



BOOSTING GROWTH FROM AFAR: THE IMPACT OF REMITTANCES ON NIGERIA'S ECONOMY

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Abstract: The aim of the study was to establish the effect of diaspora remittances on Nigeria's per capita income and gross domestic product. The study was anchored on the theory of tempered altruism. It adopted the ex post facto research approach. The data used in this study were obtained from Central Bank of Nigeria's Bulletin and the World Bank sources from 2010 to 2023. Data analysis was done using descriptive statistics, correlation and regression models. The results revealed as follows: diaspora remittance has a significant positive effect on per capita income in Nigeria. This is in line with the a priori expectation, implying that an increase in remittances will also enhance per capita income. Further, diaspora remittances showed a significant positive effect on GDP in Nigeria. It was concluded that diaspora remittance is very paramount to Nigeria's economic development. Based on the findings and conclusion, it was recommended that the Federal Government should provide the enabling environment for diaspora remittances to be channeled properly; since it is a major contributor to the economy.

Keywords: Diaspora remittances, Economic growth, Gross Domestic Product, Per capita income

Introduction

Is ranked the sixth highest recipient of global remittances, only after China, India, Egypt, Mexico, and Philippines (World Bank, 2019). With this upward trend and with the recognition of the beneficial contribution of Diasporas as partners in the Nigerian project, the Nigerian government created the Nigerians in Diaspora Commission (NIDCom) in 2019, to use the rich human capital, and material resources of Nigerian diaspora community. The foregoing restates the fact that remittances play important role in economies both at the macro and micro levels, predominantly, as it has multiplier effects on consumption, investment, and economic growth, i.e., it helps poorer recipients meet basic needs, finance education, fund investments, foster new businesses, meet debt obligations, and fundamentally, drive economic growth (PricewaterhouseCoopers, 2019). Consequently, remittances provide alternative investment, needed for economic expansion. Further, as part of their contributions to GDP, Nigerians living in diaspora are into a joint venture with the Federal Housing Authority (FHA) to commence a model city in the Federal Capital Territory (FCT). This project is expected be duplicated in Port Harcourt, Benin, Lagos and Enugu. According to the Nigerian in Diaspora Organization (NIDO), the project will be known as FHA Diaspora city and it will be institutionalized as a model for doing business in Nigeria (NIDO, 2017). Also, NIDO has successfully subscribed fully to \$300million diaspora bond towards infrastructural and technology development

to grow the country's GDP. These have huge potentials to the socio-economic development of the country. It is on the basis of the above background that this study explored the impact of diaspora remittance on economic growth in Nigeria.

1.2 Statement of the Problem

This study is motivated due to the fact that Nigeria as a nation has suffered from the loss of thousands of highly educated professionals. Fortunately, remittances by Nigerian Diasporas have provided a substantial contribution, to the Nigeria economy, arguably. According to the Nigerian Investment Promotion Commission (NIPC) about 2,000 Nigerians are trained in the USA, United Kingdom, Germany, France, Russia, Canada, Japan, and China each year. They return home to contribute their quota to the development of the economy. Some scholars have empirically examined the interactions between diaspora remittances and economic growth and have come out with diverse results. However, the studies are scanty, considering the weight of the subject and its relevance to Nigerians economic transformation. That means that there is still room for further investigation; to further bring to the fore the need for the government and other policy makers to embrace issues of diaspora remittances. Hence, this study was undertaken to fill the above identified gap. Significantly, it is believed that the study will contribute to the vast and growing body of literature on remittances and economic development and, more so, examining evidence from Nigeria. Additionally, the study will provide empirical evidence, which is also particularly useful for further studies on the same topic. Lastly, the study will also be useful for financial intermediaries to come up with new strategies to correctly price and tailor-make products available to Nigerian migrants in the diaspora. The study can, therefore, influence innovation around financial products as well as technological advancements in financial intermediaries' operating systems.

2.0 REVIEW OF LITERATURE

2.1.1 Concept of Diaspora Remittances

International Monetary Fund (2009) defined remittances based on the concepts of migration. They defined remittances as household income received from abroad, as a result of the migration of workers to foreign countries; whether the migration is temporary or permanent. The Collins English Dictionary (2018) defined the word diaspora as "populations of migrant origin who are scattered among two or more destinations, between which there develop multifarious links involving flows and exchange of people and resources: between the homeland and destinations countries". The vocabulary.com defines "diaspora as a large group of people with a similar heritage or homeland who has since moved out to places all over the world". According to the United Nations (2017), sees the concept of diaspora as any large migration of refugees, language, or culture. Essentially, Diasporas include composite mixes of persons who have converged at different times, through different channels, means, and legal statutes in their various destinations.

2.1.2 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). It can also be defined as "passage from lower to higher stage which implies change". Charles and Bruce (2018) pointed out that: "economic development is generally defined to include improvements in material welfare especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, disease and early death, changes in the composition of inputs and output that generally include shifts in the underlying structure of production away from agricultural towards industrial activities, the organization of the economy in such a way

that productive employment is general among working age population rather than the situation of a privileged minority, and the correspondingly greater participation of broad based groups in making decision about the direction, economic and otherwise, in which they should move their welfare”.

This study considers the real gross domestic product and per capita income as the surrogates for measuring economic growth. These are conceptualized thus;

2.1.3 Per Capital Income -Clipeta and Kachaka, (2004) define per capita income or total income measures the average income earned per person in a given area in a specified year. Per capita income refers to the average income earned by individuals in a specific geographic area, such as a country or region, during a specific period of time. Wikipedia describes per capita income is a measure of the amount of money earned per person in a nation or geographic region. Per capita income can be used to determine the average per-person income for an area and to evaluate the standard of living and quality of life of the population. Per capita income for a nation is calculated by dividing the country's national income by its population Per capita income counts each man, woman, and child, even newborn babies, as a member of the population. Per capita income is an important metric for policymakers and economists, as it can help identify areas where economic growth and development may be needed. It can also be used to compare the relative economic performance of different regions or countries, and to identify potential sources of income inequality within a population. It is calculated by dividing the total income of all individuals in the area by the total population of that area. Per capita income is often used as an indicator of the overall economic well-being of a population, as it takes into account factors such as income distribution and the cost of living in the area.

2.1.4 Gross Domestic Product - GDP is the final value of the goods and services produced within the geographic boundaries of a country during a specified period of time, normally a year. The Bureau of Economic Analysis (BEA) (2015) defines GDP as the value of the goods and services produced by the nation's economy less the value of the goods and services used up in production. GDP is also equal to the sum of personal consumption expenditures, gross private domestic investment, net exports of goods and services, and government consumption expenditures and gross investment. GDP is considered as one of the most widely known economic indicators. It is being used not only as an economic indicator, but also as the key indicator for development progress. It is widely used by analysts, politicians, journalists, businessmen and societies in general as a global indicator to measure economic performance and welfare, and to evaluate the success or failure of governments' economic policies and even the societal development and progress of a country.

2.2 Theoretical review

This study was anchored on the theory of tempered altruism. The theory was developed by Stark and Lucas in 1985. The tempered altruism theory states that remittances integral aspect of an inter-temporal and mutually beneficial contractual plan that is established between the migrant and the household in the recipient nation with the prospect of carrying out investments and taking some risks which has the tendency of reducing poverty and improving economic growth. The family in the recipient country in most cases invests by educating the migrant worker and anticipates yields that flow in the form of remittances as they consider the education as their investment. It suggests that remittances for educated migrants are greater than those of in-laws or even spouses. It is noted that less developed countries' insurance markets and financial markets are not well established and proceeds particularly from agriculture are greatly declining. As a result, migration seems to provide a sensible choice that provides an opportunity to expand and diversify the recipient family's income and value. The existing

harsh economic condition prevalent inside the migrant's home country and the nation hosting the migrant worker influence to a large extent the flow of remittance money. In a situation where the migrant worker's country is plagued with negative situations such as natural disasters, the migrant worker is compelled to transfer comparatively much more than when the conditions are favourable. Conversely, in the situation where the migrant worker finds himself or herself in a tight and unpleasant situation such as being unemployed, the migrant worker's family sees it as an obligation to support by sending money to assist the migrant worker.

2.3 Empirical Review

Fiberesima, Anyanwu, and Christopher (2023) examined diaspora remittance, overseas development assistance and economic growth in Nigeria. The study sets out to examine the diaspora remittance, overseas development assistance and economic growth in Nigeria, covering the period of 38 years (1981 -2019). Secondary data sourced from national bureau of statistics, CBN statistical bulletin, World Bank data bases are adopted in the analysis. The work used Ordinary Least Squares model to estimate the variables used in the analysis. The result suggests that diaspora remittances reduce moderate poverty in Nigeria, also evidence from the study suggest that overseas development assistance inflows were positively statistically significant in the short run in the economy. Also, the study reveals that improvements in gross capital formation cause more overseas development assistance into the Nigeria economy. Adewale, Ameji and Urah (2021) studied diaspora remittances and the growth of the Nigerian economy. The paper assessed the impact of diaspora remittances on the growth of the Nigerian economy from 1986 to 2019. It employed the Autoregressive Distributed Lag (ARDL) model by using variables of gross national product, diaspora remittance inflows, labor force, financial development, and trade openness. Results of the study have shown that diaspora remittances have a positive and significant impact on economic growth in Nigeria in the short run and longrun, however, its impact on growth was quite low for both periods. To improve the contributions of diaspora remittance, remittances should go beyond just transfer payments and social security to help family members and serve as investments to spur economic growth. Also, increasing labor force participation through job creation, improving working conditions to enhance productivity, and creating favorable financial environment to invest these funds is advocated. Additionally, international trade should be strengthened by shifting production from primary products such as crude oil and agricultural produce to secondary products such as refined petroleum and industrial products by revamping the industrial sector. Kigen (2020) studied diaspora remittance and economic growth in Kenya. The study estimated short-run and long-run effects of diaspora remittances on growth of economy in Kenya and took into considerations the two factors of domestic savings and financial deepening as independent variables. The data was sourced from the World Bank, Central Bank of Kenya, Kenya National Bureau of Statistics and the National Treasury. The study used time series data for the period 1970 to 2017. Empirical studies carried in Kenya have not considered the period from 1970 to 2017. Stata software was used for the analysis and Granger causality test was used to test the direction of causality between diaspora remittances and economic growth. The Granger causality tests showed that there was unidirectional causality between Diaspora remittances and economic growth in Kenya for the period under study (1970-2017). That means that diaspora remittances accelerates economic growth in Kenya and that economic growth does not lead to increase in diaspora remittances in Kenya. Based on the maximum rank two of the co-integration, GDP and diaspora remittances were co-integrated. The study used ordinary least squares estimation to determine both the short-run and long-run effects of diaspora remittances on economic growth in Kenya. It was found that there was a short run and long-run relationship between GDP and diaspora remittance at 10 percent level of significance

and similarly between GDP and domestic savings. Narang (2020) investigated the trend and pattern of remittance inflows, and its effect on household consumption and investments in India, covering 1975 to 2017. The Two-stage Least Square method was employed as estimation technique on the variables of personal remittances, gross fixed capital formation (investment), government final consumption expenditure, trade openness, gross domestic product, foreign direct investment, household final consumption expenditure, exchange rate, credit to the private sector, population, and inflation rate. Empirical findings indicated that although personal remittances did not impact the GDP directly, it however led to an increase in consumption and net addition to capital stock which had strong positive effects on the GDP of India. John, Akaniyene and Chris (2020) examined migrant remittances and economic growth: The Nigerian perspective. It sought to assess the signification of diaspora remittances, and to suggest measures that could enhance its effectiveness and economic growth in Nigeria. To achieve the objective of the research, some macroeconomic indicators in the Nigerian economy were evaluated using an ex-post facto research design. The data were collected, analyzed and tested using the ordinary least square (OLS) multiple. From the analysis, it was revealed that there was a significant relationship between total remittances and gross domestic product in Nigeria. Furthermore, workers remittance was found to have an insignificant effect on gross domestic product in Nigeria. In Nigeria, Ugherughe and Jisike (2019) explored diaspora remittances and the Nigerian economy: an empirical analysis (1977 – 2017). The study used remittance inflows and the macroeconomic variables of the exchange rate and inflation rate as control element sources on the Nigeria economy (Gross Domestic Product) as to evaluate the impact of remittance inflows on the economy of Nigeria. Ordinary Least Square (OLS) and Granger Causality tests were deployed to analyze the data collected from the World Bank and International Monetary Fund database from 1977 to 2017. The result of the study revealed that there is a long run equilibrium relationship between remittance inflows of the Diasporas and the economy of Nigeria. In Kenya, Muguna (2018) in his study, assessed the impact of the global south remittances on the national development between 2005 and 2016. The study used trend analysis and multiple regression analysis on an annual time series data-set. Variables used were global south remittances, GDP, exchange rate, government expenditure, equity turnover, bond turnover, secondary school enrollment, gross savings, and consumer price index. The study's finding established a significant upward remittance trends from the global south into Kenya. In addition, the study found that increases in diaspora remittances positively increased GDP, stabilizes exchange rates, consumer price index, equity turnover, bond turnover, secondary school enrollment, consumer spending, and gross savings in Kenya. Apart from that, increases in remittance inflow reduced government spending, enabling government to lay more emphasis on priority sectors according to results of the study.

3.0 METHODOLOGY

The study used a longitudinal survey research approach to look at the statistical relationship between diaspora remittances and economic growth in Nigeria. The data used in this study was obtained indirectly from Central Bank of Nigeria's Bulletin, National Bureau of Statistics and other World Bank Sources. The study covers the period from 2010 to 2023, which is selected as the research year. The research employed the ordinary least square (OLS) regression technique to analyze the data.

3.1 Model Specification

The model specified in this study expresses economic growth (GDP) as a function of diaspora remittance, as follows:

$$GDP = f(DR) \dots \dots \dots 1$$

Disaggregating diaspora remittances, Equation 1 is restated as:

$$GDP = f(DR) \dots \dots \dots 2$$

$$PCI = f(DR) \dots \dots \dots 3 \text{ Where:}$$

GDP = Gross Domestic Product GNIPC = Per-capita income

4.0 ANALYSIS & INTERPRETATIONS OF RESULTS

This section is concerned with the presentation and analysis of the data collected by the research in a bid to draw logical inferences on the hypothesized relationships between the variables employed in this study.

4.1 Data Analysis

Table 4.2 Descriptive Statistics

	REMIT	GNIPC	GDP
Mean	3936.136	559520.2	80957.58
Median	3203.800	519610.9	68156.50
Maximum	13226.40	1027299.	229912.9
Minimum	130.5908	250492.1	7062.750
Std. Dev.	3284.586	228067.8	64594.64
Skewness	0.979412	0.483807	0.748200
Kurtosis	3.723643	2.339988	2.579020
Jarque-Bera	4.360650	0.914595	2.416437
Probability	0.113005	0.632992	0.298729
Sum	94467.26	8952323.	1942982.
Sum Sq. Dev.	2.48E+08	7.80E+11	9.60E+10
Observations	24	16	24

Source: Author's Computation using Eviews

The results above indicate that REMIT, GNIPC and GDP have mean and standard deviations (in parenthesis) of N3.9tr (N3.3tr), N0.56m (N0.23m), and N81tr (N64.6tr), respectively. On the other hand, the Jarque-Bera statistics and probability values indicate that all the variables are normally distributed. **Table 4.2: Correlation**

Statistics

REMIT	GNIPC	GDP
REMIT	1.000000	
GNIPC	0.444271	1.000000
GDP	0.547026	0.698548
		1.000000

Source: Author's Computation using Eviews

Table 4.3 reveals that remittances has positive correlations with all the dependent variables.

Table 4.3 Least Square Regression (Model 1)

Dependent Variable: LNGNIPC

Method: Least Squares

Date: 07/22/24 Time: 15:43

Sample (adjusted): 2008 2023

Included observations: 16 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNREMIT	0.786746	0.069692	11.28889	0.0000
C	-9.820399	2.035427	-4.824736	0.0003
R-squared	0.901017	Mean dependent var		13.15404
Adjusted R-squared	0.893947	S.D. dependent var		0.422334
S.E. of regression	0.137536	Akaike info criterion		-1.013391
Sum squared resid	0.264827	Schwarz criterion		-0.916817
Log likelihood	10.10713	Hannan-Quinn criter.		-1.008445
F-statistic	127.4391	Durbin-Watson stat		0.746946
Prob(F-statistic)	0.000000			

Source: Authors' Computation using E - views

From the result in Table 4.3, remittance determines over 89.4% of the variations in GNIPC. The F-statistic and probability of 127.4 and 0.000, respectively, show that the model has a very high goodness of fit. Similarly, the t-statistic of 11.29 and its associated probability of 0.0000 reveal that diaspora remittances has a significant positive effect on GNIPC in Nigeria.

Table 4.4 Least Square Regression (Model 2)

Dependent Variable: GDP

Method: Least Squares

Date: 07/22/24 Time: 15:45

Sample: 2000 2023

Included observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
REMIT2	19.0278	1.059416	17.96070	0.0000
C	6061.350	5384.517	1.125700	0.2724
R-squared	0.936155	Mean dependent var		0957.58
Adjusted R-squared	0.933253	S.D. dependent var		64594.64
S.E. of regression	16688.26	Akaike info criterion		22.36245
Sum squared resid	6.13E+09	Schwarz criterion		22.46063
Log likelihood	-266.3494	Hannan-Quinn criter.		22.38850
F-statistic	322.5869	Durbin-Watson stat		1.119953
Prob(F-statistic)	0.000000			

Source: Authors' Computation using E- views

From the result in Table 4.4, remittance determines over 93.3% of the variations in GDP. The F-statistic and probability of 322.59 and 0.000, respectively, show that the model has a very high goodness of fit. Similarly, the t-statistic of 17.96 and its associated probability of 0.0000 reveal that diaspora remittances has a significant positive effect on GDP in Nigeria.

4.3 Discussion of Findings

From the results in table 4.3, remittance has a t-statistic of 6.685 and probability value of 0.0000. Given that the probability value of 0.000 is less than 0.05, the null hypothesis is rejected. Similarly, Table 4.5 also indicated a t-statistic of 11.29 and probability value of 0.0000. Since the probability value of 0.000 is less than 0.05, the null hypothesis is rejected, therefore diaspora remittance has a significant positive effect on GNIPC in Nigeria. This is in line with the a priori expectation, implying that an increase in remittances will also enhance per capita income. Through remittances, quite a lot of persons have been able to get start-up capital for small businesses, which in return generate additional income to the recipient. As a result, these people are able to better meet their everyday needs as a result of the additional income at their disposal. Lastly, Table 4.4 also indicated that remittances also has significant positive effect on economic growth; given the t-statistic of 17.96 and probability value of 0.0000, which also implies that economic growth can be enhanced through remittances. The probable reason for this is that remittances is a useful tool for economic empowerment. This stems from the fact that the most of the people living in diaspora are quite committed to enhancing the living conditions of those they left back home. Thus, the monies that are sent from time to time can help improve wellbeing, and hence promote development. The above findings agrees with the results of Fiberesima, Anyanwu, and Christopher (2023), Adewale, Ameji & Urah (2021), as well as John, Akaniyene & Chris (2020), whose studies all found a positive and significant effect of diaspora remittances on GDP of Nigeria.

5.0 CONCLUSION AND RECOMMENDATIONS

The aim of the study was to establish the effect of diaspora remittance on economic growth in Nigeria. The study employed the secondary data which was obtained from the CBN statistical bulletin and National Bureau of Statistic. Data analysis involved descriptive data analysis, correlation analysis and the regression analysis. The result of the study reveals as follows:

- Diaspora remittances has a significant positive effect on GNIPC in Nigeria. This is in line with the a priori expectation, implying that an increase in remittances will also enhance per capita income.
- Diaspora remittances has a significant positive effect on GDP in Nigeria.

It was concluded that diaspora remittance is very paramount to Nigeria economic development, it is the second largest foreign exchange inflows into the country.

Based on the findings and conclusion of this study, the following recommendations are made:

- Proper implementations of overseas assistants in terms of capital formation will enhance greater inflows of such funds as this study indicated a uni-causal relationship between capital formation and overseas assistants in the Nigeria economy.
- There is need for the Federal Government to strengthen its Diaspora remittances channels so as to capture more remittances inflows as a major GDP contributor and reduce the multiplicity of illegal channels of fund transfers into the country.

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