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DO MIGRANT REMITTANCES DRIVE PRIVATE INVESTMENT? EMPIRICAL EVIDENCE FROM NIGERIA

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Abstract

The study conducts investigation into how migrant remittance drive private investment in Nigeria spanning from 1980 to 2021. The study adopts flexible accelerator theory as its theoretical framework. The study employs Augmented Dickey-Fuller (ADF) unit root test to test for stationarity of each variable, and the result reveals that there is mixed among the variables. Sequel to the mixed level of stationarity of the variables the study employs ARDL estimation technique to investigate the impact of migrant remittance on private investment. The study found that in the short run migrant remittance and interest rate drive private investment while exchange rate, gross domestic product growth rate, inflation rate and financial deepening crowd-out investment in Nigeria. Whereas in the long run, all the variables drive investment aside financial deepening. Consequently, that policy makers and government should formulate policies for free flow of remittance into the economy without any difficulties, also the study recommends that adequate monetary policy should be formulated to ensure that the financial sector serves its function of enhancing private investment in Nigeria.

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Keywords: *migrant remittance, private investment, level of integration, exchange rate, gross domestic product growth rate, inflation rate, financial deepening crowd-out investment*

JEL Classification : *G11, G31*

1. Introduction

Failure of successive governments of many African countries to curb her ever increasing population with appropriate policies has over the years created a lot of unemployment, increase crime rate, insecurity, and other poverty-related problems in these economies. Poverty often time instigates large scale migration of economically productive age people to other countries in search of greener pasture. Traditionally, People migrate when they are driven by lack of opportunities at home and attracted by the hope of economic gains elsewhere. This implies that hope of decent job opportunity and improved standard of living are the major incentive factor for migration. As the matter of fact, labor is the primary resource of the great majority of the world's poor and migration provides the best open door to find a better life and, in this manner, having chances to escape poverty vis-a-vis unemployment in their home country (World Bank, 2016). The number of migrants has risen significantly over the past decades for several reasons among which are: job search, climate change, natural disasters, labor shortage, caused by declining birth rates etc. (World Bank, 2016).

There are 250 million international migrants worldwide, of which over 150 million (approximately 60% of the total number) are classified as worker's migrant (World Bank, 2016). The figure increased to 272 million in 2019 from 175 million in 2000. Migration has been identified as strategy by families of developing countries Nigeria inclusive to escape poverty vis-à-vis increase consumption, obtain new investment funds and protection against the unexpected. It is therefore not astounding that professionals and talented skilled African workers are leaving their home country in search of better economic status in countries across the globe. The migrants remit money from their earnings back to their families in their home countries. The remittance inflow has been an important role in reducing poverty in their family and in general stimulating investment which in turn enhances the growth of the home countries. The remittance inflow which is one of the largest sources of stable international financial inflow to sub-Sahara Africa is on a constant increase, in fact, it is now overshadowing the traditional inflow

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foreign direct investment, foreign portfolio investment and foreign aids (Dash 2020; Saydaliyev et al., 2020; Githaiga, 2020). The World Bank (2020) reported that global migrant remittance has been on a steady increase unlike other inflow like foreign direct investment and foreign aid which often fluctuate and as such unpredictable. Nigeria is no exception in this trend as the value of foreign direct investment even falls whereas migrant remittance maintains its steady rise (WBI 2020). This reveals the important of migrant remittance and as such is major foreign earnings in Nigeria as it is second only to foreign earnings from crude oil. Depending on the usage of migrant remittances, they are expected to increase household consumptions, enhance human capital development, promotes financial development, alleviate poverty, and stimulate economic growth in the home countries (Dash 2020; Karikari et al., 2016; Vaaler 2011; Misati, 2019; Adeseye 2021; Saydaliyev et al., 2020; UNDP 2011; and Moslares 2020). However, most of the extant studies focus on how it affects economic growth and financial development. Only a few studies have examined the impact of migrant remittances on private investment as such this study will empirically investigate to determine how migrant remittance affects private investment.

The rapid growth of remittances in Nigeria was expected to increase domestic investment as remittances has been identified by extent studies as an important factor that promote domestic investment and thus expansion of the productive capacity of the economy. Despite the significant flow of remittances into the country in the recent past, the level of investment as not increase as expected as such this study investigates to determine the impact of migrant remittance on private investment in Nigeria.

Furthermore, there is no empirical consensus among the few previous researchers on the impact of migrants' remittance on private investment. For instance, (Dash 2020; Yasmeen et al., 2011; Balde 2011; Hossain and Hasanuzzaman 2015; Yang 2008), argued that migrants remittance has positive impact on private investment while authors such as (Mallick 2012; Hrushikesh 2012), revealed that migrants' remittance have negative effects on private investment. Therefore, this study will investigate to know the exact impact of migrant's remittances on private investment in Nigeria.

The rest of the paper is organized as follows: section two is devoted to literature review, section three from model specification, section four is all about result presentation and analysis while the last section is dedicated for conclusion and recommendation.

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2. Literature Review

This study starts the empirical review with the work of Dash (2020) who investigated the impact of remittances on domestic investment of six South Asian countries over the period of 1991 to 2017 using system-GMM and panel causality. The study found that remittances boost domestic investment both in the short run and long run, the panel causality result revealed that there is unidirectional causality that runs from remittances to domestic investment in the six countries. Similar result was also obtained by Yasmeen et al., (2011), in their study of Pakistan's economy using Ordinary Least Square method. Using two least square method for the study of 37 sub-Sahara African countries, Balde (2011) found that both remittance and foreign aids promotes domestic savings and investment. The study further revealed that remittance has a higher magnitude effect on domestic investment compared to domestic savings. Su et al., (2021), analyzed the effect of remittance and institutional quality on private investment in seven emerging economies using GMM technique. They found that institutional quality along remittance promotes private investment. In the study of Hossain and Hasanuzzaman (2015), they explored the relationship between remittance and private investment in Bangladesh. The study found that remittance drives investment. In the case of India, Mallick 2012 assessed the impact of remittance on domestic private investment between 1996 and 2005 using autoregressive distributed lad (ARDL) estimation technique. The study found that remittance determines domestic private investment. On the investigation of 19 Asia Pacific countries between 1980 and 2015, Tung 2008 employed system GMM technique, and he found that that remittance dissuade investment.

Yang (2008) examined the how families of migrant's remittance recipients react to using the fund for investment in Filipino using household data. The study revealed that ~~the~~ remittance boosted investment in the families. In the case of Nigeria Okeke et al., 2019 explored the impact of remittance on private investment in Nigeria. They found that migrant remittance stimulates private investment. In the study of Woodruff and Zenteno (2007), they investigated the relationship between remittance and private investment in Mexico. The study found that remittance instigates private investment. Using ~~a~~ panel data of 40 developing countries, Dzansi (2013) investigated the link between remittances and investment in the manufacturing sector over the period of 1991 – 2004. It was observed that migrant remittance drive investment and growth in the manufacturing sector in these countries. Hrushikesh (2012), utilized dynamic ordinary least square (DOLS) to examine the effect of remittances on private investment in India. The paper

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found that remittances crowd out private investment Bjuggren et al., (2010) investigated the impact of remittances on investment in 79 developing countries between 1995 and 2005 using dynamic panel method. The study found that remittance, well developed credit market and high-quality institutional framework boost investment. Incaltarau and Maha (2012), explored the impact of remittance on consumption and investment in Romania between 1990 and 2009 using ordinary least square method. They found that remittance spur both consumption and investment and that the impact of remittance on investment is stronger

3. Method

This study adopts flexible accelerator theory as its theoretical framework. The model was postulated by Lucas R. ~~by~~ (1967) and furthered by Fry M.J. (1993). The theory states that an increase in the rate of output of a firm will require a proportionate increase in the capital stock. The capital stock refers to the desired or optimum capital stock, K. Assuming that capital ratio output is constant V, the optimum capital stock is a constant proportion of output so that in any period t,

$K_t = VY_t$ ..... (1)

Where K_t is the optimal capital stock in the period t, v (the accelerator) is a positive constant and Y is output in period t.

Any change in output will lead to a change in the capital stock. Thus

$K_t - K_{t-1} = V(Y_t Y_{t-1})$ ..... (2)

Note that change in capital = investment

I.e $\Delta K = I$

Therefore: $I = K_t - K_t\text{-}1$

$I_t = V(Y_t - Y_{t-1})$..... (3)

Where $\Delta Y_{t-} = Y_{t-1}$, and I is net investment.

Model Specification

$1_t = F(Y_{t-})$..... (4)

Introducing other control variables such as exchange rate, financial deepening, real interest rate and GDP which are identified by (Githaiga, 2020; Dash, 2020; Bruiket, 2018; Bjuggren et al., 2010) as important factors that influences Private Investment. As such, in specifying our model, our independent variables shall be the Remittance inflow, Economic growth, Real interest rate and financial deepening, while our dependent variable shall be the annual time series data of Private Investment. Therefore, our multiple regressions model can be specified as thus:

$PIV = f(MGR, GDPGR, INTR, FDP$, INFR, EXR) ..... (5)

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Where: PIV = Private Investment
MGR= Migrant Remittance
GDPGR = Gross Domestic Product Growth Rate
INTR = Real Interest Rate
FDP = Financial Deepening
INFR= Inflation rate
EXR= Exchange Rate

For the purpose of empirical computation, the econometric form of the model is expressed as:

$$PIV_t = \beta_0 + \beta_1 RI_t + \beta_2 GDPGR_t + \beta_3 INTR_t + \beta_4 FDP_t + \beta_5 INFR_t + \beta_6 EXR_t + \mu_t \quad \text{..... (6)}$$

To create an equal base for the employed variables, the log form might be applied to the specified model above.

$$Log(PIV_t) = \beta_0 + \beta_1 Log(MGR_t) + \beta_2 (GDPGR_t) + \beta_3 (INTR_t) + \beta_4 (FDP_t) + \beta_5 (INFR_t) + \beta_6 (EXR_t) + \mu_t$$

..... (22)

β_0= the constant term
β_1, β_2, β_3,& β_4,β_5&β_6 = the parameters to be estimated
U_t= Error term

A-priori Expectation

The apriority expectation provides expected signs of the value of the coefficient parameters in the model in line with economic theories and extant studies. It is expected that Migrant remittance (MGR), Gross domestic product growth rate (GDPGR), financial deepening (FDP) and exchange rate (EXR) would have positive effect on Private Investment (PIV), while Interest rate (INTR) and Inflation rate (INFR) are expected to have a negative effect on Private Investment (PIV). Symbolically we have: $\beta_1>0$, $\beta_2>0$, $\beta_3<0$, $\beta_4>0$, $\beta_5<0$, $\beta_6>0$

4. Results and Discussion

Descriptive Statistics

Descriptive statistics reveal the qualities of the variables to be used in the model, this will enhance our estimation. The table below summarizes the descriptive statistics.

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Table 1: Result of the Descriptive Summary of the Variables

	EXR	FDP	GDPGR	INFR	INTR	LOG(MGR)	LOG(PIV)
Mean	98.31591	16.66077	3.141136	18.74132	17.67097	20.41121	28.22809
Median	101.6973	13.527	4.195924	12.21778	17.55333	20.87737	28.51026
Maximum	358.8108	28.62522	15.32916	72.8355	31.65	23.9142	31.4454
Minimum	0.546781	9.063329	-13.1279	5.388008	8.431667	14.70115	25.19074
Std. Dev.	100.6852	6.103193	5.335983	16.73026	4.75659	3.203938	1.970042
Skewness	0.916135	0.553967	-0.88014	1.863495	0.152142	-0.36822	-0.19758
Kurtosis	3.034671	1.692179	4.841582	5.312575	3.925038	1.667603	1.650677
Jarque-Bera	5.737297	5.018933	11.08714	32.86571	1.619984	3.959282	3.377073
Probability	0.056776	0.081312	0.003913	0.00001	0.444862	0.138119	0.18479

Source: *Author's computation*

From table 1 above, the estimated mean value which is been used to examine the pattern of distribution shows that exchange rate has the highest mean value with 98.31591 and the lowest mean value was recorded by GDP growth rate with 3.141136. The standard deviation showed that exchange rate, financial deepening, gross domestic product growth rate, inflation rate and migrant remittance demonstrates high variability within the country while private investment with the value of 1.1970042 showed low variability within the country. In summary, all the variables under this study are widely dispersed around their means indicating that they are grossly affected by their extreme value. Furthermore, the result showed that exchange rate, financial deepening, inflation rate, and interest rate are positively skewness towards normality while gross domestic product growth rate, migrant remittance and private investment are negatively skewness towards normality. The kurtosis that measures the weakness or flatness of the distribution reveals that, exchange rate, inflation rate, gross domestic product growth rate, interest rate is leptokurtic indicating that the distributions are peaked relative to normal distribution, while financial deepening, migrant remittance and private investment are platykurtic which implies that the distribution of the variables are flat relative to normal distribution. Lastly, Jarque-Bera which is test statistic for testing whether the series is normally distributed reveals that all the variables except GDP growth rate and inflation were normally distributed at 5% significant level.

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Unit Root Test

The unit root test is conducted to determine the stationarity of the data to be used for analysis in this study. It is necessary and essential to conduct the unit root test to determine the stationarity of each variable as regressing a non-stationary variable will lead to spurious or misleading result. To avoid a spurious or misleading result, it is required that variables be stationary before the application of standard econometric techniques (Gujarati, 2004). Therefore, before estimating the model of the research, we shall check for the time-series properties of the data and Augmented Dickey-Fuller (ADF) test was used to determine this.

Table 2: Result of Augmented Dickey Fuller Unit Root Test

	AT LEVELS		IST DIFFERENCE		LEVEL OF INTEGRATION
VARIABLE	**ADF-Test**	**5% C.V**	**ADF-Test**	**5% C.V**	
EXR	-2.249736	-2.93694	-4.15371	-2.93899	I(1)
FDP	-2.26214	-2.93694	-9.23549	-2.93899	I(1)
GDPGR	-2.78517	-2.93899	-11.7966	-2.93899	I(1)
INFR	-3.02259	-2.93694	-6.35243	-2.94115	I(0)
INTR	-2.59498	-2.93694	-5.54402	-2.94115	I(1)
LOG(MGR)	-0.76852	-2.93694	-6.44285	-2.93899	I(1)
LOG(PIV)	-0.620582	-2.93694	-3.89392	-2.93899	I(1)

Source: *Author's computation*

Table 2 above presents the results of the stationarity test of all the variables at levels and first difference. The result reveals that all the variables are integrated of order one I (1) expect inflation rate (INFR) which is stationary at level. This implies that there is mixed level of integration among the variables as such Autoregressive Distributed Lag (ARDL) is the most appropriate estimation technique to be used in the study.

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Co-integration Test

Having identified the appropriate estimation technique to be used, it is essential to conduct bound test to determine if the model cointegrates, that is if there is long run relationship among the variables in the model. This study will employ Pesaran Bound test as it is the most suitable when there is mixed level of integration in variables under study. The null and alternative hypotheses are specified below:

H_o: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots = \beta_7$

H_1: $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \neq \beta_7$

The null hypothesis is that there is no cointegration among the variables while the alternative hypothesis is that there is cointegration among the variables.
The Pesaran Bounds Co-integration test result is provided thus:

Table 3: Result of ARDL Bound test

F-Statistics	significant level	Lower Bound I(0)	Upper Bound I(1)
5.719	1%	2.88	3.99
	5%	2.77	3.28

Source: *Author's computation*

Table 3 above shows that the value of F-statistics is greater than the value of both the lower and upper bounds. This implies that there is cointegration among the variables i.e., there is long run relationship among private investment, migrant remittance, interest rate, inflation rate, gross domestic product growth rate, financial deepening, and exchange rate as such, both short and long run analysis are important.

Table 4: Result of long run ARDL analysis

Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
LOG(MGR)	0.404829	0.088619	4.568193	0.0001
INTR	0.114033	0.071861	1.586849	0.1256
INFR	0.041443	0.02117	1.957616	0.0062
GDPGR	0.045991	0.037391	1.229984	0.2306
FDP	-0.10198	0.052478	-1.94338	0.0638
EXR	0.016502	0.005725	2.882145	0.0082
C	18.47715	1.553141	12.06547	0

Source: *Author's computation*

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The result in table 4 above shows that migrant remittance has a positive and significant impact on private domestic investment at 1% significant level. The result further shows that 1% increase in migrant remittance will lead to 0.4048% increase in private domestic investment in Nigeria in the long run. This implies that remittance drives domestic private investment in Nigeria i.e., as remittance inflow increases, the private investment will also increase in the long run. This is in tandem with the findings of (Dash, 2020; Hossain and Hasanuzzaman, 2015; Dzansi, 2013) and it confirms the apriority expectation.

In the same vein, the table shows that inflation rate has a positive and significant impact on domestic private investment at 5% significant level. The result further shows that a 1% increase in inflation rate will lead to a 0.0062% increase in domestic private investment in the long run. This implies that inflation rate boosts private investment i.e., as inflation rate increases, the level of private investment in Nigeria increases in the long run. This is in tandem with Bruiket, (2018) but does not confirm to the apriority expectation. Furthermore, the table shows that the exchange rate has a positive and significant impact on private investment at a 10% significant level, and that a 1% increase in exchange rate will cause private investment to increase by 0.0165% in the long run. This implies that exchange rate spur private investment in Nigeria i.e., as exchange rate increases, private investment increases in the long run. This is in tandem with the studies of Clement (2017) but contradicts the findings of Dash (2020). Contrariwise, the table displays that financial deepening has a negative and significant impact on private investment in Nigeria, and that 1% increase in financial deepening leads to 0.0165% decrease in private investment in the long run. This implies that financial deepening crow out private investment that is as financial sector gets deepen, private investment deteriorates in Nigeria in the long run. This is in tandem with the studies of Hammed (2018) but contradicts the findings of Githaiga (2020). This does not match the apriority expectation. Lastly. Interest rate and gross domestic product per capital had no impact on private investment in Nigeria in the long run.

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Table 5: short run analysis with ECM

Variables	Coefficient	Std. Error	t-Statistic	Prob.*
DLOG(MGR)	0.16014	0.020301	-0.79499	0.0344
D(INTR)	0.016851	0.004161	4.049617	0.0005
D(INFR)	-0.063979	0.012896	-4.961168	0.0003
D(GDPGR)	-0.01305	0.003467	-3.76291	0.001
D(FDP)	-0.2525	0.005273	-4.78865	0.0001
D(EXR)	-0.00064	0.000618	-1.03658	0.3103
CointEq(-1)*	-0.69755	0.007672	-15.3221	0.0000
R-squared	0.816749	Durbin-Watson stat		2.242336
Adjusted R-squared	0.77537			

Source: *Author's computation*

The result in table 5 above shows that migrant remittance has a positive and significant impact on private domestic investment at 5% significant level. The result further shows that a 1% increase in migrant remittance will lead to 0.4048% increase in private domestic investment in Nigeria in the short run. This implies that remittance drives domestic private investment in Nigeria i.e., as remittance inflow increases, the private investment will also increase in Nigeria in the short run. This is in tandem with the findings of (Dash 2020; Hossain and Hasanuzzaman 2015; Dzansi 2013) and it confirms the apriority expectation. Furthermore, the table shows that interest rate has a positive and significant impact on private investment in the short run at 1% significant level, and that 1% increase in interest rate leads to 0.01685% increase in private investment in Nigeria in the short run. This denotes that the interest rate stimulates private investment i.e., as interest rate increases, private investment increases. This contradicts the findings of Dash (2020), and it does not confirm to the apriority expectation. In the same vein, the table shows that inflation rate has a positive and significant impact on domestic private investment at 5% significant level. The result further shows that 1% increase in inflation rate will lead to 0.0062% increase in domestic private investment in Nigeria in the short run. This implies that inflation rate boosts private investment i.e., as inflation rate increases, the level of private investment in Nigeria increases in Nigeria in the short run. This is in tandem with Bruiket, (2018) but does not confirm to the apriority expectation.

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Contrariwise, the table reveals that GDP growth rate has a negative and significant impact on private investment at 1% significant level, and that 1% increase in GDP growth rate leads to 0.01305% decrease in private investment in Nigeria in the short run. This implies that GDP growth rate deters private investment in Nigeria i.e., as the economy grows, private investment decline in Nigeria in the short run. This contradicts the findings of Githaiga (2020) and does not confirm to the apriority expectation. Also, the table displays that financial deepening has a negative and significant impact on private investment in Nigeria, and that 1% increase in financial deepening leads to 0.0165% decrease in private investment in Nigeria in the short run. This implies that financial deepening crow out private investment that is as financial sector gets deepened, private investment deteriorates in Nigeria in the short run. This is in tandem with the studies of Hammed (2018) but contradicts the finding of Githaiga 2020 does not confirm to the apriority expectation. Exchange rate was found not to have any impact on private investment in the short run.

Lastly, the coefficient of ECM (-1) is well defined as it is negative and statistically significant at 1% significant level. The result further shows that approximately 69.76% of the previous year's disequilibrium in private investment will be corrected by migrant remittance, inflation rate, interest rate, GDP growth rate, financial deepening, and exchange rate. The coefficient is also the speed of adjustment, and it shows that the model converges back to long run equilibrium at the speed rate of 69.76% following a short run shock. The coefficient of (R^2) is 0.816749, this implies that migrant remittance, inflation rate, interest rate, GDP growth rate, financial deepening and exchange rate are responsible for approximately 81.67% of the total change in private investment in Nigeria.

Diagnostic test

Having estimate both the short and long-run analysis, it is required to verify whether the estimated model follows the OLS technique assumptions so as to know the efficiency and consistency of the model.

Table 6: Diagnostic test result

Test	F-Stat (Prob)
Jarque-Bera test	2.504 (0.286)
Breusch-Godfrey Serial Correlation test	1.525 (0.239)
Breusch-Pagan-Godfrey Heteroskedasticity Test	0.669 (0.780)

Source: Author's computation

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The result of the diagnostic test is presented in table 6 above and it reveals that the probability value of the test conducted was greater than 5% significant level. this implies that the null hypothesis of non-normality test, serial correlation, and nonexistence of heteroskedasticity were not rejected and as such it denotes that there the model is normally distributed, no serial correlation and no homoscedastic variance in the mode. This implies that the model is reliable.

5. Conclusion and recommendation

The study conducts investigation into how migrant remittance drive private investment in Nigeria spanning from 1980 to 2021. The study adopts flexible accelerator theory as its theoretical framework. The study employs Augmented Dickey-Fuller (ADF) unit root test to test for stationarity of each variable, and the result reveals that there is mixed level of integration among the variables. Sequel to the mixed level of stationarity of the variables the study employs ARDL estimation technique to investigate the impact of migrant remittance on private investment. The study found that in the short run migrant remittance and interest rate drive private investment while exchange rate, gross domestic product growth rate, inflation rate and financial deepening crowd-out investment in Nigeria. Whereas in the long run, all the variables drive investment aside financial deepening.

Consequently, the study recommends the following policies: It is suggested that policy makers and government should formulate policies for free flow of remittance into the economy; government should formulate policies to stabilize interest rate and make it attractive to investors; government should formulate policies in order to caution the rise of inflation for the growth of investment; government should formulate economic policies that will stimulate the economy to have an inclusive growth so that it will enhance private investment; and lastly, adequate monetary policy should be formulated to ensure that the financial sector serves its function of enhancing private investment in Nigeria.

References

[1] Adeseye Adenike (2021). The Effect of Migrants Remittance on Economy Growth in Nigeria: An Empirical Study. Open Journal of Political Science, 11 99-122 doi.org.104236/ojps.2021.111007

[2] Balde Y. (2011). The Impact of Remittances and Foreign Aids on Savings/Investment in Sub Saharan Africa. Africa Development Review 23(3), 247-262

[3] Dash Kumar R. (2020). Impact of Remittances on Domestic Investment: A Panel Study of Six South Asian Countries. South Asia Economic Journal 21(1) 7-30. Doi.10.1177/1391561420903199

Annals of Spiru Haret University.
Economic Series
Since 2000
ISSN:2393-1795 ISSN-L:2068-6900

[4] Ekanayake E.M And Moselares Carlos (2020). Do Remittance Promote Economic Growth and Reduce Poverty? Evidence From Latin America Countries. Economies 8(35) doi.10.3390/economies8020035
[5] Fry M.J. (1993). Foreign Direct Investment in a Macroeconomics Framework: Finance, Efficiency, Incentives and Distortions (Policy Research Working Paper Series 1141). Washington DC: Debt and International Finance Division, international Economics Department, World Bank.
[6] Githaiga Nderitu P. (2020). Foreign Remittances, Banking Sector Development and Private Sector Investment. Journal of Business, Economics and Environmental Studies 10(1) 7-18. Doi.1013106/jbees.2020.vol10.no1.7
[7] Hossain AKM And Hasanuzzaman S. (2015). Remittances And Investment Nexus in Bangladesh: An ARDL Bound Testing Approach. Int. Rev Econ 60(4) 387-407
[8] Karikari Nana K, Mensah Sam and Harvey (2016), Do Remittances Promotes Financial Development in Africa? SpringerPlus 5:1011 doi.10.1186/s40064-016-2658-7
[9] Lucas R. (1967). Optimal Investment Policy and the Flexible accelerator. International Economics Review, 8(1), 78-85
[10] Mallick H. (2012). Inflow Of Remittances and Private Investment in India. The Singapore Economic Review, 57(1) 1-22
[11] Misati Nyakerarion R, Kamau and Nassir Hared (2019). Do Migrant Remittance Matter for Financial Development in Kenya? Financial Innovation 5:31 doi.org/10.1186/s40854-019-019-0142-4
[12] Okeke, Izuchukwu (2021), Impact of International Remittances on Employment in Nigeria. Journal Of Economics and Sustainable Development. Doi.10.7176/JESD/12-1-05
[13] Saydaliyev Berk H, Chin Lee and Oskenbayev Yessengali (2020). The Nexus of Remittances, Institutional Quality, and Financial Inclusion. Economic Research-Ekonomska Istrazivanja 33:1 3528-3544 doi.org/10.1080/1331677x.2020.1774795
[14] Su C., Sun T., Ahmed S., And Mirza N. (2021). Does Institutional Quality and Remittance Inflows Crowd-in Investment to Avoid Duch Disease? A Case for Emerging Seven (E7) Economies. Doi.org/10.1016/j.resourpol.2021.102111
[15] Syed S. And Miyazako M. (2013) Promoting Investment in Agriculture for Increased Production and Productivity. CAB International and Food Agriculture Organization, Rome.
[16] Tung L.T. (2018). The Impact of Remittances on Domestic Investment in Developing Countries: Fresh Evidence from The Asia-Pacific Region. Organizations And Markets in Emerging Economies 9, 193-211
[17] United Nation Development Program (2011). Towards Human Resilience: Sustaining MDG Progress in An Age of Economic Uncertainty. New York: UNDP
[18] Vaaler P. (2011). Diaspora Concentration and The Venture Investment Impact of Remittances. Jn Int Manag 19; 26-46

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[19] Woodruff C, Zenteno M (2007). Remittances And Microenterprises in Mexico. Mimeo, UC San Diego
[20] Dzansi J. (2013). Do Remittance Inflow Promote Manufacturing Growth? Ann Reg Sci 51(1):89-111
[21] World Bank (2016). Migration and remittances fact-book 2016 fact-book third edition.
[22] World Development Indicator (2018). World Bank Development Indicators, World Bank, Washington D.C.
[23] World Development Indicator (2020). World Bank Development Indicators, World Bank, Washington D.C.
[24] Yang (2008). International Migration, Remittances and Household Investment: Evidence from Philippine Migrants' Exchange Rate Shocks. Econ J 118(528) 591-630
[25] Yasmeen K., Anjum A, Ambreen S, And Twakal S. (2011). The Impact of Workers' Remittances on Private Investment and Total Consumption in Pakistan. International Journal of Accounting and Financial Reporting 1(1), 173-177