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FDI, REMITTANCE INFLOWS, AND ECONOMIC DEVELOPMENT IN A DEVELOPING ECONOMY: WHAT DO NIGERIAN DATA SHOW?

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Abstract

This study investigated the impact of remittance inflows and Foreign Direct Investment on economic development in Nigeria. The Phillip-Perron unit root test indicated that all the series except domestic investment were stationary at first difference. With the combination of orders of integration 1 and 0, the Autoregressive and Distributed Lag (ARDL) Model was adopted. The results revealed there is a long relationship existing amongst the variables and that Remittance inflow, Gross Fixed Capital Formation, Private Investment and Exchange Rate are significant determinants of economic development. Of these variables, Remittance inflow and Exchange rate were found to negatively influence economic development in the long run while others were positive. A Vector Autoregressive (VAR) model was also used to examine the response to shocks of Income per capita to Remittances and FDI respectively and it was found that Income per capita responds to shocks from both variables. The study recommends there is need for serious policy interventions from government to make foreign direct investment and remittances more development enhancing and not retarding.

Keywords: FDI; Remittances; Economic; Development.

JEL Classification: E22; F21; F24; O11; O15.

1. INTRODUCTION

Globalization is generally regarded as a process through which countries get connected to achieve certain economic, political or technological goals. When countries of the world are interconnected in one or two ways to carry out any economic activity, transfer of capital in the form of inflows and outflows becomes inevitable. Globally, the process of development has been a watchword for every economy, and since no economy is self-sufficient people migrate round the world to acquire skills, knowledge, ideas and wealth to add to their already existing wealth in order to facilitate the process of development.

Foreign direct investment and remittance inflows came about as a result of international migration of human and non- human resources (Comes et al, 2018). Over the past three decades, there has been series of capital inflows to developing countries, including Nigeria. These inflows can be in the form of remittance, foreign direct investment, official development assistance etc. It is generally believed by development economist (like David Ricardo) that these flows towards the developing countries, even though may be concessional, but should not be avoided. Remittance reduces poverty in developing countries through the incomes it supplies to household (MPI 2008) .Many researchers and scholars such as Rosenzweig (2005) and Ratha (2003) have written from different discipline, for and against the developmental impact of migration on both source and host countries. This debate has created two major opposing schools of thought –migration optimist and pessimist, but having gone through some works that studied the impact of remittance and FDI on socio-economic development of some developing countries of the world, such as Bangladesh, Mexico and Philippines, it is evident that remittance and FDI contributed immensely to the development of these countries. China being one of the fastest growing economies of the world, their testimonies still emanates from FDI in their economy. The above mentioned countries adopted some utilization technique that made the effect of FDI and remittance manifest in their economy, some of these manifestations include increase in employment, favourable income per capita, good health care, high literacy rate, and high life expectancy and so on.

Furthermore, the economic environment of an economy is of great influence to the benefit which accrues from remittances, (Migration Policy Institutes, 2008).The perceived benefits which accompany foreign direct investments seems greater than its demerits, this sole reason has compelled the less developed nation like Nigeria to encourage foreign direct investments through income tax holidays, import duties exemption and subsidies to foreign firm. Developing countries are encouraged to embrace foreign direct investment as a source of its external finance, and is seen as a pathway to inclusive growth and development in an economy. The poor state of the Nigeria economy has compelled the government to wake up and device means of improving lifestyles through foreign direct investment into the country. Ajayi (2006) noted that the required capital for investment, which is capable of alleviating poverty in Nigeria is very low, and this impedes its growth and development.

However, foreign direct investment and remittances are catalyst for economic growth in developing nations, because it enhances economic growth and development through increased domestic investment, increased capital formation, favourable income per capita, employment creation, health and educational innovations and also facilitating the technology transfer in the host countries, which generally promotes peoples welfare. (Falki, 2009).

Khan (2007) noted that foreign direct investment and remittance forms a great part of capital formation in less developed countries as its inflows increases.

However, there has been a debate as to whether or not foreign direct investment generates positive spillover effect for host countries. Though, there are conflicting views about FDI to its host country's development, policy makers and academia still maintain that FDI play a vital role on the host country's development effort. Besides the direct funds that FDI supplies, it is also a source of valuable technology know-how for local firms which helps the economy at large. Sequel to the perceived benefit that accompanies FDI, Nigeria as an economy left no stone unturned in encouraging FDI into the economy.

After the realization of the importance of FDI, the Nigerian government in the mid-1980 resorted to adoption of some policies that will drive foreign investors into Nigeria. The adoption of the Structural Adjustment Programme (SAP) as an economic package ensured the establishment of laws and reforms such as the Industrial Development Co-ordination Committee (IDCC), financial liberalization,, Allied matters decree 1990 and the Nigeria Investment Promotion Commission (NIPC) that gears towards FDI enhancement in Nigeria. The reforms were put in place by the Nigerian government to widen the horizon of FDI by increasing investors' confidence to dwell in the economy. The reforms aim at stimulating private sector participation which promotes private sector investment, and entrepreneurial business operations in Nigeria. Shino (2009) noted that "since the enthronement of democracy in 1999, the government of Nigeria has taken a number of measures necessary to drive foreign investors into Nigeria". These measures, he noted include the repelling of laws and policies that are not favourable to foreign investment growth, and creation of economic weather that is business friendly for the investors.

Still on this, the enormous drop in global crude oil price and the persistence effort by the Nigerian government to create more avenues for revenues, the government has metamorphosed from one reform to another in order to diversify the economy. In 1995, the Nigeria Investment Promotion Commission was set up, this law provides for a foreign investor or serves as a shield against exploitation by the internal factors. NIPC equally creates conducive environment for foreign investors to trend well in their operations. In summary the NIPC advices the federal government on the appropriate policies and actions to take, in attracting more foreign investors into the economy (NIPC, 1995).

Workers remittance all over the globe remains the largest source of foreign financing, exceeding both portfolio investment and official development assistance (IMF, 2011) with a big margin. World Bank(2013) revealed Nigeria as the top – remittance receiving country in Africa and fifth in the world following India(\$71 billion), then China(\$60 billion), Philippines (\$26 billion), Mexico(\$ 22 billion).

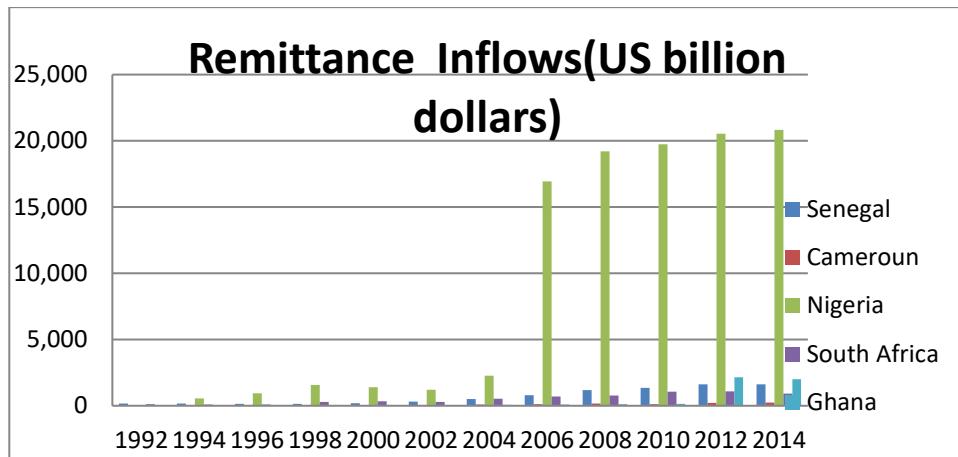


Figure 1. Remittance Inflows into selected countries in sub-Saharan Africa.

Source: Researchers' computation based on data from World Bank Data base

From the figure above, Nigeria has the highest trend of remittance inflow among the five African countries that were sampled. For example, in the year 2004, remittance inflow into Nigeria was \$2.270 billion, while it was \$511 million, \$523 million, \$82million, and \$103 million for Senegal, South Africa, Ghana and Cameroun respectively. However, after 2004, there was massive upsurge of remittance inflows into Nigeria leaving other countries with minimal inflows, for example between 2006 and 2014, while remittance inflows into Nigeria rose from \$5.435 billion to \$20829 billion, the average inflows for Cameroun, Ghana, Senegal and South Africa were \$185.5m, \$796.8m, \$1319.6m and \$946.4m respectively. This clearly shows that Nigeria has not been disadvantaged at all among the sampled countries, as far as remittance inflow is concerned. The diagram reflects that more Nigerians live abroad and are productive as well, and this put the country ahead of other African countries as the most remittances recipient country. Recently as shown in the figure, remittances has outpaced Foreign Direct Investment (FDI), Official Development Assistance (ODA) and other inflows in Nigeria and is presently second to oil receipts as a foreign exchange earner. This high remittance inflows to Nigeria, is a clear indication of an actual increase in monetary flows resulting from rising migration and labour mobility. Addison (2004) asserted that remittance is much more stable over time than other capital flows and exports. He also recognized that remittance flow unlike other capital flow does not create obligation in the future, making it a very attractive source of foreign financing. In the history of Nigerian economy, the remittance inflow into the country has been on the increase, with \$10

US million in 1990, and then got to \$1.390 US billion in the year 2000, coming to \$10.045 US billion in 2010, then in 2014 it accelerated to \$20.677 billion. The remittance inflows indeed have been increasing geometrically in Nigeria.

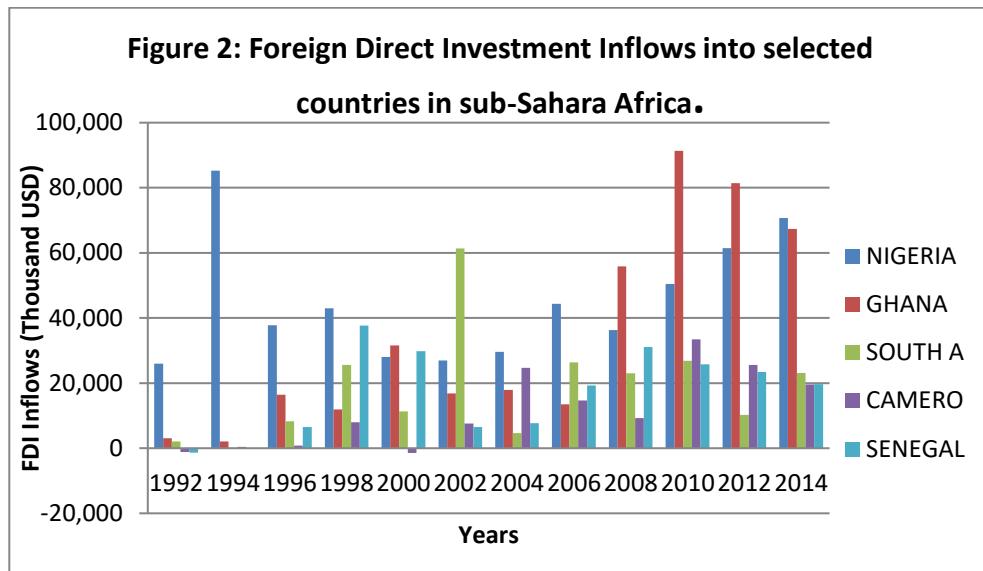


Figure 2. Foreign Direct Investment Inflows into selected countries in sub-Saharan Africa.

Source: Researchers' computation based on data from World Bank Data base

The figure 2 above reveals that, out of the selected few African countries, on the average Nigerian economy still has the highest FDI inflows compared to other countries. In 1992, Nigeria's foreign direct investment was \$2.6 m, in 1996 it went up to \$3.7 m. Coming to the year 2000, it rose to \$2.8m. Then in 2010 it became \$5.04m, and \$2.14m in 2012, while in 2014 it became \$1.07m. Evidently there have been some fluctuations lately, which can be attributed to the Boko Haram terrorism that scared away many foreigners and distorted economic activities in the country, though the figure still trends high. However from 2004 to 2014, Nigeria's FDI averaged to \$4.399m, while the average inflows for Ghana, South Africa, Cameroun and Senegal were \$6.2676m, \$1.7823m, \$1.805m and \$2.2187m respectively. Nigeria is still on the high side just as Ghana.

Given the upward trend of Foreign Direct Investment and remittance inflow into Nigerian economy, it is of interest to know whether their effect is felt on the growth and development of the economy, and to what degree does it affect the economy. Again, despite the upward trend in the foreign direct investment inflow and remittance inflow into Nigeria as anticipated through these reforms, the economy seem not to be improving at the same frequency. An average Nigerian still wallow in poverty, hunger, high unemployment, poor health outcome and in general low standard of living. Interestingly, many researchers have also carried out similar studies in this area, but there were conflicting ideas and views. For example, in a

review of micro data on spillover from foreign owned to domestically owned firms, Gorge and Greenwood (2002) concluded that the effects of FDI on economic growth is mostly negative, while Lipsey (2002) takes a more favourable view from reviewing the micro literature and argues that there is evidence of positive effect. Now, if these FDI and remittance inflows have really contributed to the growth and development of Nigerian economy, does this growth and development reflect in the life of Nigerian citizens and their standard of living? In view of the above review, several studies have been carried out on remittance and foreign direct investment. For example, Alfaro (2003) and Awe (2013), found a negative impact of FDI on economic growth, while Shiro (2007) revealed a positive relationship between FDI and growth, but also went further to argue that FDI has not contributed much to economic growth in Nigeria because there exist enormous repatriation of profits by the foreign investors.

However, the key issue in this work is not just about growth but economic development .So the paper is keen about knowing the real impact of foreign direct investment, remittance inflow on economic development in Nigeria. Furthermore, most of the studies specifically focused on economic growth leaving out economic development. Here, following the World Bank (2014), the researchers use per capita income (which is an integral component of Human Development Index) as a measure of economic development .So in the course of study, it will be made explicit if foreign direct investment and remittances significantly impacts on economic development in Nigeria. The objective of this paper is therefore to estimate the impact of foreign direct investment and remittance inflow on economic development in Nigeria from 1981-2014. Again, this study ascertains the response of economic development to shocks from foreign direct investment and remittances inflows in Nigeria. The rest of the paper is structured as follows; section 2 is on materials and methods, while the results and discussions are presentations are shown on sections 3 and 4. The last section concludes the paper.

2. METHODOLOGY

2.1. THEORETICAL FRAMEWORK

The theoretical framework of this study is hinged on the endogenous growth theory which is known as the AK model. This model assumes that when people accumulate capital, learning by doing generates technological progress that tends to raise the marginal product of capital, thus offsetting the tendency for the marginal product to diminish when technology is unchanged. In the 1980s it became progressively clearer that the standard neo-classical exogenous growth models were unsatisfactory as tools to ascertain long run growth, as these model predicted economies without technological change and that they would eventually converge to a steady state, with zero per capita growth. The reason for this is the diminishing return of capital. The key property of AK endogenous – growth model is the absence

of diminishing returns to capital. AK model uses a linear model where output is a linear function of capital which is as follows

$$Y = AK \quad (2.1)$$

Where Y = total production in the economy

K = capital

The linkage between FDI, remittance inflow and economic development has been pointed out in various existing literature. Although, it is almost commonly argued that FDI positively affect economic growth.

However, capital which remains an indispensable factor, in term of investment and businesses cannot be overemphasized. Coming to the LDC's where these capital accumulations is low, they resort to other ways to gather these treasures, such as through encouraging foreign direct investment, trade openness in order to attract remittance, which in turn enhances the per capita income via increased capital formation, productivity, employment level, skill acquisition, technological know-how etc.

Foreign direct investment and remittance inflow can be seen to have a link to economic development through its contribution to productivity of both domestic labour and domestic capital, through the transmission of foreign (superior) technology. The analytical structure is therefore in the spirit of Romer (1986). The importance of FDI can be seen as closing the capital – gap identified by Romer (1993) as the main challenge facing developing countries trying to catch-up with advanced countries. This gap is more in knowledge or human capital, than the gap in physical capital

2.2. MODEL SPECIFICATION

Model 1

For model 1, a multivariate analysis (ARDL) will be conducted to capture objective 1. This is subject to the cointegration status and order of integration of the series involved. Thus a long and short run model would be estimated to capture the impact of FDI and remittance inflows on economic development of Nigerian economy. This proposed model is structured to be suitable should the series be integrated of a mix of order 1 and 0, and that cointegration is not found in the model.

The functional form of model is as follows:

$$Y = A \cdot K^\beta \quad (2.2a)$$

Taking the natural logarithm of both side

$$\ln y = \ln A + \beta \ln K \quad (2.2b)$$

Where FDI and remittance enters the model in the form of capital, while A is a constant that represent technology innovations.

$$\ln y = a + \emptyset \ln fD1 + \beta \ln RMT$$

Introducing other variables that affect output per capita.

Adopting a log-log model (and replacing y with $GDPPC$), the long run form of the model is

$$\begin{aligned} \ln GDPPC = & \alpha_0 + \alpha_1 \ln fD1_t + \alpha_2 \ln REM_t + \alpha_3 \ln Gfcf + \\ & + \alpha_4 \ln PIV + \alpha_5 EXCH_t + \mu_t \end{aligned} \quad (2.2c)$$

α = Parameter estimates / coefficients

$GDPPC$ = Income per capita (measure of economic development). Income per capita is a critical component of the Human Development Index and World Bank (2014) argues that more developed countries usually have higher per capita income.

FDI = Foreign direct investment

REM = Remittance inflows

$EXCH$ = Exchange rate

$GFCF$ = Gross fixed capital formation

PIV = Private Investment

U_t = Error term

Since the ARDL would be adopted in estimating the equation, the model is specified in the ARDL form below:

$$\begin{aligned} \Delta \ln GDPPC_t = & \beta_0 + \sum_{i=1}^m \beta_1 \Delta \ln GDPPC_{t-1} + \sum_{i=1}^n \beta_2 \Delta \ln FDI_{t-1} + \\ & + \sum_{i=1}^o \beta_3 \Delta \ln REM_{t-1} + \sum_{i=1}^p \beta_4 \Delta \ln GFCF_{t-1} + \sum_{i=1}^q \beta_5 \Delta \ln PIV_{t-1} + \\ & + \sum_{i=1}^r \beta_6 \Delta EXCH_{t-1} + \gamma_1 \ln GDPPC_{t-1} + \gamma_2 \ln FDI_{t-1} + \gamma_3 \ln REM_{t-1} + \\ & + \gamma_4 \ln GFCF_{t-1} + \gamma_5 \ln PIV_{t-1} + \gamma_6 \ln EXCH_{t-1} + \mu_t \dots \end{aligned} \quad (2.2d)$$

Where $\beta_1 \dots \beta_6, \gamma_1 \dots \gamma_6$ are the respective parameter estimates, β_0 is the coefficient, and Δ is the first difference operator.

Model 2

Vector Auto Regression model (VAR) is adopted to capture objective 2 and 3 of the study. It investigates the impulse response of the variables, foreign direct investment, remittance inflows and economic development.

$$\begin{aligned} LNGDPPC_t = \gamma_j + \sum_{j=1}^p \alpha_i LNREM_{t-j} + \sum_{j=1}^p \beta_i LNGFCF_{t-j} + \\ \sum_{j=1}^p \theta_i LNFDI_{t-j} + \pi_t \dots \end{aligned} \quad (2.3a)$$

$$\begin{aligned} LNREM_t = \gamma_j + \sum_{j=1}^p \alpha_i LNGDPPC_{t-j} + \sum_{j=1}^p \beta_i LNGFCF_{t-j} + \\ + \sum_{j=1}^p \theta_i LNFDI_{t-j} + \pi_t \dots \end{aligned} \quad (2.3b)$$

$$\begin{aligned} LNGFCF_t = \gamma_j + \sum_{j=1}^p \alpha_i LNREM_{t-j} + \sum_{j=1}^p \beta_i LNGDPPC_{t-j} + \\ + \sum_{j=1}^p \theta_i LNFDI_{t-j} + \pi_t \dots \end{aligned} \quad (2.3c)$$

$$\begin{aligned} LNFDI_t = \gamma_j + \sum_{j=1}^p \alpha_i LNREM_{t-j} + \sum_{j=1}^p \beta_i LNGFCF_{t-j} + \\ + \sum_{j=1}^p \theta_i LNGDPPC_{t-j} + \pi_t \dots \end{aligned} \quad (2.3d)$$

3. RESULTS

3.1. TEST FOR UNIT ROOT

This section tests for unit root in the series to be used. As proposed in the previous chapter, the Phillips-Perron (P-P) test would be used while the Kwiatkowski-Phillip-Schmidt-Shin (KPSS) test would be used to confirm the P-P test results.

Table 3.1. Phillips-Perron (PP) Unit Root Test

Variables	PP Test Stat at Level	Critical Value at 5%		PP Test Stat at First Difference	Critical Value at 5%	Order of Integration
LGDPPC	-1.911444	-3.552973		-4.910266	-3.557759	I(1)
LFDI	-1.497722	-3.552973		9.410689	-3.557759	I(1)
LREM	-2.258984	-3.552973		6.397034	-3.557759	I(1)
LGFCF	-2.858607	-3.552973		3.748952	-3.557759	I(1)
LPIV	3.806195	-3.552973		-	-	I(0)
REXCH	-2.178336	-3.552973		-5.285810	-3.557759	I(1)

Source: Authors' computation Eviews result

Table 3.2. Kwiatkowski-Phillips-Schmidt-Shin (KPSS) Unit Root Test

Variables	KPSS LM Stat at Level	Critical Value at 5%		KPSS LM-Stat at First Difference	Critical Value at 5%	Order of Integration
LGDPPC	0.196331	0.146000		0.083019	0.146000	I(1)
LFDI	0.184360	0.146000		0.081108	0.146000	I(1)
LREM	0.077031	0.146000		-	-	I(0)
LGFCF	0.079271	0.146000		-	-	I(0)
LPIV	0.121170	0.146000		-	-	I(0)
REXCH	0.113158	0.146000		-	-	I(0)

Source: Authors' computation Eviews result

From the results above, as proposed, the KPSS is used to confirm the results from the Phillips-Perron test. The foregoing shows that from the KPSS test, only GDP per capita and Foreign Direct Investment are stationary at first difference, all other series are stationary in levels. Though the Phillips-Perron test shows that all the series used are stationary at first difference save for Private Investment. The occurrence of some series' stationarity at first difference violates the assumption of constant variance of error terms (which is precursory to stationarity of a series), thus making OLS an unsuitable estimation technique. For a long run estimation to be adopted, the series must now be subjected to a cointegration test, which would further decide the approach to be taken. This is conducted in the next sub-section.

3.2. TEST FOR COINTEGRATION- BOUNDS TEST

To evaluate if there exists a long run relationship among the variables in model 1, the Bound Test (BT) approach under the instrumentality of the F-statistics was adopted. The table below is a summary table of the bounds test approach

H_0 : No long-run relationship exists

Table 3.3. Bounds Test Result

	Value	K
F statistic	5.250005	5
Significance	Lower bound	Upper Bound
10%	1.81	2.93
5%	2.14	3.34
2.5%	2.44	3.71
1%	2.82	4.21

Source: Authors' Computation (Eviews)

Decision Rule: We reject the null hypothesis since the test statistic (F -statistic = 5.250005) is greater than the upper bounds at 5% level of significance [*i.e.* $F - \text{statistic} = 5.250005 > 3.34$], and thus conclude that long-run relationship exists in the model. This test verifies if there exist a long run relationship amongst the relating variables of interest.

4. DISCUSSION

Model 1

The model is estimated using the ARDL estimation technique and its results presented in the Table 4.1 below.

Table 4.1. Model Estimation Results (Long-Run)

LNGDPPC

Variable	Coefficient	Std. Error	t-statistics	Probability
LNFDI	0.317049	0.369014	0.859180	0.4387
LNREM	-0.649136	0.216114	-3.003675	0.0398
LNGFCF	1.587717	0.412708	3.847070	0.0183
LNPIV	1.775303	0.600648	2.955645	0.0417
REXCH	-0.038739	0.008490	-4.563080	0.0103

Source: Authors' Computation (Eviews)

The model's long run relationship reveals that a percentage point increase in remittance would cause income per capita to fall by about 0.65% in the long run, and this was found to be significant at the 5% significance level. This was in corroboration with the results as found by Nkoro and Uko (2013). They too found

that remittance was negatively related and significant to Nigeria's economic growth. Other studies as Akonji and Wakili (2013) also concluded that remittance was a significant determinant of economic growth in Nigeria and that at the individual level, it provides immediate income for different households. Conditions in Nigeria that could tilt results from the a priori expectation include the possible over-reliance on remittance by the older and much younger population who are beneficiaries. These group fall into the dependents of the economy, who already are not responsible for the productivity of output. With higher unemployment amongst this group, remittance only makes them reliant, thus not contributing to the growth of output as in the Nigerian case. In like manner, it was found that a 1% increase in Gross Fixed Capital Formation (GFCF) would also raise income per capita by about 1.59%. Also, Private Investment (PIV) was found to have a positive and significant influence on per capita income. Thus a 1% increase in Private investment increases per capita income by 1.78%

It was found that FDI in Nigeria does not have a significant impact on economic growth as measured by the income per capita, though a positive relationship was found between it and economic growth. This is in contrast with the findings of Ekwe and Inyama (2014), Nkoro and Uko (2013), as they found FDI contributes positively and significantly to economic growth. This could be as a result of the non-compliance of the government as well as Non-Government Organizations (NGOs) in the private sector, in the use of funds from the FDI. With misappropriation of funds, in segments of sectors without immediate productivity, there is the possibility of having the insignificance of the FDI as found above. Furthermore, income per capita is expected to fall by 0.0387% for every 1% fall in the Naira to Dollar parity, all in the long run.

Table 4.2. Model Estimation Result (Short Run)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDPPC(-1))	0.495990	0.080829	6.136319	0.0000
D(FDI)	-0.000803	0.000100	-8.058989	0.0000
D(FDI(-1))	0.000640	0.000129	4.946130	0.0000
D(GFCF)	0.000076	0.000019	4.086284	0.0001
D(PIV)	-22.671315	3.267479	-6.938474	0.0000
D(PIV(-1))	9.669283	5.386928	1.794953	0.0753
D(PIV(-2))	-1.446537	4.857393	-0.297801	0.7664
D(PIV(-3))	4.721946	3.121526	1.512704	0.1331
D(REM_US\$_)	-0.000000	0.000000	-0.660540	0.5102
D(REM_US\$_(-1))	-0.000000	0.000000	-1.677888	0.0961
D(REXCH)	-1.129831	0.873979	-1.292743	0.1987
ECM (-1)	-0.041288	0.022889	-1.803879	0.0739

Source: Authors' Computation from Eviews output

Having established that there exists a long-run relationship among the variables in model one, the error correction analysis was carried out to estimate the short-run dynamics and the speed of adjustment mechanism. From the table above, it can be clearly seen that the error correction coefficient is negative (-0.041288) as required. This entails the speed of adjustment to attain long-run equilibrium is 4.1%. This is however slow but significant.

4.1. STABILITY DIAGNOSTICS (MODEL 1)

The CUSUM test is used to verify the stability of the model. The null hypothesis being tested here is that the $CUSUM_t$ statistic is drawn from a $CUSUM_{(t-k)}$ distribution, thus the $CUSUM_{(t-k)}$ is a symmetric distribution centred at 0 with its dispersion increasing as $t-k$ does.

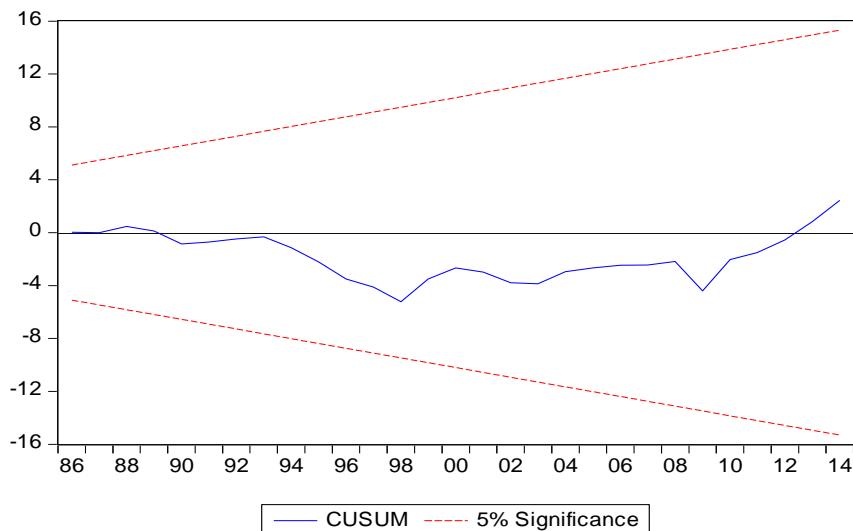


Figure 4.1. CUSUM Stability Test

Source: From Eviews output

The figure 4.1 above reveals the model's parameters are not different during the forecast period than they were during the sample period, thus useful. This means that the graph does not suggest any break down in the constancy of the parameters. The CUSUM graph explains further that the stability condition of the ARDL. The model can be said to be stable given the CUSUM test which corroborates the discovery of a long run relationship. With the CUSUM line lying within the critical bounds at the 5% significance level, thus the model is stable and reliable (for forecasting).

4.2. STABILITY DIAGNOSTICS (MODEL 2)

The Autoregressive root tables is obtained and presented in the Appendix A11. The table reveals that all inverse roots are less than 1, thus verifying that the model satisfies the VAR condition for stability. The unit circle is thus presented below to corroborate this claim in the Figure 4.2 below.

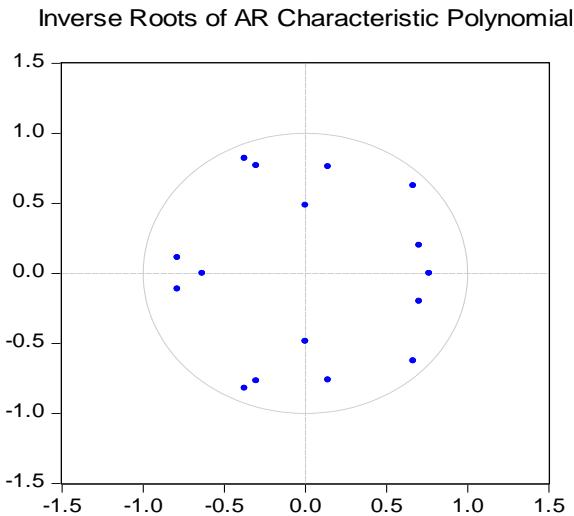


Figure 4.2. Unit Circle (Model 2)

Source: Authors' Derivation (Eviews)

A preview at the figure above shows that all inverse roots are within the circle, thus proving they are all less than 1.

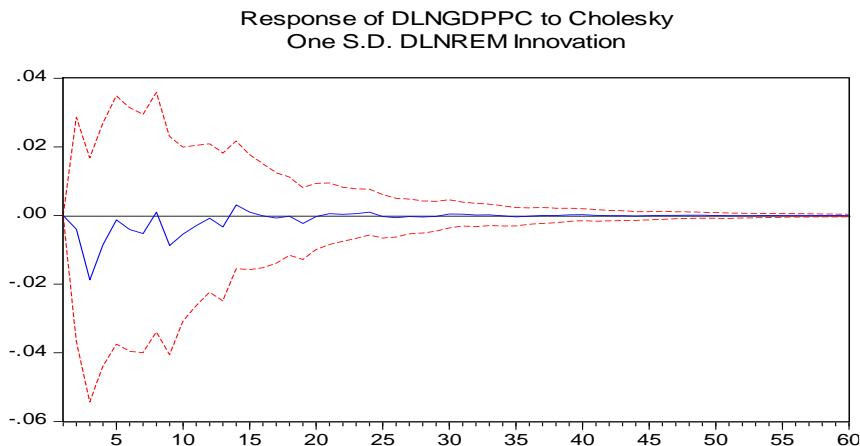


Figure 4.2. Response of Economic Development to Shocks from Remittance.

Source: Authors' presentation (Eviews)

Since the impulse function contains within it all frequencies, the impulse-response explains the response of a linear time-invariant system for all frequencies, though as shown in the figure above, the hypothesis is particular about frequencies sent out from remittance in Nigeria. Economic development is observed to respond negatively to shocks from remittance into the Nigerian economy, thus we reject the null hypothesis and conclude that there is response to shocks.

Though FDI in Nigeria does not significantly improve economic development, economic development responds to shocks from the FDI. This explains that FDI to Nigeria has capacity to cause shifts in aggregate demand and or supply in the markets (commodity, money and labour) which can slow down the rate of attaining equilibrium. Same can be said of the economy's response to shocks from remittances as this also has potential of distorting equilibrium positions in the markets. Remarkably, the nation's actual output can be distorted by shocks from either of FDI and or remittance inflow.

We therefore recommend that for FDI to have significant impact on the nation's development, more of public goods should be funded by FDI. The government should advocate that more foreign investor take up provision of some public goods in the form of Corporate Social Responsibility, and Corporate governance. FDI should not only be allowed to be spent on intangible goods alone as healthcare. This recommendation stems from the realization that though healthcare is a necessary economic good, the recipients are already immobilized and somewhat unproductive. As a tackle to cause as against effects, the funding of basic amenities that facilitate better health would do the economy more, than waiting to fund intangible goods. To this end, FDI should be appropriately, and properly executed via government's active participation by promulgating policies as to which sector lacks.

- Remittance is a significant contributor to economic development, though negatively. With such implication as a means to further income redistribution, government can reduce the imposition of taxes on remittances so as to enable an increase in the purchasing capacity of recipient households. Remittances also come in form of tangible goods which further buttresses the need to remove restrictions on remittance as embedded in emigration laws. It is also recommended that the government takes advantage of remittances in stabilizing the volatility of the exchange of the naira for other foreign currencies since remittances increases the demand for the naira.
- This study further recommends that government actively administer policies that would selectively define the investment interest of private investors. Since private investment is seen to be significant, much more can be done with it, as with the government expenditure on capital goods. It is thus recommended that to ensure some sectors are not lagging while some other thrives, government should encourage investment in some industries or

sectors via tax holidays, light tariffs, as well as outright imposition where necessary.

- Exchange rate policy review in Nigeria should be advocated to accommodate the importing nature of the populace. Since Nigeria is not self-sufficient in all goods, the need to import cannot be overlooked. Thus government should as a recommendation, revisit her exchange rate policy and allow it the flexibility needed to keep the naira away from steady depreciation. Local industries too should also be encouraged such that exportable goods can be produced and sold off. This way, the demand for exchanging currencies would have appreciable effects on the naira and its resultant effect would be a more developed economy by preference of the demand for her local currency.

5. CONCLUSIONS AND POLICY IMPLICATIONS OF FINDINGS

The discovery that foreign direct investment has no long run significant impact on economic development is against the a priori expectation. The implication of this finding is the non-usage of FDI in promoting Nigeria's economic development. This further implies that though FDI has positive influence on Nigeria's income per capita, its non-significance calls for serious policy intervention from the government to reverse this trend.

Remittance inflow was found to negatively and significantly influence Nigeria's economic development. With more Nigerians in diaspora remitting funds to relatives at home, economic development is expected to improve. However, the negative result could mean that the remittances are spent on consumption of imported products and the receipt of 'free' money from overseas also renders the recipient unproductive and jobless, thus, leading to a reduction in national productivity. By inference, an increase in unemployment ensues in the economy since remittance is found to be a disincentive to economic growth. Other implications of this finding is the potential of revenue reallocation from (beneficiary) households to others via the lowering of the imposition of taxes on remitted income so as to increase the real income of beneficiary households.

The Gross Fixed Capital Formation was found to significantly influence economic development. This finding is of grave importance to this study in that it corroborates the relevance of expenditure on capital projects in the country thus emphasising the need. This is very similar to the significance of private investment on economic development. Over time, investment has been endeared by the government, the significance of these reveal the implication of promulgating investor-friendly policies as it concerns the Nigerian economy.

The exchange rate is seen to negative and significantly influence economic development. This implies unfavourable conditions in terms of foreign currency influence on the Nigerian economy. The exchange rate depicts the parity of Naira

for a unit of US Dollar. This variable's negative significance reveals the reality that the Naira exchanges for more of the Dollar, thus making foreign purchases more expensive and the real value spent much more than its face value. This goes on to imply that Nigeria loses more of not just her currencies value but also explicit value of goods bought, thus degrading her economic prowess and development at a faster pace – thus the significant negative relationship.

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