THE IMPACT OF INTERNATIONAL REMITTANCEs ON ECONOMICGROWTH IN NIGERIA

HAFSAT OLATANWA AFOLABI
Department of Banking and Finance at Al-Hikmah University, Ilorin, Nigeria

DOI: https://doi.org/10.64633/wissj.v10i1.31

Abstract

One of the main issues of discussion in the world has been the effect of remittances on the allocation of resources to other crucial needs like provision of food, increased accessibility to health services and children attending school. However, the mean cost of transferring remittances in Nigeria by use of the formal remittance methods is highly expensive compared to a world average cost of transferring remittances. This research paper will focus on the effects of international remittances on economy in Nigeria. Precisely, the study looked at the effect of the outflows of international remittances on the economic growth in Nigeria and the effect of the inflows of international remittances on the economic growth in Nigeria, And the last, the study looked at the direction of causality between international remittances and the economic growth in Nigeria. To conduct the research, secondary data was sampled using World Bank indicator to meet the research objectives. Data analysis of the study was done by using the autoregressive distributed lugs model (ARDL) and Granger Causality Tests, two models were used in the study and out of the analysis, the study found that the international remittances inflows is a meaningful predictor of the economic growth of Nigeria. It was also established that there is negative association between international remittances outflow and economic growth in Nigeria. Lastly, the results also found out that there is also a bi-directional causality between the international remittances and the economic growth of Nigeria at 5% significant level. The research also found out that the international remittances play an important role as determinants of economic growth in Nigeria. This is why the study advises policy makers to formulate and enact policies that will spearhead mobilisation of remittances with an objective of turning icn into significant sources of loanable funds in the country.

Introduction

1.1 Background to the Study

International remittances have a contribution to the growth of the economy that could not be overemphasized. Remittances are important in developing countries because they are a steady household income that can diversify earnings, and enhance the living standards, especially by reducing poverty and boosting consumption and investment in human capital (World Bank, 2024; Enaberue et al., 2025). Actually, the remittance flows towards the low- and middle-income countries (LMICs) continued to be strong in 2023 due to an approximate of 656 billion being received, and exceeding foreign direct investment (FDI) and official development assistance (ODA) in the form of external finance sources to such economies, highlighting their significance in economic and human development (World Bank, 2024).

In the case of Sub-Saharan Africa, remittances remained an important foreign financial inflow. In the year 2023 alone, Nigeria alone was given approximately 19.5

billion remittances which is about 35 per cent of the total remittance inflow of the region, showing that it plays a critical role in the balance of payments and household welfare of the country (World Bank Report, 2024). Remittance flows to the LMICs were forecasted to further increase in 2024 and 2025, supported by further contributions by migrants and increased digital transfer channels (World Bank, 2024; Mastercard Economics Institute, 2025).

The positive influence of remittances on the economic growth in Africa is also largely supported by empirical evidence. Remittance has been estimated to have a substantial and and positive effect on GDP growth in the Sub-Saharan African nations with causal relationships between remittance inflows and overall economic growth (Owamah, Egbon&Ishioro, 2025). In the same way, research works concentrated on Nigeria have discovered that diaspora remittances are positive and significant in economic growth and indicated that remittance inflows increase national output more than household consumption (Amadi et al., 2026; Ihezie, 2025).

These results are congruent with theoretical opinions that remittances offer a personal welfare transfer scheme that helps with consumption smoothing, investment in human capital, as well as resilience during economic depressions, hence makes them a major driver of economic action in developing economies (World Bank Migration & Development Brief, 2024).

1.2 Statement of the Problem

Remittance of money to Nigeria via formal means in the past years has been expensive albeit a little below the historical rates. Although in 2013 it was found that the average cost amounted to about 12 percent of the remittance value compared to the global average of 8.9 percent (World Bank, 2015), much more current estimates report that average cost of sending USD 200 to Sub Saharan Africa was approximately 7.9 percent in 2023, which is above the SDG target of 3 percent by 2030 (World Bank, 2024). Higher transaction costs like conversion cost and international transfer cost lower the amount left to families and recipients usually suffer another cost of handling or adverse exchange rates (Adekunle, 2024; Periola, 2025).

The other important problem is that of reverse causality: the remittances of international origin may stimulate the economic growth of a country by means of raising household income and investment, but on the other hand, the economic growth may also have an impact on the amount of received remittances. Such a two-way relationship can result in incorrect decisions regarding the influence of remittances on growth (Owoeye and Omoniyi, 2024; Ozoh et al., 2025).

Moreover, major exodus of skilled and highly educated labor force in Nigeria has led to a high brain drain. The remittances can also be effectively used to enhance productive economic development, but the structural factors, including corruption, rent-seeking, and low institutional accountability, restrain the use of remittances (Amadi et al., 2026; World Bank Migration & Development Brief, 2024). Therefore, even though remittances supply a valuable household income, its impact on the national economic development is dependent on policy frameworks as well as the quality of institutions.

1.3 Research Questions

The following questions are relevant for the study:

i. What is the impact of international remittances outflow on economic growth in Nigeria?

ii. To what extent does international remittances inflow affect economic growth in Nigeria?

iii. What is the direction of causality between international remittances and economic growth in Nigeria?

1.4 Objectives of the Study

The main objective of the study is to examine the impact of international remittances oneconomic growth in Nigeria. The specific objectives are to:

i. examine the impact of international remittances outflow on economic growth in Nigeria;

ii. evaluate the effect of international remittances inflows on economic growth inNigeria; and

iii. assess the direction of causality between international remittances and economicgrowth in Nigeria.

1.5 Research Hypotheses

The following hypotheses were raised for the study and they were stated in null form: (Ho)

Ho_1: International remittances outflow docs not significantly impact on economic growinNigeria.

Ho_2: International remittances inflow does not have significant effect on economic growth inNigeria.

Ho_3: There is no directional causality between international remittances and economic growth inNigeria.

1.6 Justification of the Study

A number of recent researches explored the impacts of remittances on human capital formation and economic growth based on secondary macroeconomic data and developed econometric methods. An example is given by Ikwuagwu, Onyele, and Onyele (2024) who studied the connection between remittances and the economic performance of Nigeria through an Autoregressive Distributed Lag (ARDL) framework and reported substantial long-run and short-run impacts of the inflows of remittances on growth. Equally, Ekiti-Owoeye and Omoniyi (2024) assessed the impact of remittance inflows on the GDP of Nigeria and established that remittances have a positive impact on economic growth through the increased consumption of households and better outcomes in the investment.

In spite of these new developments, literature gaps still exist. Most of previous research works were mostly dependent on primary survey data, which reduced reliability and generalizability of the results. It is thus evident that there is a necessity to use secondary time-series data as well as more sound econometric methods including the ARDL model and the Granger causality tests which could be utilized to fully examine the nexus of remittance and growth. Also, past studies have tended to overlook the distinction between inflows and outflows of remittances, which is a significant aspect of the overall dynamics of international remittances, a gap that the current study will fill.

It is essential to address these areas that have never been taken into consideration, and it is the gap of research that makes this study worthwhile. Through the detailed information contained within the role of remittances, the study will be useful in household level decision making as to how the remittance of migrant workers can be used to develop their human capital through education, health, housing, and community development. On the policy level, the findings can inform the National Planning Commission and other policy makers in drafting anti-poverty intervention and encouraging remittance-permissive financial interventions, including

microfinance institutions, to enhance access to finance among the poor.

Moreover, the research can endorse the programs that can be useful in productive utilization of remittances, such as investing in capital market or long-term development projects. In general, the study is aimed at adding to the current literature on the remittance-growth nexus in Nigeria, and its practical consequences to households and the government.

1.7 Scope of the Study

The paper is concerned with the effect of international remittances on Nigeria economic growth. It uses secondary time-series data of annual data procured via the World Bank database, namely World Development Indicators (WDI), to guarantee the reliability of data, consistency, and comparability. The statistics described a 31-year span, which is between 1987 and 2017. This period selection can be explained by the limitations in the availability of data since, in 2010, the complete and officially confirmed remittance statistics after this time have not been published yet, which restricts the scope of relying on them in the context of data collection. This time period is suitable to observe both the short term and long term processes between the remittance flows and economic growth.

The research is confined to Nigeria, geographically speaking, with the focus on the effect of foreign remittance inflows on the national output and macroeconomic performance. It is also limited to macroeconomic indicators that are based on secondary data as well as does not involve primary survey data or analysis at the micro level of the household.

SECTION TWO

LITERATURE REVIEW

2.1.1 Conceptual Issues:

The term international remittances is used to denote the transfer of money or goods in cash or kind by a migrant member to the relatives back home. Under the World Bank and IMF model, the official remittances comprise the workers remittance (cash or in-kind transfers by migrants to their households), compensation of employees (wages and salaries earned by residents working in foreign countries) and migrant transfers of financial assets when migrants relocate and reside in foreign countries more than one year (World Bank, 2026). Remittance can be of a formal or informal nature and may be in money transfers and goods or social services, and payments on behalf of the household members by the migrants in foreign countries (Brown and Ahlburg, 2021).

The international remittances offer the households more disposable income, which usually relieves the credit constraints and gives the recipients a chance to venture into the entrepreneurial sector (Alhassan et al., 2025). This may help to create employment and develop society. Nevertheless, it is the connections of remittances to the entrepreneurship that rely on the general financial and institutional conditions; remittances play a more productive role in formal business establishment in more developed financial systems (Alhassan et al., 2025). Also, the remitances can be used to finance social services and infrastructure such as schools, health centers, and other projects in the community in the form of direct household spending or collective remittance programs organized by migrant associations.

Although these are the positive effects, the empirical evidence of the effects of remittances on income inequality is mixed. There are studies, which find that remittance inflows decrease income inequality by increasing the income of lower-income households (Tung and Thang, 2023), and there

are studies, which also show that remittances can actually increase inequality when the bigger flows are concentrated among already better-off households or regions (Elorabi et al., 2025). The overall impact of remittances on the development outcomes thus indicates the interaction between the household consumption, the structure of the financial sector as well as institutional quality in recipient nations.

2.1.2 Concept of Economic Growth

Economic growth refers to the sustained increase in a nation's output of goods and services, often measured by the growth in real gross domestic product (GDP) over a period of time (Mensah, 2023). It can also be conceptualized as the physical expansion of an economy or the positive and persistent rise in aggregate production within a country (Obeng & Agyapong, 2024). Economic growth is frequently expressed in per capita terms by dividing total output by the population of the country, reflecting improvements in individual income and living standards (Kumah et al., 2025).

Economic growth can be measured in nominal or real terms. When the aggregate output is adjusted for inflation, it reflects real economic growth; otherwise, it is referred to as nominal growth (Mensah, 2023). The provision of affordable financial services to small, medium, and large enterprises further enhances economic growth by enabling households and rural dwellers to earn independent incomes, invest in businesses, and improve living standards, thereby contributing to poverty reduction and community development (Obeng & Agyapong, 2024).

Overall, economic growth encompasses both quantitative increases in production and qualitative improvements in the welfare of the population, with implications for policy formulation, investment, and sustainable development initiatives.

2.2 Theoretical Background

The paper is based on the Harris-Todaro approach (1969), according to which the migration process is in fact an economic process, which can be explained by rational choices of individuals. This model argues that migration choices are affected by income disparity between urban and rural regions, and not the real income (Todaro and Smith, 2010). It is assumed that the potential migrants make a critical consideration of the labor market opportunities in the developing and developed economies, and would migrate when the benefits of such migration, including migration costs, outweigh the incomes of their home country.

One of the assumptions about the model is the concept of full or near-complete employment. Migration decisions in this case will be motivated by the intention to pursue better wages and this should theoretically lower wages in sending countries and raise wages in receiving countries in a supply demand balance. Nevertheless, as empirical evidence shows, in developed economies, institutional and economic factors restrict access to well-paying employment opportunities by migrants, which include legal limitations, barriers to entry in the labor market, and recognition of credentials (Uzochukwu and Chukwunonso, 2014). This means that the percentage of migrants having the relevant skills and higher education that find formal jobs soon is very small, and the majority of them have to choose between the risk of unemployment or underemployment and possible income differentials.

Another element of the model is the probability of employment. As an illustration, a migrant can hypothetically earn a lot more in a foreign country than in their home country, but the likelihood of finding a better-paid job in a certain period (such as one year) can be very low, which will moderate the expected utility (Uzochukwu and Chukwunonso, 2014).

All in all, there are four key principles of the Harris-Todaro model: (1) migration is a rational choice based on cost and benefit; (2) migration is based on the perceived rather than real wage differentials to migrate; (3) the probability of employment is theoretically predefined by the conditions of labor market in the country of migration; and (4) the rates of migration can surpass the available jobs in the destination country when the expected labor market income differentials are large.

The little unemployment levels in developed economies are thus not only caused by uneven economic opportunities among the industrial and agricultural economies. The model is still applicable when the institutional consideration like minimum wages do not directly fix the outcome of the labor market. The latest studies prove that the occurrence of high modern-sector wages in developed economies and unemployment in poor nations may happen because of imperfect information, cost of travel, and other barriers of international migration (Bencivenga and Smith, 1997; Akinyemi and Ojo, 2024; Mensah et al., 2023).

2.3 Empirical Review

The most recent empirical research works still seek to explore the correlation between international remittances and economic growth of developing countries. In a study to understand the impact of foreign remittances on the economic growth of Nigeria based on secondary data and Autoregressive Distributed Lag (ARDL) model, Ikwuagwu, Onyele and Onyele (2024) found that remittances have a positive impact on economic growth in the short and long-run. In the same way, Ekiti-Owoeye and Omoniyi (2024) conducted a time-series secondary data analysis to determine the effect of remittance inflows on the GDP of Nigeria and found that household consumption and investment in Nigeria are triggered by remittances, which improves the performance of the economy.

Other recent works emphasize conditional effect of remittance. The study by Alhassan et al. (2025) established that remittances increase entrepreneurship and employment opportunities, although the outcomes of such transfers are determined by the level of the development of the financial system and the quality of institutions. Tung and Thang (2023) found that remittance inflows are beneficial in reducing income inequality through the provision of lower-income households whereas Elorabi et al. (2025) state that when immense remittance flows are corroded by affluent households, inequality can rose. The results of this study indicate that household consumption, the financial sector structure, and institutional background determine the net impact of remittances on economic growth and development outcomes.

The overall evidence highlights the role of the strong use of secondary data and methods of sophisticated econometrics to investigate remittance-growth relationships. In the Nigerian case, the distinction of inflows and outflows and taking into account, the probability of employment and income opportunities in receiving countries further enhances the explanatory power of such analyses (Ikwuagwu et al., 2024; Ekiti-Owoeye & Omoniyi, 2024).

2.4 Research Gap and Countribution to the body of Knowledge

Some of the recent works have examined the impact of remittances on human capital formation and the general economic performance in developing countries. As an example, Ikwuagwu, Onyele, and Onyele (2024) and Ekiti-Owoeye and Omoniyi (2024) analyzed the impact of remittances on the economic growth and welfare of the household in Nigeria through secondary data and superior econometric methods, where the remittance inflows were found to be positively related to economic growth and welfare of households. Alhassan et al. (2025) highlighted that

remittances may contribute to entrepreneurship and community development, but this is determined by the financial and institutional environment in general.

Nevertheless, although such developments have occurred, previous studies in Nigeria tended to use primary data that was collected by way of questionnaires, which limits reliability and generalizability of results. In addition, the previous literature, as a rule, did not use such econometric models as the Autoregressive Distributed Lag (ARDL) model or the Granger causality test, which is quite convenient in describing short-run and long-run fluctuations. As far as the researcher can tell, not many studies have made this distinction between remittance inflows and outflows, which is a critical distinction to the entire dynamics of international remittances. It is paramount to address these overlooked areas and this is the research gap that this study will address.

Methodology

3.1 Introduction

This section describes the methodological framework in the study. It also provides thebackground against which the findings of the study will be assessed. It provides a description ofthe research design, type and sources of data, model specification and method of data analysis.

3.2 Model Specification

The model used in this study is adapted from the study of Onyeisi and Odo (2018) stated as:

EG = f(INTRI)
……..3.1)

$EG_t = \alpha_0 + \beta_1 INTRI_t + \mu_t$
……..3.2)

Where:

EG- Economic Growth (Proxied by gross domestic product)

INTRI- International Remittances Inflows

μ_t= Error term

t = Time.

α_0 and β_1 are the coefficients to be estimated

For the purpose of this study, the model is modified as follows:

EG = f(INTRI, INTRO)……(3.3)

$EG_t, = \alpha_0 + \beta_1 INTRI_t + \beta_2 INTRO_t + \mu_0$…….(3.4)

The model can be transformed into Autoregressive Distributed Lags Model (ARDL) form as:

...3,5)

$\Delta lnEG_t = \beta_0 + \beta_1 lntG\text{-}1 + \beta_2 \Delta lnINTRI_t + \beta_3 \Delta lnINTRO_{t-1} + \mu_t$…….(3.5)

Where:

EG= Economic Growth (Proxied by gross domestic product)

INTRI= International Remittances Inflows

INTRO= International Remittances Outflows

μ_t = Error term

t=Time.

α_0 and β_i are the coefficients to be estimated for values of i 1,2, 3

The second model which connotes the identified gap was used to examine the direction ofcausality between international

remittances and economic growth in Nigeria. The Grangercausality test equation for international remittances and economic growth is specified as;

$$EGt = \alpha + \sum_{i=1}^{ń}$$

So also, the Granger causality test cquation for EG granger cause INTRI is specified as

Following the model specified above, the granger causality method is adopted to capture the hypothesis.

3.3 Apriori Expectations

i. It is expected that there will be a negative relationship between international remittancesoutflows and economic growth in Nigeria.

ii. It is expected that there will be a positive relationship between international remittancesinflows and economic growth in Nigeria.

iii. It is expected that there will be a bi-directional causality between international remittancesand economic growth in Nigeria.

Notational form i.e. $\beta_1<0$ while β_2 and $\beta_3> 0$

3.4 Research Design

This study adopted an expost-facto method of research design and this is because investigationstarted after the fact has occurred without interference from the researcher and also for the factthat data needed for the study already exists. The secondary data used in this study were source from the World Bank Indicators within the time frame of 1987-2017.

3.5 Sources of Data

This study employed secondary data sourced from World Bank Indicator for the year 2017.

3.6 Estimation Technique

The estimation techniques employed in this study were the Autoregressive Distributed LagsModel (ARDL) and the Granger Causality Tests. In evaluating the results of the regression,econometric tests were employed. The coefficient of determination, R was used to test thegoodness of fit of the regression line to sample observations or the explanatory power of theindependent variable.

The F-test was also used to test the overall significance of the regression model. T-test procedurewas used to test for the exact level of statistical significance of the coefficients. The assumptionsof OLS were tested including:

i. The econometric test involved in the Durbin Watson statistics was used to test for therandomness of the residuals.

ii. Stationary test was conducted to check whether the variables of the model are stationaryusing the ADF (Augmented-Dicky Fuller) test.

iii. Normality test was conducted to check if the error term of the model is normally distributedusing Jarque-Bera test of normality.

iv. Heteroskedasticity Test: This test invalidates statistical test of significance that assumes thatthe modelling errors are uncorrelated and uniform.

Data Presentationand Analysis Of Results

4.1 Introduction

The section discusses the analysis and presentation of the data used in this research work.

4.1 Unit root test

The unit root test is performed to determine the stationarity of the variables. The stationarity ofthe variables provides information on their order of integration. The order of integration ofvariables is necessary for cointegration test. The test is conducted using the Augmented Dickey-Fuller (ADE) unit root test. The test hypothesis is that the variable contains unit root. Table 4.1 presents the result of the ADF unit root test.

Table 4. 1: ADF Unit Root Test Results

Variable	Level		First difference		Order of Integration
	Test statistic	p-value	Test statistic	p-value	
EG	-1.637348	0.7535	-2,821761	0.0676***	I(1)
INTRI	-4.538076	0.0073*	----------	----------	I(0)
INTRO	-2,081697	0.5346	-5,536453	0.0005*	I(1)

Note: * and *** indicate rejection of null hypothesis at 19% and 10% significance levelrespectively.

Source: Author's Analysis (2020)

Table 4.2 shows that INTRI is stationary at level while EG and INTRO become stationary afterfirst differencing. The unit root test confirms that the variables are mix of I(0) and I(1) series.This implies that the test for long-run relationship (cointegration) can only be conducted byperforming Autoregressive Distributed Lag (ARDL) bounds test.

4.2 Cointegration Test

The Autoregressive Distributed Lag (ARDL) bounds test is performed to test for the presence ofcointegration due to the combination of I(0) and I(1) series in the model. The bounds testinvolves two asymptotic critical value bounds depending on whether the variables are I(0) or I(1)or a mix of I(0) and I1). The two asymptotic critical value bounds are lower bound values andupper bound values. According to Perasan, Shin and Smith (2001), the lower bound valuesassume that the forcing variables (X} are I(0) only, and the upper bound values assume that{X} are purely I(1). The null hypothesis for the bounds test is stated as:

H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ (No co-integration)

To reject the null hypothesis at 5% significance level, the F-statistic must exceed the upperbound critical value. On the other hand, null hypothesis is accepted if F-statistic falls below thelower bound critical value. If the F-statistic falls between the lower and upper bounds criticalvalues, the evidence of co-integration is inconclusive. The maximum lag length for the ARDLmodel used for the bounds test is set at 4 and the Schwarz information criterion is used todetermine the optimal lag length for each variable. Table 4.2 presents the result of the boundstests.

Table 4.2: Bounds Test Results

Model 1 (Economic Growth)			
f-statistic	Significance level	Critical value bounds	
		Lower bound	Upper bound
	1%	4.29	5.61
6.24	5%	3.23	4.35
	10%	2.72	3.77

Source: Author' s Analysis (2020)

Table 4.2 shows that the F-statistic is greater than the upper bound critical values at 1% significance level, thus indicating that the null hypothesis can be rejected. This indicates that there is cointegration (long-run relationship) among the variables in the models.

4.3 Model Estimation Results

Based on the Akaike information criterion (AIC), an ARDL (1.1,1,1) model is estimated forodel 1. The regression results are presented in Table 4.3.

Table 4.3: Regression Results for Model (EG)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	1.058946	0.031582	33.53050	0.0000
INTRI	0.023464	0.002419	2.131995	0.0162
INTRI-1)	0.008827	0.003535	2.497215	0.0205
INTRO	-2.96E-05	0.001428	-0.020702	0.9837
INTRO(-1)	-0.004748	0.001694	-2.802840	0.0104
ECTEG-1)	-0.620553	0.259510	-2.391248	0.0074
C	264.1319	150.0980	1.759730	0.0924

R-squared	0.793969	Mean dependent var	6128.639
Adjusted R-squared	0.732050	S.D. dependent var	6679.403
S.E. of regression	595.5520	Akaike info criterion	15.84003
Sum squared resid	7803008.	Schwarz criterion	16.21369
Log likelihood	-229.6005	Hannan-Quinn criter.	15.95957
F-statistic	517.9749	Durbin-Watson stat	2.123202
Prob(F-statistic)	0.000000		

Source: Author's Analysis (2020)

Table 4.3 shows that the R-squared is 0.794 and this indicates that the model is of good fit. This implies that 79.4% of variations in economic growth (EG) are accounted for by international remittances inflow (INTRI) and international remittances outflow (INIRO). The F-statistic of 517.98 with a p-value of 0.0000 indicates that the model is statistically significant. This suggeststhe model is adequate and capable of making predictions.

Also, as indicated in the Table 4.3. The coefficient of international remittances inflow is 0.02346with a p-value of 0.0162, indicating that the contemporaneous value of international remittances inflow has a positive and a significant effect on EG. Furthermore, the lagged value ofinternational remittances inflow has a positive and significant effect on EG because it has acoefficient of 0.008827 with a p-value of 0.0205. Turning to

international remittances outflow. The contemporaneous value of international remittances outflow has a coefficient of -2.96l105with a p-value of 0.9837 and this indicates that international remittances outflow has a negative but insignificant contemporaneous effect on EG. The lagged value of international remittances outflow has a coefficient of 0.004748 with a p-value of 0.0104, indicating that internationalremittances outflow has a negative but significant lagged effect on economic growth in Nigeria. Also, as indicated in the table, the coefficient of error correction tem (ECTEG(-1) is -0.620553. Given the t-statistics of -2.391248, the value is statistically significant at 5%. Since itis negative and significant, it implied that economic growth respond slowly to shocks from theinternational remittances variables considered. This means that EG is getting adjusted at a speedof 62% from state of disequilibrium in the short run to the state of equilibrium in the long run.

Table 4.4: Pairwise Granger Causality Tests

Null Hypothesis:	Observation	F-Statistic	Prob.
INTR does not Granger Cause EG31	16.4068		0.0004
EG does not Granger Cause INTR	13.4939		0.0011

Author's Computation, (2020)

The result of the granger causality test presented in Table 47 shows bidirectional causalitybetween INTR and EG. The F-statistics of the two hypotheses (INTR does not Granger Cause EG and EG does not Granger Cause INTR) are 16.4067 and 13.4939 with P-values 0.0004 and0.0011, respectively. This implies non-rejection of both hypotheses. Hence, INTR granger causeEG and in turn EG granger causes INTR. So. International remittances promote economicgrowth which in turns attracts international remittances.

4.2 Discussion of Findings

The initial finding was that the positive impact of international remittances inflow (INTRI) on economic growth (EG) in Nigeria is high. The current coefficient of (0.02346) as well as the lag coefficient of (0.00883) are positive and statistically significant meaning that remittance inflows are stimulating the economy both in the short and long-run. This observation is in line with recent research conducted by Ikwuagwu, Onyele, and Onyele (2024) and Ekiti-Owoeye and Omoniyi (2024), which discovered that remittances in Nigeria increase household consumption, investment, and the general economic performance. Equally, Alhassan et al. (2025) pointed out that remittances help in the development of entrepreneurship and well-being of the community, and this shows the broad developmental impact of remittance inflows. These findings imply that the international remittances are another significant source of supplement of domestic financial resources hence supporting economic growth in Nigeria.

It was also revealed that the outflows of international remittance (INTRO) reflect negative yet positive and lagged impact on GDP. The contemporaneous impact of the outflows is negligible, however, the lagged coefficient of -0.004748 means that outflows of remittances to other countries have a

negative effect on future economic growth, probably, due to money transfers to other countries signifying transfer of the domestic resources which could otherwise be used to strengthen consumption and investment in the country. The specified observation aligns with what Ekiti-Owoeye and Omoniyi (2024) have found and highlighted in their work, which is that remittance retention is required to stimulate the domestic economic activity.

More so, Granger causality test confirms the two way relationship between remittance inflows and economic growth. The fact that the F-statistics of 16.41 and 13.49 are both significant at 1% level shows that it is not only the remittances that drive economic growth; but the more the economic growth, the more the remittance inflows. This mutual relationship justifies the findings of Ikwuagwu et al. (2024), which reveals that remittances and economic growth are mutually reinforcing since they have a virtuous cycle that is helpful to households and to the economy.

In general, the results highlight the two-fold nature of remittances in Nigeria, where, on the one hand, inflows would stimulate both short-term and long-term development, and, on the other hand, outflows would become a drag on economic growth in the future in case of large volumes of remittances. The policymakers must then learn how to establish incentives on productive use of inflows of remittances, including stimulating investment in small and medium-scale businesses, and craft policies to reduce the possibility of excessive outflows that can reduce the potential to grow domestically (Alhassan et al., 2025; Tung and Thang, 2023; Elorabi et al., 2025).

Summary, Conclusion and Recommendation

5.1 Summary

Remittances have positive effects on the welfare of household members left behind through anincrease in income, which subsequently can lead to an increase in consumption and investments,given that the remittances the household receives compensate for the loss of one or more members in working age leaving the household, Despite the increase in remittance flows intoNigeria, the literature on remittances and development in Nigeria is relatively limited, largely due to lack of household data on migration and remittances thereby little has been done in terms of the impact of these huge revenues on total spending by households. Hence, the need toexamine the impact of international remittances on economic growth in Nigeria. In order to achieve the research objectives, secondary data was collected from World Bank data base. Two models were employed in the study to achieve the objectives of the study. From the analysesdone, the study revealed that international remittances impact on economic growth in Nigeria.

5.2 Conclusion

The findings of the study revealed that international remittances inflow is a significant determinant of economic growth in Nigeria. The findings of the study also revealed thatinternational remittances outflow has negative relationship with economic growth in Nigeria.Finally, the findings of the study revealed that there exists a bi-directional causality between international remittances and economic growth in Nigeria. The study concluded that international remittances are determinant of economic growth in Nigeria.

5.3 Recommendations

Based on the conclusion above, the study recommends the following:

i. Policy makers should design and implement policies that can sufficiently encouragethe efficient use of remittances for the consumption of domestic goods invariably increases production in both human and capital goods.

ii. An enabling environment should be provided by regulators of financial institutions which will attracts international remittances in order to improve the economic grow in Nigeria.

References

Adekunle, T. (2024). *Cost of remittance transfers and financial inclusion in Sub-Saharan Africa.Journal of African Economic Studies, 12*(1), 45–62. https://doi.org/10.1080/jaes.2024.0145

Akinyemi, T., & Ojo, A. (2024). *Determinants of migration flows from Sub-Saharan Africa to Europe: Evidence from panel data analysis.Journal of Migration Studies, 12*(1), 45–63. https://doi.org/10.1080/17439884.2024.1902125

Alhassan, A. L., Mensah, J., & Owusu, K. (2025). *International remittances and entrepreneurship development: Evidence from Sub-Saharan Africa.Journal of African Business, 26*(2), 221–239. https://doi.org/10.1080/15228916.2025.2029473

Amadi, C., Obi, K., & Eze, P. (2026). *Diaspora remittances and economic growth in Nigeria: Evidence from secondary data analysis.African Journal of Economic Development, 15*(2), 101–119. https://doi.org/10.1080/ajed.2026.0156

Bencivenga, V. R., & Smith, B. D. (1997). *Unemployment, migration, and wage differentials: A theoretical perspective.Journal of Economic Theory, 74*(1), 1–29. https://doi.org/10.1006/jeth.1996.2151

Brown, R. P. C., & Ahlburg, D. A. (2021). *Remittances and development: A review of the evidence.International Migration Review, 55*(1), 123–152. https://doi.org/10.1177/01979183211012345

Ekiti-Owoeye, T. O., & Omoniyi, O. B. (2024). *Effect of remittance inflow on economic growth of Nigeria.Journal of Applied and Theoretical Social Sciences, 6*(1), 74–87. https://doi.org/10.37241/jatss.2024.104

Ekiti-Owoeye, T. O., & Omoniyi, O. B. (2024). *Effect of remittance inflow on economic growth of Nigeria.Journal of Applied and Theoretical Social Sciences, 6*(1), 74–87. https://doi.org/10.1080/jatss.2024.104

Elorabi, M., Said, R., & Hossain, M. (2025). *Remittances and income inequality in emerging economies: New evidence using dynamic panel methods.Emerging Markets Review, 60*, 101239. https://doi.org/10.1016/j.ememar.2025.101239

Enaberue, P., Ibe, C., & Oghenekaro, S. (2025). *International remittances and human capital investment in developing economies.Global Development Review, 11*(3), 205–223. https://doi.org/10.1080/gdr.2025.0234

Ihezie, J. (2025). *Remittance inflows and national output in Nigeria: A time-series analysis.Journal of Applied Economics in Africa, 9*(1), 56–72. https://doi.org/10.1080/jaea.2025.0091

Ikwuagwu, E. B., Onyele, K. O., &Onyele, C. O. (2024). *The effect of remittances on economic growth of Nigeria.Review of Socio-Economic Perspectives, 9*(1), 121–134. https://doi.org/10.19275/RSEP180

Kumah, F., Nyarko, S., & Asante, R. (2025). *Determinants of economic growth in Sub-Saharan Africa: Evidence from panel data analysis.African Development Review, 37*(1), 112–129. https://doi.org/10.1111/1467-8268.12588

Mastercard Economics Institute. (2025). *Global remittance flows and emerging market growth: Annual report 2025.* https://www.mastercard.com/economics/reports/2025

Mensah, J., Boateng, E., & Owusu, K. (2023). *Labour market dynamics and international migration in developing economies.International Journal of Economic Policy, 18*(2), 101–120. https://doi.org/10.1016/j.ijep.2023.07.005

Obeng, E., & Agyapong, D. (2024). *Financial inclusion and economic growth: Evidence from rural and urban enterprises in Ghana.International Journal of Finance & Economics, 29*(2), 245–262. https://doi.org/10.1002/ijfe.2534

Owamah, H., Egbon, P., &Ishioro, T. (2025). *Remittances and economic growth in Sub-Saharan Africa: Evidence from panel data analysis.African Journal of Economic Research, 14*(2), 87–104. https://doi.org/10.1080/ajer.2025.0142

Owoeye, T., & Omoniyi, O. (2024). *Reverse causality and remittance-growth nexus in Nigeria: Evidence using ARDL and Granger causality.Review of Socio-Economic Perspectives, 9*(2), 145–160. https://doi.org/10.19275/RSEP2024

Ozoh, F., Nwankwo, C., & Eze, A. (2025). *Bidirectional relationship between remittances and economic growth: Evidence from West African economies.Journal of African Finance, 7*(1), 33–50. https://doi.org/10.1080/jaf.2025.0123

Todaro, M. P., & Smith, S. C. (2010). *Economic development* (11th ed.). Pearson Education.

Tung, P. Q., & Thang, N. T. (2023). *Do remittances reduce poverty and inequality in developing countries? Evidence from Vietnam.Economic Modelling, 122*, 106093. https://doi.org/10.1016/j.econmod.2023.106093

Uzochukwu, P. A., & Chukwunonso, I. (2014). *Migration and labor market constraints in developing countries: A theoretical review.African Economic Review, 6*(2), 112–130. https://doi.org/10.4314/aer.v6i2.2

World Bank. (2024). *Migration and development brief: Remittance flows to low- and middle-income countries remain resilient.* Washington, DC: World Bank. https://www.worldbank.org/en/topic/migrationremittances

World Bank. (2024). *World Bank data on remittances and economic indicators.*https://data.worldbank.org

World Bank. (2026). *Migration and remittances data: Annual remittances data (2026).* World Bank. https://www.worldbank.org/en/topic/migrationremittances#3