDP and all the capital flight variables, including foreign portfolio investment.

Orimolade and Olusola (2018) investigated the impact of capital flight on the growth of the Nigerian economy from 1970-2016. The variables studied include external Debt, Direct Foreign Investment, External Reserves, Current Account Balance, and Terms of Trade. The ARDL approach was used to analyse both short and long-run relationships between variables. The results reveal that there is a Long run negative relationship between GDP and all the capital flight variables in this study.

Rahmouni and Debbiche1 (2017) examined the effects of remittances on the economic growth of Saudi Arabia from the period 1970 to 2014 by using a standard model augmented by the amount of remittances outflows. The Autoregressive Distributed Lag approach to Error correction modelling (ARDL-ECM) was used in order to estimate a short and long relation between remittances and gross domestic product (GDP) in Saudi Arabia over the studied period. The result showed that, both in the long and the short term, remittance outflows have no significant effect on GDP.

Alley (2017) examined the linkage between weak private capital flows and economic growth in SSA countries from 2003 to 2013. The independent variable in the study is capital flows measured by foreign direct investment outflows, foreign portfolio investment outflow, and remittance, while the dependent variable is economic growth measured by RGDP growth rate. The study revealed that risk-sharing private capital (foreign direct investment and equity capital) risk-apathetic capital (bond) had an inverse effect on economic growth as well as weakened their global competitiveness. The result also revealed that capital controls were more effective at containing surges to risk-sharing capital and when selectively targeted.

Adeola (2017) investigated the effect of different foreign capital flows on economic growth in four selected sub-Saharan Africa's major economies to determine the foreign capital flows that contribute most to the economic growth in the countries. Tests of Co-integration and Vector Error Correction modelling were used in the estimation to achieve this. The study found that foreign direct investment, foreign portfolio investment, foreign debt flows, official development assistance and remittances are positively and significantly related to economic growth in SSA countries during the period under review.

Gunter (2017) investigated the impact of corruption and family effects on capital flight in economic growth nexus in China based on data from 1984 to 2014. The study adjusted and reflected the genuine assets of the Chinese banking industry, inaccurately of China's trade with its major trading partners, currency values, and the lack of strength of both the authoritative borrowing data, among other things, using both Cuddington's balance of payments and residual measures to investigate this connection.

Lawal, Kazi, Adeoti, Osuma, Akinmulegun, and Ilo (2017) examined the impact of capital flight and its determinants on the Nigerian economy using the Autoregressive Distributed Lag (ARDL) model to analyze data sources from the period of 1981 to 2015. The variables included current account balance, capital flight, foreign direct investments, foreign reserve, inflation rate, external debt, and the real gross

domestic product. It was to examine the existence of a long-run relationship among the variables studied. The result indicates that capital flight has a negative impact on the economic growth of Nigeria.

Adedayo and Ayodele (2016) evaluated the impact of capital flight on Nigeria economy. The research work made use of secondary data collected from the Central Bank of Nigeria's Statistical Bulletin of various issues and the National Bureau of Statistics. The empirical measurement covers the sample period between 1980 and 2014. An Ordinary Least Square (OLS), Augmented Dickey-Fuller unit root test, and Co-integration test was adopted to carry out an extensive analysis of the adopted variables, which include: Gross Domestic Product, Capital Flight, FDI outflows, and Exchange Rate. The results revealed that the variables have a significant effect in the positive direction. This implies that as capital flight inflow increases into the economy, it, in turn, increases the exchange rate causing a positive influence on the Nigerian economy within the period considered.

Hathroubi and Aloui (2016), using three variants of the wavelet methodology, showed that remittances outflows are strongly related to real growth rates, employment and government expenditure. Moreover, the study found that government expenditure positively affects remittances' share to real output and that a positive causality link exists from the active population to the remittances.

a) Gap in Literature
The summary of the literature on some prior empirical studies reviewed indicate that both capitals outflows and inflows have not been entirely considered in aggregate in the light of economic growth and sustainable development. Moreover, there appears to be a series of divergent empirical findings from the empirical literature. This may, however, simply be the result of the sampled countries, methodology applied, data coverage, researchers' choice of study variables, amongst other factors not accounted for. Extant literature on the linkage between foreign capital flows and economic growth shows a focus either on the relationship between foreign capital inflows and economic growth or between foreign capital outflows and economic growth. This study attempts to bridge the space by examining the influence foreign capital flows have on economic growth in Nigeria from 1999 to 2020, given that Nigeria returned to democratic governance in 1999.

III. MATERIALS AND METHODS
The study adopted the *ex-post Facto* research design premised on the fact that it is used to source useful information concerning the present status of a particular phenomenon but does not give liberty to manipulate the variables of interest. The study population covers Real Gross Domestic Product, and capital flows in the Nigerian

economy using aggregate data on the entire population from 1999 – 2020.

Secondary data was sourced from the CBN Statistical Bulletin (2020) and the World Bank Global Financial Development Data Bank (2020). Data considered include foreign debt inflows, foreign remittance inflows, foreign direct investment outflows, expenses on foreign education and health, and real gross domestic product per capita from 1999 to 2020.

The study was modelled after the works of Anetor (2019); Alley (2017); Adeola (2017) econometrically expressed as:

$$GDPPC = \beta_0 + \beta_1 FODI + \beta_2 FORI + \beta_3 FDIO + \beta_4 XFEH + Ut \dots\dots\dots\dots\text{Equation 3.1}$$

Where:
GDPPC	=	Real Gross Domestic Product Capita
FODI	=	Foreign debt inflows
FORI	=	Foreign remittance inflows
FDIO	=	Foreign direct investment outflows
XFEH	=	Expenses on foreign education and health
Ut	=	Stochastic Disturbance Term

All variables of interest were lagged in order to treat for and avoid spurious regression results.

A-priori expectation: $\beta_1\beta_2, \beta_3, \beta_4 > 0$. It is expected that all capital inflow and outflow proxies considered in this study would lead to an increase in economic growth. By implication, a positive relationship is expected between capital flows and economic growth in Nigeria.

A. *Measurement of Variables*

Table 3.1: Operationalization of Variables

S/N	Denotation	Nature of variable	Measures	A-priori Expectation	Validity/Source
1	GDPPC	Dependent	GDP at constant prices divided by the population of a given country	Nil	Lawal, Kazi, Adeoti, Osuma, Akinmulegun, and Ilo, (2017)
2	FODI	Independent	Foreign debt stock	Negative	Igwemma, Egbulonu and Nneji (2018);
3	FORI	Independent	Personal Remittance Inflow (current US$)	Positive	Ighosewe and Agbogun (2020)
4	FDIO	Independent	Foreign direct investment outflows, net outflows (current US$)	Positive	Adedayo and Ayodele (2016)
5	XFEH	Independent	Annual Expenses on foreign education and health	Negative	Igwemma, Egbulonu and Nneji (2018)

Source: Researcher's compilation from World Bank development indicator (2021)

B. *Technique of Data Analysis*
All the study data were first subjected to pre-test alongside post-test analysis. The statistical package used to run these analyses is the Econometric Views (E-Views) version 9.0. The choice of this statistical package for this study is premised on its global acceptability, user-friendliness and amenability for time series data.

IV. RESULTS AND DISCUSSIONS

This section takes into consideration the data presentation, descriptive statistics, correlation analysis, diagnostic tests, and regression results. They are presented below:

Table 4.1: Raw Data on Foreign Capital Flows and Economic Growth

YEAR	XFEH	FDIO	FODI	FORI	GDPPC
1999	6127.8	120600	974367.5	1301056	10.2313
2000	6663.4	140400	1729268	1391826	10.5599
2001	8870.9	840337	2468040	1166615	10.5747
2002	18905	656653	1430090	1208959	10.9223
2003	17108.4	726269	1627895	1062821	11.1011
2004	28671.2	119700	1705136	2272735	11.3647
2005	20874	141800	8800307	14640084	11.5717
2006	38364	215300	6700510	16932144	11.7844
2007	15927.2	319500	1002007	18014431	11.8708
2008	8487.9	260400	427512.6	19199974	12.008
2009	8950.9	134900	426303.5	18370797	12.0042
2010	17457	178500	306840.5	19744755	12.7651
2011	7157	219400	351585.9	20616773	12.8769
2012	7378.9	171600	251711.3	20542884	12.9807
2013	8234.8	200700	393272	20797074	13.0636
2014	8196.9	180500	264681.1	20999085	13.1437
2015	9801.9	219900	397598.2	20626047	13.1718
2016	21606.6	214400	355439.4	19697938	13.2204
2017	22429.2	210800	342899.4	22037017	13.2602
2018	20768.3	714953	1341308	24311022	13.2706
2019	11907.1	137100	54832.54	23809281	13.2801
2020	13297.8	758311	658438.5	17207547	-13.9

Source: CBN Statistical Bulletin (2020); World Bank Global Financial Data (2020); International Monetary Fund (2020)

Table 4.2: Summary of Descriptive Statistics

	GDPPC	FODI	FORI	FDIO	XFEH
Mean	10.96028	1455002.	14815948	312819.2	14872.10
Median	12.00610	542975.6	18785386	212600.0	12602.45
Maximum	13.28010	8800307.	24311022	840337.0	38364.00
Minimum	-13.90000	54832.54	1062821.	119700.0	6127.800
Std. Dev.	5.645648	2159291.	8670221.	243113.2	8285.196
Skewness	-4.133524	2.540247	-0.831127	1.229272	1.140621
Kurtosis	18.76748	8.464390	1.948162	2.774193	3.969261
Jarque-Bera	290.5444	51.03173	3.546997	5.587475	5.631573
Probability	0.000000	0.000000	0.169738	0.061192	0.059858
Sum	241.1262	32010043	3.26E+08	6882023.	327186.2
Sum Sq. Dev.	669.3402	9.79E+13	1.58E+15	1.24E+12	1.44E+09
Observations	**22**	**22**	**22**	**22**	**22**

Source: Econometric Views version 9.0. (2021)

Table 2 above clearly revealed that the gross domestic product per capita growth rate (GDPPC) had a maximum and minimum value of 13.28010 and -13.90000over the study period. Meanwhile, foreign debt inflows reported maximum and minimum values of 8800307 and 54832.54, respectively. More so, both foreign remittance inflows and foreign direct investment outflows reported maximum values of 24311022 and 840337.0, respectively. More so, foreign remittance inflows

and foreign direct investment outflows reported maximum values of 1062821.0 and 119700.0. More so, expenses on foreign education and health had a maximum and minimum value of 38364.00 and 6127.800.

Furthermore, in terms of volatility, gross domestic product per capita growth rate (GDPPC) and foreign debt inflows were highly volatile since their mean values were both higher than their standard deviation values. To further substantiate this assertion, the p-values of their Jarque-Bera tests are higher than 5%. However, the model was further subjected to a normality test. The result is stated below:
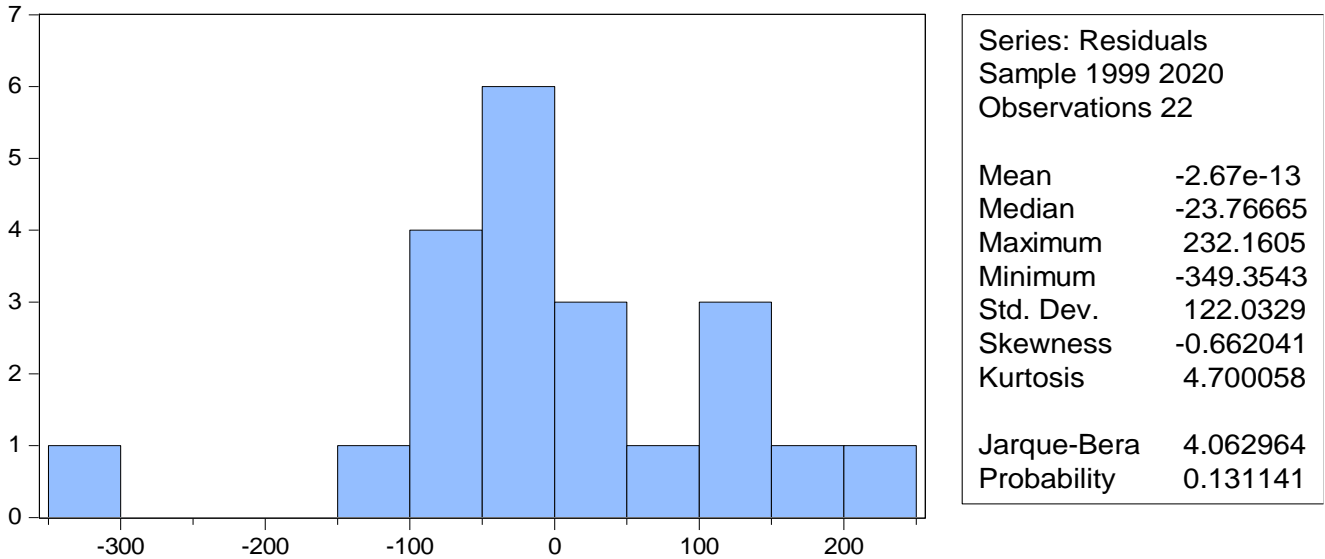

Figure 4.1: Normality test

Source: Econometric Views version 9.0. (2021)

The normality test results in figure 1 above evidence that the model is normally distributed. This implies that the model is well-fitted for prediction. Hence, we boldly concluded that the model satisfies the OLS Assumption of normality.

Table 4.3: Summary of Correlation Analysis

	GDPPC	FODI	FORI	FDIO	XFEH	DTOP
GDPPC	1.000000					
FODI	0.551061	1.000000				
FORI	0.869294	0.238407	1.000000			
FDIO	0.481666	0.393900	-0.214244	1.000000		
XFEH	0.856808	0.253538	0.403730	-0.217699	1.000000	-0.065769

Source: Econometric Views version 9.0. (2021)

The correlation analysis in table 2 above reported that migrant foreign debt inflows, foreign remittance inflows, expenses on foreign education and health exerted a high correlation with sustainable economic development. More so, both variables exhibited positive results. However, both foreign direct investment outflows and the degree of trade openness were negative though the degree of trade openness reported a high correlation. Lastly, trade openness also exhibited a high positive correlation.

In terms of the individual variables, none of the variables exhibited high correlation suggests that the model is free from multicollinearity. This suggests that the model is fit for prediction.

B. Diagnostic Test

To revalidate the OLS assumption, we first subjected the model to diagnostic tests vis-à-vis normality test and Heteroskedasticity test. They are presented below:

Table 4.4: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.429546	Prob. F(4,17)	0.8210
Obs*R-squared	2.630219	Prob. Chi-Square(4)	0.7568
Scaled explained SS	2.482644	Prob. Chi-Square(4)	0.7791

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 09/28/21   Time: 11:23

Sample: 1999 2020

Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-756.3990	135988.1	-0.005562	0.9956
FODI	-3.064501	2.360477	-1.298255	0.2138
FORI	5035.422	5078.637	0.991491	0.3372
FDIO	30153.46	29226.80	1.031706	0.3186
XFEH	5.398654	5.414537	0.997067	0.3345

R-squared	0.125249	Mean dependent var	14182.88
Adjusted R-squared	-0.166335	S.D. dependent var	27955.24
S.E. of regression	30190.82	Akaike info criterion	23.70342
Sum squared resid	1.37E+10	Schwarz criterion	24.00186
Log-likelihood	-242.8859	Hannan-Quinn criteria.	23.76819
F-statistic	0.429546	Durbin-Watson stat	1.888975
Prob(F-statistic)	0.821037		

Source: Econometric Views version 9.0. (2021)

Since the P-value of the Heteroskedasticity tests estimated at 0.8210 is higher than 5%, we conclude that the model is Homoskedastic. Hence, we can assertively state that the model is Homoskedastic.

Table 4.5: OLS Regression Result
Dependent Variable: GDPPC

Method: Least Squares

Date: 09/28/21   Time: 11:13

Sample: 1999 2020

Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.89286	0.187647	58.04976	0.0000
FODI	-0.530701	0.121689	-4.361124	0.0011
FORI	0.049295	0.011017	4.474387	0.0004
FDIO	0.231257	0.347280	0.665909	0.5192
XFEH	-0.256999	0.025272	-10.16949	0.0000

R-squared	0.979033	Mean dependent var	1802.648
Adjusted R-squared	0.972044	S.D. dependent var	842.7710
S.E. of regression	140.9114	Akaike info criterion	12.96910
Sum squared resid	297840.4	Schwarz criterion	13.26753
Log-likelihood	-130.1755	Hannan-Quinn criter.	13.03386
F-statistic	140.0826	Durbin-Watson stat	1.930285
Prob(F-statistic)	0.000000		

Source: Econometric Views version 9.0. (2021)

The result above reaffirmed that the overall capital flows (in and outflows) had a high statistical significant effect on the sustainable development of Nigeria throughout the study periods. This is because the p-value of the F-statistics estimated at 0.00000 is less than 5%. Further, the coefficient of determination denoted by R-Squared estimated 0.979033 (97.90%) has high explanatory power. This further revealed that the overall capital flows (in and outflows) jointly accounted for 97.90% variation in the economic growth proxy (GDPPC) while the remaining 2.10% is explained by the error term (i.e. other variables not captured in the study). Meanwhile, the Durbin Watson, which accounts for the presence or absence of serial autocorrelation in the series, reported a value of 1.930285, suggesting that the model is free from the serial auto-correlation problem. As such, our model is fit for prediction.

Table 5: Summary of Hypothesis Testing

Variables	Prob.	Decision Rule	Conclusion
Foreign Debt Inflows	0.0011	**P-value<5%**	Significant-Reject Null Hypothesis
Foreign Remittance Inflows	0.0004	**P-value<5%**	Significant-Accept Null Hypothesis
Foreign direct investment Outflows	0.5192	**P-value>5%**	Insignificant-Accept Null Hypothesis
Expenses on Foreign Education and Health	0.0000	**P-value<5%**	Significant-Reject Null Hypothesis

Source: Researcher's Compilation Based on E-Views Output (2021).

A. Discussion of Results
As expected, foreign debt inflows denoted by FODI exerted a negative effect on economic growth in Nigeria. This implies that a 1% rise in foreign debt inflows will reduce real gross domestic product by 53.07%. This implies that foreign debt inflows are growth deterring. The justification for this is that the higher cost of servicing more inflows of foreign debt may lead to debt overhang, which in turn reduces the real gross domestic growth of the receiving country. This result is in tandem with the findings of

Rahmouni and Debbiche1 (2017); Orimolade and Olusola (2018).

Additionally, the result revealed that foreign remittance inflows have a positive and statistically significant effect on economic growth in Nigeria over the period of study. The positive result revealed that a unit rise in foreign remittance inflows results in 0.049295 rises in real gross domestic product per capita. This result aligns with the aprioiri expectation. The result further substantiates the claim raised by earlier scholars that foreign remittance inflows are instrumental to the economic growth of every nation. This result aligns with the findings of Ighosewe and Agbogun (2020).

Conversely, foreign direct investment outflows exerted an insignificant positive effect on the development of the Nigerian economy. This is because a 1% increase in FDIO will increase GDPPC by 23.13%. This means that foreign direct investment outflows at the moment are not instrumental to economic development in Nigeria. However, the degree of trade openness being the control variable was found though positive but insignificant. The possible reason for this is attributed to the fact that the Nigerian business environment is still shallow at the moment. Hence, it was unable to contribute maximally to the growth and development of the Nigerian economy.

Lastly, the result revealed that only trade openness efficiently controlled for the relationship between foreign remittance indicators and the sustainable development of Nigeria. The policy implication here is that trade openness should be encouraged since it reported high statistical significance.

V. *A. Conclusions*
This study examined the effect of foreign capital flow indicators on sustainable growth and development of Nigeria from 1999 to 2020 using the Ordinary Least Square regression approach through the instrumentality of Econometric Views version 9.0. The independent variable is foreign capital flows measured by foreign debt inflows, foreign remittance inflows, two foreign capital outflows (expenses on foreign medical services and education), and foreign direct investment outflows against real gross domestic product per capita growth rate. The study collected data from CBN Statistical Bulletin, World Bank Data Bank, and the International Monetary Fund (2020). Specifically, the study reported that both foreign debt inflows and foreign medical services and education exerted a significant negative effect on economic growth and development. Meanwhile, foreign remittance inflows exerted a significant positive effect on economic growth and development in Nigeria, while foreign direct investment outflows exerted a statistically positive but insignificant effect on economic growth and development in Nigeria. It is concluded that

foreign capital flows are instrumental to economic growth and development in Nigeria, especially where foreign debt is well utilized and foreign direct investment outflows and expenses on foreign education and health are well accounted for.

B. Recommendations
The study recommends that the Nigerian government:
a) should ensure that borrowed funds are used for the purpose for which they are acquired;
b) should track all forms of illegalities arising from foreign remittance inflows since foreign remittance inflows have a highly significant effect on economic growth and development in Nigeria;
c) should undertake policy measures and reforms which are targeted at creating a more conducive business environment for investment with a view to correcting the increased flow of more FDI; and
d) should ensure that expenses on foreign education and health are well accounted for as a critical factor in determining the growth and development of the economy.

REFERENCES
[1] Acquah, A.M & Ibrahim, M. (2020). Foreign direct investment, economic growth and financial sector development in Africa. Journal of Sustainable Finance and Investment, 10(4) 315-334.
[2] Adaramola, A. & Obalade, A. A., Does Capital flight have a force to bear on Nigeria economic growth? International Journal of Developing Societies, 2(2) (2013) 1-10.
[3] Adedayo, A. & Ayodele S. O., Empirical analysis of the impact of capital flight on Nigeria economy. International Journal of Academic Research in Economics and Management Sciences, 5(2) (2016) 1-14
[4] Adeola, O.O. 0(2017). Foreign capital flows and economic growth in selected Sub-Saharan African economies. Unpublished Ph.D. Thesis Submitted to the Faculty of Economics and Management Sciences, Stellenbosch University
[5] Afees, A.S., & Kazeem, I., Capital flight-growth nexus in Sub-Saharan Africa: the role of macro-economic uncertainty. Center for Econometric and Allied Research, University of Ibadan Working Paper Series, CWPS 5034., (2017).
[6] Alley, I., Capital flow surges and economic growth in Sub-Saharan Africa: any role for capital controls? Available at https://www.researchgate.net/publication/314876833. Accessed on 13th (2017) (2021).
[7] Anetor, F.O., Macroeconomic Determinants of Capital Flight: Evidence from the Sub Saharan African Countries. International Journal of Management, Economics and Social Sciences, 8(1) (2019) 40 – 57.
[8] Bredino, S. Fiderikumo, B. & Adesuji. A., Impact of Capital Flight on Economic Growth in Nigeria: An Econometric Approach. Journal of Business and Economic Development., 3(1) (2018) 22-29.
[9] Egbuwalo, M.O. & Abere, B.O., Capital flight and the growth of Nigerian economy: An Autoregressive Distributed Lag (ARDL) Modeling. IIARD International Journal of Economics and Business Management, 4(2) (2018) 1-15.
[10] Gunter, F. R.. Corruption, costs, and family: Chinese capital flight, 1984–2014. China Economic Review, 43 (2017) 105-117.
[11] Hathroubi S, & Aloui C., On interactions between remittance outflows and Saudi Arabian macro-economy: New evidence from wavelets. Economic Model, 59(1) (2016) 32-45.
[12] Ighosewe, E.F. & Agbogun, O.E., Relationship between Foreign Remittance Indicators and Human Capital Development in Sub-

Sahara Africa Countries. Journal of Resources & Economic Development, 3(1) (2020) 55-69

[13] Igwemma A. A, Egbulonu K. G & Nneji , A., Capital Flight And The Nigerian Economy (1986-2016) International Journal of Development and Economic Sustainability, 6(4) (2018) 11-28.

[14] Komla, A., Remittances, education and health in Sub-Saharan Africa, Cogent Economics & Finance, 6(1) (2018) 1-27.

[15] Lawal, A. I, Kazi, P. K., Adeoti, O. J., Osuma, G. O., Akinmulegun, S., & Ilo, B., Capital flight and the economic growth: Evidence from Nigeria. Business Review, 8(2) (2017) 125-132.

[16] Muhammad, B, R. & Dwi, H.K., Empirical Study of Capital Flight in Indonesia 2009-2017 Period. Journal Pendelikon Economics and Business, 6 (2) (2018) 127-145

[17] Niyi, A. (2015). Three Major Task Ahead for the Next President. The Punch, 24 February (2015).

[18] Olatunji, O. and M.I Oloye., Impacts of Capital Flight On Economic Growth In Nigeria. International Journal for Innovation, Education and Research, 3(8) (2015) 60-75.

[19] Qolbi, N., & Kurnia, A. S., Intra ASEAN-5 Capital Flows: Do They Rep-resent Neoclassical Belief or Lucas Par-adox? Buletin Ekonomi Moneter Dan Perbankan, 18(2) (2015) 157–182