

REMITTANCES AND ECONOMIC GROWTH OF NIGERIA

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Abstract

This study is an investigation of the impact of remittances on the Nigerian economic growth. It specifically estimated the impact of remittances on economic growth. The study used multiple regression model using ordinary least squares techniques analysing secondary data. Tests conducted revealed that all the variables used in the analysis are I(1) and as well co integrated. Other diagnostics tests such as heteroscedasticity, autocorrelation and normality revealed that the results are robust and hence remittances positively and significantly contribute in economic growth of Nigeria. The study therefore recommends that institutions introduce new savings instruments as well as further opportunities whereby migrants can channel their remittance funds into productive sectors of the economy.

Keywords: Remittances; Economic growth; Error correction model

Introduction

Remittances are the transfer of an asset, usually in monetary term from migrants' family living outside their countries to family members in the source countries. Money sent home by migrants competes with

international aid as one of the largest financial inflows to developing countries.

According to International Monetary Fund (IMF, 2009), remittances only account for migrants that have stayed up to one year in their destination region, while those below one year and the self-employed migrants are excluded. International organization for migration (IMO) 2009, broadly, defined remittances as the financial flows associated with migration or migrants' workers or immigrants to a relative in the country of origin. On the other hand, international labour organization (ILO, 2000), define remittances as the portion of migrants workers' earning sent back from the country of origin.

Remittances in the world are now forming a huge source of income for developing countries (Mohamed and Caitlin, 2008). Arguably, remittances have been established globally as a key factor to reduce poverty because of its impact on micro and macroeconomics performance and development. One of the major reason why remittances were seen as a key factor in mitigating poverty is due to the fact money sent gets to the target people who need them most and the fund is well utilized in the fashion that results in the greatest benefits and betterment for individual recipient household. Also, remittances sent are at minimal cost with little waste of resources, and as such, it is conventionally believed that remittances can potentially be an ideal tool for economic development.

There has been an increase in the inflow of migrant remittances in Nigeria and other developing economies in the recent times. This scenario has attracted the attention of

scholars, researchers and even policy makers who consider migrant remittance to be of key interest in the development of economies (Lueth and Ruiz-Arraz, 2007). According to Iheke (2012), migrant remittances play vital roles in poverty reduction, income redistribution and economic development especially in the rural areas.

According to Urama, Nwosu, Yumi and Aguegboh (2016), the relatively recent rise in the volume of migrant remittances in Nigeria shows that by 2014, remittances had out placed Foreign Direct Investments (FDI) and Official Development Assistance (ODA). This made migrant remittances to be the second only to oil as a foreign earner for Nigeria as at 2015. According to them, World Bank estimates show that in 2013, Nigeria moved to the top ten recipients of remittances in the world as it received 77% and 82% of the total migrant remittance inflow to West African countries in 2011 and 2015 respectively.

Even though migrant remittance inflow in Nigeria has been on the increase, the extent to which it has impacted on economic growth and development remains a subject of research investigations. Therefore, this study on the impact of migrant remittances on economic growth is one of those efforts to ascertain the developmental contribution of migrant remittances in Nigeria.

LITERATURE REVIEW

Theoretical Literature

Some theories on remittances include; the Classical theory of remittances, the Neoclassical theory of remittances and the Neo-Marxist theory of remittances.

The Classical Theory of Remittances

According to the classical school of thought, modern knowledge, ideas, innovation, rational and democratic ideas needed to promote the developing countries only flows from the developed countries. Therefore, the exposure of the traditional economy to acceleration stage involves the transfer of knowledge which is a product of migration. Hence, to the classical school of thought, remittance is a proceed from migration which occurs when people move from one region to the other due to industrialization in the destination region. From this theory, we can establish that remittance is on factor that spurs economic growth.

The Neoclassical Theory of Remittances

The neoclassical schools posit that the marginal productivity of labour and subsequently domestic wage will increase when labour migrate. The neoclassical school of thought submits that, migration of labour result to the scarcity of workforce in the source country, which in turn will lead to pressure on the demand for labour resulting from the low supply of labour. According to them, the marginal productivity of labour will increase as a result of low supply of labour. This situation will result in higher domestic wage. In their view, remittances and foreign capital flows move in opposite direction with the equilibrium in the domestic economy until the development role of migration is fully utilized. To the neoclassical school, remittances will be neutralized in the long run because migrants are motivated by higher wage or wage differentials. However, their leaving will increase the source country's wage, and in the long run, the real wage differential will smoothen out.

Neo-Marxist Theory of Remittance

According to this school of thought, migration and international remittance inflows reproduced and reinforced the capitalist system by encouraging inequality between developed and least developed countries (Azam and Gubert, 2006). Neo-Marxist, as regards the socio-cultural perspectives, argued that migration and remittance were seen as having negative effect as they expose migrants' family to the taste of foreign goods. Therefore, the Neo-Marxist sees migration to have negative impact on development.

Empirical Literature

Dietmar and Adela (2016) studied impacts of remittances on economic growth, using panel data set of six high remittances receiving countries. These countries include; Albania, Bulgaria, Macedonia, Moldova, Romania and Bosnia Herzegovina during the period 1999–2013. The result of the study suggests that remittances have a positive impact on growth and that this impact increases at higher levels of remittances relative to GDP.

Oluyemi, Azuh and Ajayi (2015) investigated the activities of Nigerian Diasporas in Ghana from the perspective of the money remitted to Nigeria for her economic growth. The study made use of primary data with the aid of questionnaire instrument and a population size of 326 respondents living in Ghana. The analysis which employed both nonparametric (chi-square) and a linear regression estimator shows that remittances from the Nigerian Diasporas in Ghana are significant to economic growth of Nigeria. Also, the result revealed that remittances have significantly supported savings and investment in Nigeria.

Muriel (2015) examined the impact of remittances on economic growth in four selected countries of West African countries (Cameroon, Cape Verde, Nigeria and Senegal) from 2000–2010. Results showed that remittances flow to Nigeria and Senegal were found to exert positive impacts on economic growth while, remittances flow to Cape Verde and Cameroon were found to exert negative impact on economic growth.

The study of Kanu and Ozurumba (2013) provided an empirical support on the subject of remittances and economic growth. Focusing on the sub-Saharan African countries with emphasis on Nigeria, South Africa and Ghana. Their result showed that migrant's remittances have a positive impact on economic growth of the aforementioned economies. Also considering the casual relationship between remittances and economic growth, remittances were found to granger cause economic growth in Ghana and South Africa, but the report shows that the impact were felt more in South Africa than Ghana. The opposite was the case for Nigeria where remittances were not found to granger cause GDP, rather economic growth was seen to granger causes remittances.

Achouak and Mohamed (2013) examined the effect of remittances on economic growth through education in Tunisia. The result obtained indicated that then direct effect of remittances is negative, while the indirect effect induced by the inclusion of education is positive.

Abu (2010) in his empirical analysis of remittances and economic growth with evidence from Bangladesh, India and Sri Lanka. Using a time series data of 25 years for each country, the researcher found that growth in remittances does not lead to

economic growth in India, while Sri Lanka exhibit bidirectional causality between remittances and economic growth, meaning that economic growth and remittances influence each other.

Abedelbagi (2016) analyzed migration, remittance, trade openness and economic growth in Africa countries. Using the generalized method of moment (GMM), the result revealed that outgoing migrants have a negative significant impact on economic growth of the region, migrants' remittances on the other hands was found to have a positive significant impact on economic growth during the period. Finally, from the analysis, it was found that trade contributes positively and significantly to economic growth in the continent.

METHODOLOGY

Model Estimation and Data Issues

From the reviews of this study, the paper adopts the model specified as follows:

$$RGDP_t = B_0 + B_1MR_t + B_2EXR_t + B_3INFL_t + B_4GFCF_t + GODA_t + U_t \quad 3.1$$

Where;

RGDP_t = Real gross domestic product growth rate

MR = Migrant remittances

EXR = Exchange rate

INFL = Inflation rate

GFCF = Gross fixed capital formation

ODA = Oversea Development Assistance

U_t = a statistic error term

Data Required and Sources

The data for the study were time series secondary data ranging from 1981-2018. The

major source of data was the CBN statistical bulletin 2017 edition.

Empirical Results

Descriptive Statistics

Table 1: Descriptive Analysis Result. No of observation: 37

Variable	LNR GDP	LNEXR	LNGFC	LNODA	INF	LNRM
Mean	10.24503	3.541913	29.00812	-1.05206	19.98021	23.77415
SD	0.548966	1.950539	0.632696	1.159527	18.39193	4.975862
JB	3.573062	5.902311	3.712658	2.679189	21.37034	4.062528
Prob Value	0.167540	0.052279	0.156245	0.261952	0.00023	0.131170

Source: Researcher's computation (2020) using Eviews 9.0

The table above describes the variables used in the estimation of the models. The variable, log of gross capital formation (LNGFC) has the largest absolute mean value of 29.006, and this is followed by log of remittances (LNRM) with a value of 23.77, while official development assistance (LNODA) has the least mean value of 1.05. The mean of other variables in decreasing order includes inflation (INF), log of real GDP (LNRGDP) and log of exchange rate (LNEXR). However, in terms of how the variables are clustered around the mean measured by the standard deviation, LNGFC with the largest mean value has the second smallest standard deviation of 0.63 after LNRGDP with the smallest standard deviation of 0.549. This shows the variable LNRGDP is the most clustered around the mean followed by LNGFC. Moreover, inflation with the third largest mean has the largest standard deviation and hence shows most variability spread around the mean compared to other variables.

Jarque-Bera is a statistical test that determines whether the series is normally distributed. This statistic measures the difference of the skewness and the kurtosis of the series with those from the normal distribution. The null hypothesis is that the series is normally distributed against alternative that it is not. Evidently, the Jarque-Bera statistic did not reject the null hypothesis of normal distribution for LNRGDP, LNGFC, LNODA and LNRM. However, the null hypothesis of normal distribution is not rejected for LNERX and INF. Thus, we conclude that LNRGDP, LNGFC, LNODA and LNRM model are normally distributed.

Unit Roots Test Result

In this study, the Augmented Dickey Fuller (ADF) unit roots test was employed to test for the time series properties of the variables. The null hypothesis is that the variable under investigation has a unit root against the alternative that it does not. The choice of lag length was based on Schwartz-Bayesian information criteria. The decision rule is to reject the null hypothesis if the ADF statistic value exceeds the critical value at a chosen level of significance (in absolute term) otherwise, do not reject. These results are presented in table 4.2 below.

Table 2 Unit Roots Test Result

V ari ab le	Le vel For m of AD F Sta tisti cs	5% crit ical val ue	lag	First Differ ence ADF Statist ics	5% crit ical val ue	lag	Re mar k
L N E X R	- 2.2 034 5	- 2.9 458 4	0	- 5.943 79	-2.948404	0	I(1)

L N G F C	- 0.6 619 1	- 2.9 540 2	3	- 3.922 86	-2.954021	2	I(1)
L N O D A	- 2.9 231 2	- 3.6 329 0	1	- 5.417 17	-3.639407	1	I(1)
L N R G D P	0.0 321 42	- 2.9 484 0	1	- 3.339 74	-2.948404	0	I(1)
L N R M	- 1.0 473 6	- 2.9 458 4	0	- 6.190 72	-2.948404	0	I(1)
IN F	- 3.0 916 9	- 3.5 683 8	6	- 3.097 24	-2.967767	6	I(1)
E C M	- 3.5 146 5	- 2.6 307 6	0				

Source: Researcher's computation (2020) using Eviews 9

The results of table above show that all the variables are all integrated series. This is because their ADF values are less negative than their critical values at 5%. Based on this, the null hypothesis of unit root was not rejected for all the variables at their level form. However, at the first difference of the variables all turned stationary indicating the absence of unit root problem.

Given that all the variables are integrated of other one, that is, I (1) series, a long run equilibrium relationship between dependent and independent variables was envisaged. Following this, the study subjected the residual to unit root test (co integration test.). As shown above the error term (ECM) has the ADF statistics of -3.51465 which is more negative than the critical ADF of -2.63076 at 5 % level of significance. This implies that there exists a long-run equilibrium

relationship between economic growth and the independent variables

Impact of Migrant Remittances on Economic growth of Nigeria

Below is a table containing the error correction model result of the impact of migrant remittances on economic growth of Nigeria.

Table 3: Impact of Migrant Remittances on Economic growth of Nigeria

Variable	Coefficient	t-statistics	Probability value
Cons	0.033722	3.533372	0.0015
LN RGDP (t-1)	0.367114	2.333234	0.0273
LNEXR	-0.016671	-1.73982	0.0541
LN GFC	0.043915	1.335744	0.1928
LN ODA	-0.000574	-0.042897	0.9661
INF	-0.000547	-1.560178	0.1304
LN RM	0.01018	10.43032	0.0030
ECM	-0.067633	2.79544	0.0301

R-squared=0.515; F-statistic=4.1054; Prob(F-statistic)=0.0034

Source: Researcher’s computation (2020) using Eviews 9

The result from table above reveals that migrant remittances (LN~~RM~~) at the current period has a positive and significant impact on the growth of the Nigerian economy at 5% level of significance because t-value of the coefficient of remittances has probability value of 0.003 which is less than 5% level of significance (0.003<0.05). The coefficient of 0.01018 implies that if remittances increase by one percent, on the average, the economy will grow by about 0.10 percent holding every other variable constant. This is possible if remittances flow is channelled into productive investment.

The coefficient of exchange rate is significant at 5 percent as its calculated t-value has a probability value which is less than 0.05. Its negative sign means that as it increases, the

economy retards in its rate of growth. This is against economic implication of rising exchange rate because an increase exchange rate is a depreciation of Nigerian currency and this means that Nigerian goods will be cheaper and foreign goods dearer. This is expected to encourage the demand of Nigeria made good and hence the output growth. The negative relationship as established here may be peculiar to Nigeria case where there may not be enough goods to match increasing demand resulting from depreciation of naira. More so, an increasing exchange rate may negatively affect importation of capital goods that are needed for industrial production, and hence the output of industries will dwindle. This may negatively affect economic growth.

Gross Capital Formation (i.e. Gross Domestic Investment) is the total change in the value of fixed assets plus change in stocks. This is expected to impact positively on growth as depicted in the table above, but our results shows that it does not significantly affect economic growth. This in other words means that there is inadequate level of investment necessary to spur growth. Official development assistance as shown in the above result is negative, signifying that LN~~ODA~~ negatively affect economic growth in Nigeria, though the impact appeared not significant since t-value of the coefficient of LN~~ODA~~ has probability value of 0.9661 which is greater than 5% level of significance (0.9661>0.05). The negative relationship in the results above means that LN~~ODA~~ may tend to increase leisure hours and this reduces income, investment and growth. Inflation rate coefficient is -0.000547 suggesting that a one percentage point increase in inflation will reduce growth rate by 0.000547 percent. However, from the results as above, inflation is not statistically different from zero as the t-value of its

coefficient has probability value of 0.9661 which is much greater than 5% level of significance ($0.9661 > 0.05$).

The coefficient of error correction model (ECM (-1)) is 0.067, which is the adjustment parameter is appropriately signed. The adjustment parameter suggests that about 6.7% of the previous period's disequilibrium in growth model is corrected every year. The speed of adjustment is rather very sluggish as shown in the results.

Conclusion

This study examined the impact of migrant remittance on economic growth of Nigeria. The study engaged various time series econometric techniques such as unit root test, co integration, error correction model in the analysis. The result of the analysis revealed that, remittances and economic growth and other control variables are both I (1) and are co integrated. The result of the error correction model conducted indicated that migrant remittance has positive and significant impact on the economic growth of Nigeria.

Recommendations

In the light of on the findings of the study, researchers recommend as follows;

1. That appropriate policy to explore more foreign employment opportunity and more proficient use of remittances would help the economic growth of the Nigerian economy. Some of such policies include establishing of functional bilateral and multilateral relationships with countries where Nigerian citizens reside.

2. It is important that institutions introduce new savings instruments as well as further opportunities whereby migrants can channel their remittance funds into productive sectors of the economy.

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