Applied Journal of Economics, Law and Governance https://doi.org/10.57017/ajelg.v2.i1(3).04

Unpacking the Remittance-Development Paradox: A Longitudinal Analysis of Human Development and Sustainability in Nigeria

Gbenro Matthew SOKUNBI[1]
Department of Economics Education, College of Social Sciences Education
Lagos State University of Education, Otto/Ijanikin, Nigeria
https://orcid.org/0000-0001-5222-0185

Peter Olugbenga OLUWO
Department of Economics Education, College of Social Sciences Education
Lagos State University of Education, Otto/Ijanikin, Nigeria
https://orcid.org/0009-0000-7578-4864

Oluwatoba Oyedele ADENIWURA
Department of Economics, Faculty of Social Sciences,
Olabisi Onabanjo University Ago-Iwoye, Ogun, Nigeria
https://orcid.org/0009-0005-8622-1123

Abstract

This study investigates the complex relationship between migrant remittances and sustainable economic development in Nigeria by disaggregating progress into Gross Domestic Product (GDP) and the Human Development Index (HDI). Adopting a longitudinal lens from 1994 - 2023, the research unpacks the "Remittance-Development Paradox" using an Auto-Regressive Distributed Lag (ARDL) model. Empirical results reveal a statistically significant long-run negative effect of remittances on the composite Economic Development Index (ECD) and HDI, suggesting that dollar inflows have failed to catalyse sustainable human capital gains. While foreign direct investment shows positive developmental potential, the paradox persists due to structural inefficiencies and consumption-heavy remittance patterns.

The findings challenge the traditional narrative of remittance-led prosperity and emphasize the need for sustainability-focused policies that redirect inflows into productive social investments. The study provides a critical research agenda for aligning financial inflows with the UN Sustainable Development Goals (SDGs) in sub-Saharan Africa.

Keywords: financial governance; digital financial inclusion; regulatory frameworks; financial sustainability; fintech policy.

JEL Classification: F24; O15; O55; Q56.

Introduction

Remittances have assumed an increasingly prominent role in the global development discourse, particularly as a stable and resilient source of external finance for low- and middle-income countries (LMICs). Over the past two decades, they have consistently outpaced foreign direct investment (FDI) and official development assistance (ODA) in magnitude and volatility resistance.

[1] Corresponding Author

Between 2000 and 2022 alone, remittance flows to developing economies grew from USD 128 billion to over USD 831 billion, a rise of more than 650%, underscoring their emergent structural role in global capital redistribution (International Organization for Migration, 2024). Yet, the development impact of remittances remains uneven across regions. While cross-national meta-analyses affirm a generally positive association with economic growth, particularly in Asian economies, outcomes in Sub-Saharan Africa are less conclusive, often shaped by domestic institutional frameworks and competing forms of capital inflow (Cazachevici et al., 2020).

Nigeria, one of the leading remittance recipients in Africa, presents a compelling case for examining the remittance-development nexus. The country's vast diaspora and increasing reliance on external transfers, rising from roughly USD 1 billion in 2003 to approximately USD 24 billion in 2018 have positioned remittances as a cornerstone of foreign capital inflows, surpassing both FDI and ODA in recent years (Ebenebe et al., 2024). This surge has been facilitated by improvements in formal remittance channels and financial system liberalization. However, empirical assessments of their economic implications reveal significant heterogeneity. For instance, Nadabo (2023), identified a bi-directional causality between remittance flows and financial sector deepening in Nigeria, suggesting a mutually reinforcing dynamic between migrant transfers and domestic banking development.

Contrasting findings also illustrate the complex macroeconomic effects of remittances. While some scholars associate these inflows with growth-supporting investments, others point to potential negative externalities. Ikwuagwu et al. (2024) reported that remittances had a statistically significant negative effect on real GDP when controlling for FDI, inflation, and exchange rate volatility, indicating possible crowding-out effects or diminished productivity in core economic sectors. Periola (2025) corroborates this sectoral divergence, showing that while remittances may depress tradable-sector output in the short run, they tend to support non-tradable sector expansion without triggering long-term currency overvaluation, dampening traditional Dutch Disease concerns.

Beyond the aggregate macroeconomic perspective, remittances in Nigeria exert multidimensional social and developmental impacts. One critical domain is household-level health financing. In the face of systemic underinvestment in public health, remittances have emerged as alternative mechanisms for private healthcare provision. Ebenebe et al. (2024) highlight that household out-of-pocket health expenditure climbed from 60% of national health financing in 2000 to nearly 75% by 2020, a trend substantially supported by migrant transfers that mitigate state-level budgetary constraints. Similarly, in poverty and income distribution analyses, Baafi & Asiedu (2025) observed that a 10% increase in remittances is associated with nearly a 3% reduction in poverty headcount across 33 African countries, though the effectiveness hinges critically on financial inclusion systems.

However, remittances may also generate perverse distributional and institutional effects. Nwonye et al. (2023) found that remittances in Nigeria correlate with rising income inequality, potentially due to uneven access among households and localized inflationary pressures. These outcomes complicate the egalitarian narrative typically associated with migrant transfers.

Moreover, Ajide & Olayiwola (2020) argued that remittances in governance-constrained environments may create moral hazard, reducing incentives for governments to improve public service delivery. Paradoxically, the diaspora's influence may also catalyse accountability and institutional responsiveness through transnational civic engagement and remittance conditionality.

The empirical heterogeneity documented across these studies foregrounds a critical need to rethink the developmental narrative of remittances. While they undeniably contribute to poverty alleviation, health access, and financial sector growth, their interaction with macroeconomic volatility, institutional quality, and structural transformation remains deeply context-dependent. Mohammed (2022) emphasizes that the marginal development impact of remittances is highest where institutional quality is weakest, though diminishing returns emerge as governance improves, thus reaffirming the role of absorptive capacity in mediating outcomes.

The foregoing arguments therefore, shows clear developmental shortfalls that directly relate to SDG 8 and SDG 10. Despite large remittance inflows, Nigeria has not achieved sustained economic growth or decent job creation, reflecting weak progress toward SDG 8. Remittances are largely used for consumption rather than productive investment, limiting skills development, employment, and long-term productivity. At the same time, unequal access to remittances has widened income gaps, undermining SDG 10 on reducing inequality. Instead of narrowing social and regional disparities, remittances have sometimes reinforced them, highlighting the need for policies that channel inflows into inclusive growth and equal opportunities.

Therefore, this study aims to empirically evaluate the multifaceted impacts of remittances on Nigeria’s economic development by incorporating macroeconomic, social, and sectoral dimensions. Accordingly, it seeks to deepen the empirical and theoretical understanding of the relationship between remittances and economic development in Nigeria by examining both macroeconomic and social outcomes. Specifically, the study is motivated to investigates the impact of remittances on various aspect of development, including poverty reduction, education, healthcare, infrastructure investment, etc.

The analysis contributes to existing literature by reassessing remittances not just as consumption enablers, but as potential drivers of structural and sustainable development in fragile institutional contexts. The remaining parts of this paper is outlined as follows: Section 1 provides a detailed overview of the link between remittance inflows and economic development. Section 2 outlines the data sources and describes the model formulation. Section 3 reports the empirical results and their interpretation. Section 4 discusses the key insights derived from the analysis. Finally, the concluding section offers a summary of the study’s main contributions and policy implications.

1. Literature Review

1.1. Conceptual Review

Economic development is conceptualized as a multidimensional process that goes well beyond mere GDP growth, integrating both quantitative and qualitative dimensions of progress. According to Noushad et al. (2020), it encompasses broader measures of human well-being, including access to education, health services, and enhanced livelihood opportunities at the state level. Kersan-Škabić & Tijanić (2022) further define it as a process marked by sustained increases in income levels, improvements in living standards, and the

structural transformation of the economy, often indicated by GDP per capita growth, investment levels, and productivity gains. Complementing these perspectives, Mutai et al. (2024) conceptualize sustainable economic development as the capacity of an economy to achieve consistent and inclusive growth driven by macroeconomic inputs such as foreign capital inflows, trade openness, and diaspora contributions, extending the focus from GDP expansion to long-term financial stability, equitable resource distribution, and poverty alleviation.

Remittances are widely conceptualized in economic literature as cross-border financial transfers made by migrants to individuals or households in their countries of origin, primarily for consumption or investment purposes. Scholars such as Nadabo (2023), Ajayi et al. (2017), and Adjei et al. (2020) emphasize their private, non-debt-creating nature, often treating them as alternative sources of foreign capital capable of supplementing domestic income, enhancing welfare, and stimulating economic activity. While Meyer and Shera (2017) and Cazachevici et al. (2020) highlight the macroeconomic potential of remittances in stabilizing economies and promoting GDP growth, others, including Matuzeviciute & Butkus (2016) and Ikwuagwu et al. (2024), draw attention to their dual role, supporting household-level consumption and savings, but potentially limiting structural transformation if not directed toward productive use.

Abduvaliev & Bustillo (2019) and Ekanayake & Moslares (2020) further expand the scope of remittances to include informal and formal flows, categorizing them as significant and stable components of external finance that often surpass foreign direct investment and aid in volume and reliability. However, the developmental impact of remittances, as noted by Dastidar (2017) and Mohammed (2022), depends on institutional quality, governance structures, and the absorptive capacity of recipient economies. Collectively, these perspectives underscore that remittances are not merely financial transfers but dynamic instruments of socio-economic development, with varying impacts on poverty reduction, investment, financial inclusion, and long-term growth depending on contextual and policy environments.

1.2 Theoretical Review

This study is anchored on Endogenous Growth Theory, which emphasizes internal drivers of growth such as human capital development, technological innovation, and knowledge spillovers, while recognizing the potential of external financial inflows, like remittances and FDI, to amplify these internal mechanisms when channelled effectively through sound institutions and policies (Mutai et al., 2024; Islam et al., 2024).

Remittances are viewed not merely as consumption supplements, but as financial capital that can enhance investment in education, health, and entrepreneurship, thereby contributing to productivity growth and poverty reduction (Stojanov et al., 2019; John et al., 2020). However, their developmental impact is not automatic; rather, it depends on the absorptive capacity of the domestic financial system and the broader structural context (Bouzerdine & Sekrafi, 2021).

In some cases, economic growth itself may precede and attract greater remittance flows, suggesting a reverse causality that challenges the conventional view of remittances as unidirectional growth drivers (Ari, 2020). Moreover, integration with complementary theories such as the Dual Gap Theory reinforces the notion that remittances help close savings and foreign exchange gaps in capital-scarce economies, facilitating investment and imports (Adjei et al., 2020). Collectively, these perspectives converge on the idea that remittances, when effectively mobilized within an enabling institutional environment, act as strategic levers of endogenous economic transformation.

1.3 Empirical Review

Empirical investigations into the relationship between remittances and economic development are viewed from different perspectives, shaped by macroeconomic conditions, institutional strength, and financial infrastructure. Mohammed (2022) establishes that remittances significantly enhance human development in Sub-Saharan Africa, with stronger effects in countries marked by weak institutions, implying a compensatory role in fragile governance environments.

Huay et al. (2019) reinforce this, ranking remittances above aid and FDI in promoting welfare, a position further supported by Adjei et al. (2020) and Meyer and Shera (2017), who confirm a long-run equilibrium relationship between remittance inflows and economic growth, mediated by factors like trade openness and exchange rate stability. However, the Nigerian context presents more mixed outcomes.

Ikwuagwu et al. (2024), using time-series econometric models, show that although a long-run linkage exists, remittances negatively affect growth due to their predominant use for consumption over investment, a finding corroborated by Cazachevici et al. (2020), who emphasize the modest, regionally contingent impact of remittances.

The role of financial development emerges as a crucial moderating variable. Studies by Bouzerdine & Sekrafi (2021) and Nadabo (2023) show that remittances support growth more effectively in economies with deep financial systems. Chowdhury (2016) and Dastidar (2017) also identify financial intermediation and economic openness as key enhancers of remittance impact. Ajayi et al. (2017) affirm remittances' stabilizing role in Nigeria during capital droughts, as they bolster private consumption, domestic investment, and gross domestic product (GDP).

Meanwhile, Ajide & Olayiwola (2021) adopt an institutional point of view, finding that remittances mitigate corruption and strengthen civic accountability. Okorie et al. (2024), through OLS and cointegration techniques, demonstrate a statistically significant positive relationship between remittances and GDP, particularly when integrated with policies that promote productive investment. John et al. (2020), however, distinguish between total and workers' remittances, suggesting that broader remittance flows, rather than specific channels, more effectively stimulate output.

Micro-level evidence from Fayomi et al. (2015) highlights remittances' contributions to household savings, community development, and charitable activities, prompting recommendations for policy-driven diaspora engagement and investment incentives. Owotemu et al. (2024) further explore sector-specific impacts, noting substantial contributions of remittance inflows to housing and infrastructure, especially during peak periods like 2018. Conversely, Anetor (2019) identifies a negative standalone effect of remittances and financial development on growth but a positive interactive effect, underlining the need for strong financial institutions to transform remittances into catalytic development capital.

Comparative insights enrich the discourse. Stojanov et al. (2019) rank remittances as more stable and growth-inducing than aid, while Kersan-Škabić & Tijanić (2022) confirm their positive macroeconomic role in EU-11 countries, albeit warning against the labour depletion effects associated with outmigration. Afridi et al. (2024) and Issahaku et al. (2018) extend this caution, emphasizing that remittance effectiveness is contingent on institutional quality and absorptive capacity. Together, the literature suggests that while remittances present a potent development tool, especially in developing countries, their transformative capacity is moderated by policy environment, governance quality, and financial system efficiency.

Despite a growing body of empirical literature affirming the significance of remittances for economic development in Nigeria and other developing economies, one observable gap is that existing studies provide inconclusive or conflicting results on the direct impact of remittances on economic growth (Mohammed, 2022; Ajayi et al., 2017), and Okorie et al. (2024) report positive associations between remittances and macroeconomic performance, Ikwuagwu et al. (2024) and Anetor (2019) document negative or conditional effects often linked to the consumption-dominated use of remittances. This divergence underscores a lack of consensus regarding the mechanisms through which remittances influence growth in Nigeria, suggesting a gap in disaggregated sectoral or usage-based analysis (Ikwuagwu et al., 2024; Anetor, 2019).

This study fills major methodological gap by disaggregating economic development into three key dimensions: Gross Domestic Product (GDP) as a measure of aggregate economic output, GDP per Capita (GPC) as an indicator of average individual income, and the Human Development Index (HDI), which captures human welfare through education, health, and life expectancy. These dimensions are subsequently integrated into a composite Economic Development Index (ECD), offering a comprehensive and multidimensional assessment of development in Nigeria.

3. Research Methodology

This study employs ex-post facto and quasi-experimental research designs, consistent with Frederick et al. (2025), to examine the impact of remittances on economic development in Nigeria. While the earlier study by Frederick et al. (2025) utilised Human Development Index (HDI) as a single proxy for economic development, the current study addresses a methodological gap by disaggregating economic development into three core components: Gross Domestic Product (GDP) representing aggregate economic output; Gross Domestic Product per Capita (GPC) indicating average individual income; and Human Development Index (HDI) as a composite of human welfare (education, health, and life expectancy). These three dimensions are further aggregated into a composite Economic Development Index (ECD) to robustly capture the multidimensional nature of development in Nigeria. Thus, this study enhances specificity in capturing the heterogeneous impact of remittances across economic development channels.

The study utilises secondary time-series data covering the period 1994–2023. The data were sourced from World Bank, World Development Indicators (WDI, 2024) and United Nations Development Programme (UNDP, 2024). To estimate the dynamic relationship among the variables, the study adopts the Auto-Regressive Distributed Lag (ARDL) approach developed by Pesaran et al. (2001). The ARDL technique is preferred due to its suitability in small sample sizes and its ability to estimate both short-run and long-run relationships regardless of whether the underlying variables are I(0) or I(1), provided none is I(2). Prior to the estimation, the stationarity properties of all variables were assessed using Unit Root Tests, including the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. Upon confirmation that all variables are either I(0) or I(1), the ARDL Bounds Test was employed to determine the presence of a long-run cointegrating relationship. The short-run and long-run coefficients were subsequently estimated using the ARDL Cointegrating and Error Correction Model (ECM) frameworks. Based on the disaggregated proxies for economic development, four ARDL models were estimated as follows:

Model 1: GDP as Proxy for Economic Development

$$\Delta GDP_t = \alpha_0 + \sum_{i=1}^{k} \beta_1 \Delta GDP_{t-1} + \sum_{i=1}^{k} \beta_2 \Delta REM_{t-1} + \sum_{i=1}^{k} \beta_3 \Delta FDI_{t-1} + \sum_{i=1}^{k} \beta_4 \Delta GCF_{t-1} + \sum_{i=1}^{k} \beta_5 \Delta INF_{t-1} + \sum_{i=1}^{k} \beta_6 \Delta EXR_{t-1} + \lambda_1 ECT_{t-1} + \varepsilon_t;$$

Model 2: GPC as Proxy for Economic Development

$$\Delta GPC_t = \alpha_0 + \sum_{i=1}^{k} \gamma_1 \Delta GPC_{t-1} + \sum_{i=1}^{k} \gamma_2 \Delta REM_{t-1} + \sum_{i=1}^{k} \gamma_3 \Delta FDI_{t-1} + \sum_{i=1}^{k} \gamma_4 \Delta GCF_{t-1} + \sum_{i=1}^{k} \gamma_5 \Delta INF_{t-1} + \sum_{i=1}^{k} \gamma_6 \Delta EXR_{t-1} + \lambda_1 ECT_{t-1} + \varepsilon_t;$$

Model 3: HDI as Proxy for Economic Development

$$\Delta HDI_t = \alpha_0 + \sum_{i=1}^{k} \delta_1 \Delta HDI_{t-1} + \sum_{i=1}^{k} \delta_2 \Delta REM_{t-1} + \sum_{i=1}^{k} \delta_3 \Delta FDI_{t-1} + \sum_{i=1}^{k} \delta_4 \Delta GCF_{t-1} + \sum_{i=1}^{k} \delta_5 \Delta INF_{t-1} + \sum_{i=1}^{k} \delta_6 \Delta EXR_{t-1} + \lambda_1 ECT_{t-1} + \varepsilon_t;$$

Model 4: ECD as Composite Index for Economic Development

$$\Delta ECD_t = \alpha_0 + \sum_{i=1}^{k} \psi_1 \Delta ECD_{t-1} + \sum_{i=1}^{k} \psi_2 \Delta REM_{t-1} + \sum_{i=1}^{k} \psi_3 \Delta FDI_{t-1} + \sum_{i=1}^{k} \psi_4 \Delta GCF_{t-1} + \sum_{i=1}^{k} \psi_5 \Delta INF_{t-1} + \sum_{i=1}^{k} \psi_6 \Delta EXR_{t-1} + \lambda_1 ECT_{t-1} + \varepsilon_t;$$

where: Δ denotes the first difference operator; REM is workers' remittances per capita; FDI denotes foreign direct investment inflow; GCF represents gross capital formation; INF is the consumer price index as a measure of inflation; EXR is the official exchange rate; ECT_{t-1} is the error correction term lagged by one period, which captures the speed of adjustment towards long-run equilibrium; ε_t is the white noise disturbance term.

4. Results and Discussion

Descriptive Statistics

Table 1 presents the descriptive statistics of the study variables, including their mean, median, dispersion, and normality properties.

Table 1: Descriptive statistics

	ECD	GDP	GPC	HDI	REM	FDI	GCF	INF	EXR
Mean	-6.14E-16	4.1103	1.4703	0.4877	3.6712	1.2599	28.2675	18.2235	114.4716
Median	0.3274	4.0677	1.5022	0.4980	4.1999	1.2249	27.7250	13.0613	105.6749
Max.	1.5506	15.3292	12.2104	0.5650	8.3338	2.9002	46.1699	72.8355	273.0147
Min.	-2.8783	-2.0351	-4.5972	0.3930	0.1597	-0.0391	14.9000	5.3880	54.4407
Std. Dev.	1.2671	3.7282	3.5233	0.0543	2.2950	0.8831	10.0680	15.6327	46.8934
Skew.	-0.8053	0.4907	0.4717	-0.3508	-0.0939	0.2264	0.1299	2.3172	1.9070
Kurtosis	2.5093	3.9486	4.1445	1.8202	1.9366	1.7507	1.7063	7.5881	6.6169
Jarque-Bera	3.7799	2.4843	2.93230	2.5122	1.5547	2.3544	2.3213	56.70641	36.8391
Prob.	0.1510	0.2887	0.2307	0.2848	0.4596	0.3081	0.3132	0.00000	0.00000
Obs.	32	32	32	32	32	32	32	32	32

Note: ECD represents economic development; GDP denotes Gross Domestic Product; GPC is GDP per capita; HDI is Human Development Index; REM: Remittances; FDI: Foreign Direct Investment; GCF: Gross Capital Formation; INF: Inflation and EXR: Exchange rate

Source: Author's Computation, 2025

As reported in Table 1, economic development (ECD) has a mean value of approximately −6.14E−16, positioned between its minimum (−2.8783) and maximum (1.5506), suggesting fluctuations centered around zero over the sample period. GDP records a mean of 4.1103, with a maximum value (15.3292) substantially exceeding the minimum (−2.0351), indicating episodes of strong expansion. Similarly, GDP per capita (GPC) shows a mean of 1.4703, reflecting moderate average income growth but with noticeable dispersion.

The Human Development Index (HDI) exhibits relatively low variability, with a mean of 0.4877 and a narrow range between 0.3930 and 0.5650, implying stability in human development indicators. Remittances (REM) average 3.6712, while Foreign Direct Investment (FDI) records a mean of 1.2599, suggesting predominantly positive inflows with occasional reversals. Gross capital formation (GCF) averages 28.2675, reflecting sustained investment activity.

Inflation (INF) shows considerable volatility, with a high maximum value (72.8355) relative to its mean (18.2235), indicating episodic inflationary spikes. Exchange rate (EXR) movements also display wide dispersion, as reflected in the large standard deviation (46.8934), pointing to exchange rate instability.

The Jarque–Bera statistics in Table 1 indicate non-normality for inflation and exchange rate (p = 0.000), while the remaining variables do not significantly deviate from normality.

Unit Root Test Results

The stationarity properties of the variables are reported in Table 2 using the ADF–Fisher Chi-square approach. The presence of a mixed order of integration justifies the adoption of the ARDL framework, which accommodates variables integrated of order I(0) and I(1) without requiring uniform stationarity.

Table 2: ADF - Fisher Chi-square

Variables	Level	First Difference	Order
	Stats.	Stats.	
ECD	-0.7437	-7.5019***	I(1)
GDP	-2.9384**	-7.4869***	I(0)
GPC	-3.0628***	-7.5330***	I(0)
HDI	0.3035	-3.4127***	I(1)
REM	-1.8302	-5.5747***	I(1)
FDI	-1.9363	-7.2169***	I(1)
GCF	1.3860	-4.2545***	I(1)
INF	-2.9030	-5.1179***	I(1)
EXR	-2.9397	-5.2918***	I(1)

Key: *** & ** represents level of significance at 1% and 5% respectively

Note: ECD represents economic development; GDP denotes Gross Domestic Product; GPC is GDP per capita; HDI is Human Development Index; REM: Remittances; FDI: Foreign Direct Investment; GCF: Gross Capital Formation; INF: Inflation and EXR: Exchange rate

Source: Author's Computation, 2025

The unit root test results reveal that while GDP and GPC are stationary at level [I(0)], the majority of the variables including ECD, HDI, REM, FDI, GCF, INF, and EXR are non-stationary at level but become stationary after first differencing [I(1)], indicating a mixed order of integration suitable for ARDL modelling or cointegration analysis.

ARDL Estimation Results

The ARDL short-run and long-run results are presented in Table 3.

Table 3: ARDL result

Cointegrating Form					
Variable		Dependent variable: GDP	Dependent variable: GPC	Dependent variable: HDI	Dependent variable: ECD
		Coefficient	Coefficient	Coefficient	Coefficient
(-1)		-0.1953 (-1.3004)	-0.1995 (0.2036)	-0.4842 (-1.8857)	3.2809*** (5.8279)
D(REM)		0.2266 (0.6713)	0.2237 (0.6867)	-0.0010*** (-2.0411)	0.0215 (0.7992)
D(FDI)		-1.3905 (-1.4364)	-1.4562 (-1.5588)	0.0016 (1.4754)	0.2197 (0.2099)
D(GCF)		0.4668*** (2.5308)	0.4818*** (2.6918)	0.0005*** (2.5416)	-0.0963*** (0.0041)
D(INF)		-0.1101 (-1.1925)	-0.0919 (-1.0302)	-0.0002 (-1.5737)	-0.0614 (0.0098)
D(EXR)		-0.0043 (-0.4047)	-0.0049 (-0.4700)	-0.00001 (-1.0701)	-0.0021 (0.7155)
CointEq(-1)		-1.1953*** (-7.9600)	-1.1995*** (-8.0484)	-0.8768*** (-3.4871)	-5.1134*** (-7.6977)
Long Run Estimates					
Long Run Coefficients	REM	-0.4934*** (-3.0252)	-0.4383*** (-2.7934)	-0.0023*** (-2.7026)	-0.0578*** (-6.2590)
	FDI	4.6156*** (8.1380)	4.2620*** (7.8065)	0.0018 (1.4051)	0.1170*** (4.3790)
	GCF	0.1714*** (3.4904)	0.1703*** (3.6131)	-0.00004 (-0.4027)	-0.0007 (-0.3658)
	INF	-0.0921 (-1.1707)	-0.0766 (-1.0123)	-0.0002 (-1.6347)	0.0011 (0.8049)
	D(EXR)	-0.0578*** (-2.4209)	-0.0578*** (-2.5160)	-0.00007*** (-3.0437)	-0.0015 (0.2135)
	C	-2.5616 (-1.5256)	-5.1631*** (-3.1993)	0.0244*** (3.5369)	0.3434*** (2.3412)
Diagnostics Test					
ARDL Bounds Test	F-statistic	13.259	13.5635	5.0619	14.9277
	Critical Value (5%)	I(0) = 2.62 I(1) = 3.79			
Wald Test	F-statistic	5.4286***	4.9024***	8.9051***	8.9395
	Chi-square	10.8573***	9.8049***	17.8102***	17.8790
	F-statistic	0.2136	0.2270	1.5471	1.8978

Serial Correlation (BG Test)	Obs*R-squared	1.0467	1.1098	5.3832	9.1412
Heteroskedasticity Test (BPG)	F-statistic	0.753824	0.8975	1.3647	0.7805
	Obs*R-squared	12.54584	13.7620	14.6144	15.1099

Key: *** & represents level of significance at 5% while () represents t-statistics

Note: ECD represents economic development; GDP denotes Gross Domestic Product; GPC is GDP per capita; HDI is Human Development Index; REM: Remittances; FDI: Foreign Direct Investment; GCF: Gross Capital Formation; INF: Inflation and EXR: Exchange rate

Source: Author's Computation, 2025

In the short run, remittances exert an insignificant positive effect on GDP and GPC, with coefficients of 0.2266 and 0.2237 respectively. However, on HDI, remittances exhibit a statistically significant negative impact, with a coefficient of -0.0010, indicating that a one-unit increase in remittance reduces HDI by 0.10%. Given that HDI captures the broader dimensions of human welfare including education, life expectancy, and standard of living—this decline suggests that short-term remittance inflows do not translate into meaningful improvements in human capabilities and can distort household-level incentives toward education and health investment. In the case of ECD, the effect of remittances is positive but statistically insignificant. In the long run, remittances display a statistically significant negative effect across all four dependent variables. The coefficients are -0.4934 for GDP, -0.4383 for GPC, -0.0023 for HDI, and -0.0578 for ECD, all significant at the 5% level. This suggests that a 1% increase in remittance inflow would reduce economic output by 0.49%, average living standards by 0.44%, human welfare by 0.23%, and aggregate economic and developmental metrics by 5.78% over the long run. Economically, this indicates that in the short run, remittances do not provide substantial developmental gains and undermines human development. In the long run, persistent inflows of remittances contribute negatively to macroeconomic performance and development indicators due to dependency effects, reduced labor market participation, or the use of remittances for consumption rather than investment in productive ventures.

In the short run, FDI shows an insignificant negative effect on GDP and GPC, with coefficients of -1.3905 and -1.4562 respectively. On HDI (0.0016) and ECD (0.2197), FDI exerts positive but statistically insignificant impact. In the long run, FDI has a significant positive impact on GDP, GPC, and ECD, with coefficients of 4.6156, 4.2620, and 0.1170 respectively, all statistically significant at the 5% level. This implies that a 1% increase in FDI would enhance economic output by 4.62%, individual economic wellbeing by 4.26%, and broader economic and developmental metrics by 11.70%. However, the impact on HDI remains statistically insignificant. From an economic perspective, while the short-run results suggest limited immediate impact, the long-run outcomes emphasise FDI as a potent driver of macroeconomic expansion and structural transformation.

Gross capital formation shows a statistically significant positive short-run effect on GDP (0.4668), GPC (0.4818), and HDI (0.0005), while having a significant negative effect on ECD (-0.0963), all at the 5% level. This means a 1% increase in GCF would increase GDP by 0.47%, GPC by 0.48%, HDI by 0.05%, but reduce ECD by 9.63% in the short run. The positive coefficients suggest that capital accumulation enhances production capacity (GDP), raises per capita economic benefit (GPC), and improves human development outcomes (HDI), capturing the expected benefits of investment in physical infrastructure and assets.

However, the decline in ECD indicates that the collective effect of these gains may not be sufficient to register immediate composite development, due to inefficiencies in investment or delayed maturation of capital-intensive projects. In the long run, GCF has a statistically significant positive effect on GDP (0.1714) and GPC (0.1703), indicating that a 1% increase in capital formation boosts GDP and GPC by approximately 0.17%. However, the effects on HDI and ECD are statistically insignificant. This infers that gross capital formation contributes positively and significantly to economic output and income level both in the short and long term. However, its negative short-run effect on ECD reflects misallocation of investment resources or a lag in the translation of investment into broad-based economic development. In the long run, while the growth in GDP and GPC persists, the insignificance in HDI and ECD suggests that capital formation may not be sufficiently inclusive or development-oriented unless accompanied by human capital and institutional reforms.

In the short run, inflation exerts an insignificant negative effect across GDP, GPC, and HDI, with coefficients of -0.1101, -0.0919, and -0.0002 respectively. For ECD, inflation shows a positive but statistically insignificant coefficient of 0.0614. In the long run, the effect of inflation remains negative and statistically insignificant for GDP (-0.0921), GPC (-0.0766), and HDI (-0.0002), while it is positive and insignificant for ECD (0.0011). Economically, inflation is a weak determinant of economic growth and development in this context. Both in the short and long run, its influence lacks statistical support, suggesting that inflation, within the observed range, directly influence macroeconomic aggregates. However, its consistently negative signs on GDP-related indicators reinforce the traditional understanding of inflation as a potential deterrent to economic stability and investment if not well-managed.

In the short run, exchange rate movements have negative but statistically insignificant effects across GDP (-0.0043), GPC (-0.0049), HDI (-0.00001), and ECD (-0.0021). In the long run, the exchange rate demonstrates a statistically significant negative effect on GDP, GPC, and HDI with identical coefficients of -0.0578 for GDP and GPC, and -0.00007 for HDI. These imply that a 1% depreciation of the exchange rate leads to a 0.06% decline in GDP and GPC, and a 0.007% fall in HDI. The effect on ECD remains statistically insignificant. From an economic standpoint, the negative effect on GDP signifies contraction in national output, while the fall in GPC points to diminished average living standards. The decline in HDI indicates long-term erosion of development quality due to macroeconomic instability.

The coefficient of CointEq(-1) is statistically significant across all four dependent variables and exhibits the expected negative sign, satisfying the condition for convergence. Specifically, the coefficient values are -1.1953 for GDP, -1.1995 for GPC, -0.8768 for HDI, and -5.1134 for ECD. All coefficients are significant at the 5% level, with t-statistics of -7.9600, -8.0484, -3.4871, and -7.6977 respectively. This implies that these results confirm the existence of a stable long-run equilibrium relationship among the variables in each model. The relatively high speeds of adjustment suggest that shocks to the system are not persistent, and the economy tends to return quickly to its long-run trajectory after temporary fluctuations.

The ARDL Bounds Test confirms the presence of a long-run relationship. The F-statistics for GDP (13.259), GPC (13.5635), HDI (5.0619), and ECD (14.9277) all exceed the upper critical bound at the 5% level (I(1) = 3.79). This provides strong evidence of cointegration among the variables in each model, justifying the estimation of both short-run and long-run dynamics.

The Wald Test for joint significance of the short-run coefficients also supports model validity. The F-statistics for GDP (5.4286), GPC (4.9024), HDI (8.9051), and ECD (8.9395) are significant, as confirmed by the Chi-square values, all marked with asterisks indicating 5% level significance. This implies that the independent variables jointly influence the dependent variables in the short run.

The Breusch-Godfrey Serial Correlation Test (BG Test) checks for autocorrelation in the residuals. For all models, the F-statistics (ranging from 0.2136 to 1.8978) and corresponding Obs*R-squared values (ranging from 1.0467 to 9.1412) do not indicate significant serial correlation. This confirms that the residuals are white noise, an important requirement for unbiased and consistent parameter estimates. The Heteroskedasticity Test (BPG) shows no significant heteroskedasticity. This confirms homoscedasticity in the model, supporting the reliability of inference from the estimated coefficients.

Conclusion and Recommendations

The empirical results from this study reveal distinct short-run and long-run dynamics of key macroeconomic variables in shaping Nigeria's growth and development outcomes. Remittances, while offering negligible short-term benefits to output and income, significantly undermine human development in the short run and exert a deleterious long-term effect across all economic and developmental indicators. This aligns with the findings of Iheke (2012) and Kaasschieter (2014) who argue that remittances may function more as compensatory income rather than productive capital, can reduce labour supply incentives and foster consumption rather than investment. However, this contrast with Fredrick et al. (2025) who argue that in countries with underdeveloped financial sectors, remittances through a moderating exchange rate that enhances the attractiveness of currency inflows promote growth.

On the other hand, foreign direct investment (FDI) demonstrates robust and statistically significant long-run benefits for GDP, GPC, and ECD, underscoring its critical role in economic transformation. This corroborates the theoretical underpinnings of endogenous growth models and empirical studies such as Alabi (2019), which assert that FDI augments domestic capital, promotes technology spillovers, and enhances productivity. Nonetheless, the persistent insignificance of FDI's effect on HDI suggests that its benefits have not translated into broad-based improvements in education, health, or standard of living. Gross capital formation (GCF) presents an encouraging picture in the short run by positively affecting GDP, GPC, and HDI, but simultaneously revealing a puzzling negative short-run impact on ECD. In the long run, while GCF continues to boost output and income, its statistically insignificant impact on HDI and ECD indicates that capital accumulation alone is insufficient without institutional capacity and social investment. Inflation, both in the short and long run, demonstrates weak and statistically insignificant effects across all dependent variables, though consistently negative on GDP, GPC, and HDI. Exchange rate fluctuations exhibit negative but insignificant short-run effects, while their long-run influence is significantly detrimental to GDP, GPC, and HDI. This highlights the vulnerability of an import-dependent economy to currency depreciation and its adverse pass-through effects on production costs and living standards.

These findings align with Yensu et al. (2022) who contends that real exchange rate misalignments in developing countries compromise export competitiveness and productivity growth. The significant long-run impact underscores the macroeconomic fragility associated with exchange rate instability and the importance of external sector resilience.

In sum, this study shows that Nigeria's reliance on remittances undermines productive employment, inclusive growth, and human development, weakening progress toward SDG 8, while unequal growth outcomes and income erosion reinforce structural inequalities, limiting achievement of SDG 10.

Based on the empirical evidence, policy recommendations for Nigeria should draw from international best practices that have yielded measurable development outcomes:

- Remittances should be mobilised into formal financial systems and redirected toward productive investment. Mexico's *"3x1 Program for Migrants"* offers a model, where remittances are matched with public funds to support local infrastructure and development projects. Nigeria should institutionalise diaspora bonds and cooperative investment platforms that channel remittances into human capital development, entrepreneurship, and infrastructure.
- FDI attraction policies must be reinforced not only through ease-of-doing-business reforms but also by targeting sectors with high development multipliers such as manufacturing, renewable energy, and ICT. Singapore and Vietnam have shown that aligning FDI with national development priorities and human capital enhancement produces broader economic and social returns.
- Capital formation policies must prioritise quality over quantity. The government should enhance the productivity of investment through rigorous project appraisal, public-private partnerships, and performance-based budgeting, as observed in Chile and South Korea. Reforms that link capital investment with education, health, and innovation outcomes are essential to translate physical capital into sustainable development.
- Inflation targeting frameworks should be deepened, including credible central bank independence and effective coordination between fiscal and monetary authorities.
- Exchange rate management must avoid abrupt depreciations by building external buffers and diversifying the export base. China's managed float system offers strategic lessons for building currency resilience while supporting industrial policy.
- Future research should extend this analysis by examining sectoral heterogeneity in the effects of remittances, FDI, and capital formation, particularly in education, health, and industry. Furthermore, the inclusion of institutional quality, governance indicators, and social protection variables could enrich understanding of the channels through which macroeconomic variables affect development. Finally, panel data across African economies could uncover regional patterns and cross-country learning relevant for integrated economic planning.

Authorship Contribution Statement

Sokunbi, G. M. conceptualised the study, designed the research framework, conducted the econometric analysis, interpreted the findings, and drafted the original manuscript. Oluwo, P. O. contributed to the methodological refinement, data curation, statistical validation, and critical revision of the manuscript for important intellectual content. Adeniwura, O. O. supported the literature review, assisted in data management and analysis, and contributed to the discussion and policy implications sections. All the authors contributed equally to the manuscript preparation. However, the final draft was edited by the corresponding author.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Acknowledgment/Founding

N/A

Data Availability Statement

The data that support the findings of this study were sourced from World Bank, World Development Indicators (WDI, 2024) and United Nations Development Programme (UNDP, 2024).

Ethical Approval Statement

This study is based exclusively on the analysis of publicly available secondary data obtained from the World Bank (World Development Indicators, 2024) and the United Nations Development Programme (UNDP, 2024). The data used are aggregate, anonymized, and do not contain any personally identifiable information. Consequently, the study did not involve human participants, animal subjects, or primary data collection, and formal ethical approval was not required.

References

Abduvaliev, M., & Bustillo, R. (2019). *Impact of remittances on economic growth and poverty reduction amongst CIS countries*. *Post-Communist Economies*. Advance online publication. https://doi.org/10.1080/14631377.2019.1678094

Adjei, M., Bo, Y., Nketiah, E., Adu-Gyamfi, G., & Obuobi, B. (2020). The effects of remittances on economic growth in West Africa. *Journal of Human Resource and Sustainability Studies, 8*(3), 312–329. https://doi.org/10.4236/jhrss.2020.83018

Afridi, M. A., Khan, I., Rahman, H. U., & Khan, M. R. (2024). *Remittances as a driver of economic growth: The moderating impact of financial development in developing economies*. *Journal of Economic and Administrative Sciences*. https://doi.org/10.1108/JEAS-05-2024-0143

Ajayi, E. O., Adedayo, A. O., Agbolade, G. B., & Ebun, A. F. (2017). Dynamic impact of remittance on economic growth in Nigeria. *Journal of Accounting and Financial Management*, *3*(3), 26–41. https://www.iiardpub.org/get/JAFM/VOL.%203%20NO.%203%202017/DYNAMIC%20IMPACT%20OF%20REMITTANCE.pdf

Ajide, F. M., & Olayiwola, J. A. (2021). Remittances and corruption in Nigeria. *Journal of Economics and Development, 23*(1), 19–33. https://doi.org/10.1108/JED-04-2020-0046

Alabi, K. (2019) The Impact of Foreign Direct Investment on Economic Growth: Nigeria Experience. *Open Journal of Applied Sciences*, 9, 372-385. https://doi.org/10.4236/ojapps.2019.95031

Anetor, F. O. (2019). Remittance and economic growth nexus in Nigeria: Does financial sector development play a critical role? *International Journal of Management, Economics and Social Sciences, 8*(2), 116–135. https://doi.org/10.32327/IJMESS/8.2.2019.8

Ari, Y. O. (2020, August). *The impact of remittances on economic growth in developing countries: Empirical evidence from Turkey* [8th International Conference on Culture and Civilization]. International Congress on Social Sciences, Humanities and Education, Istanbul, Turkey. Retrieved from https://www.researchgate.net/publication/344189066

Baafi, J. A., & Asiedu, M. K. (2025). The synergistic effects of remittances, savings, education and digital financial technology on economic growth in Sub-Saharan Africa. *Journal of Electronic Business & Digital Economics*, *4*(1), 132–150. https://doi.org/10.1108/JEBDE-08-2024-0026

Bouzerdine, T., & Sekrafi, H. (2021). Remittances and economic growth in MENA countries: The role of financial development. *Economic Alternatives, (1)*, 43–59. https://doi.org/10.37075/EA.2021.1.03

Bucevska, V. (2022). Impact of remittances on economic growth: Empirical evidence from South-East European countries. *South East European Journal of Economics and Business, 17*(1), 79–94. https://doi.org/10.2478/jeb-2022-0006

Cazachevici, A., Havranek, T., & Horvath, R. (2020). Remittances and economic growth: A meta-analysis. *World Development, 134*, 105021. https://doi.org/10.1016/j.worlddev.2020.105021

Chowdhury, M. (2016). Financial development, remittances and economic growth: Evidence using a dynamic panel estimation. *Margin: The Journal of Applied Economic Research, 10*(1), 35–54. https://doi.org/10.1177/0973801015612666

Comes, C.-A., Bunduchi, E., Vasile, V., & Stefan, D. (2018). The impact of foreign direct investments and remittances on economic growth: A case study in Central and Eastern Europe. *Sustainability, 10*(2), 238. https://doi.org/10.3390/su10010238

Dastidar, S. G. (2017). *Impact of remittances on economic growth in developing countries: The role of openness*. *Global Economy Journal, 17*(2), 1–30. https://doi.org/10.1515/gej-2016-0066

Ebenebe, O. E., Ejimgini, I. M., Ezenekwe, U. R., & Kalu, C. U. (2024). Bridging health divides: Remittances and health expenditure in Nigeria. *International Journal of Research and Innovation in Social Science, 8*(9), 24-41. https://doi.org/10.47772/IJRISS.2024.809003

Eggoh, J., Bangake, C., & Semedo, G. (2019). Do remittances spur economic growth? Evidence from developing countries. *The Journal of International Trade & Economic Development, 28*(4), 391–418. https://doi.org/10.1080/09638199.2019.1568522

Ekanayake, E. M., & Moslares, C. (2020). Do remittances promote economic growth and reduce poverty? Evidence from Latin American countries. *Economies, 8*(2), 35. https://doi.org/10.3390/economies8020035

Fayomi, O., Azuh, D., & Ajayi, L. (2015). The impacts of remittances on Nigeria's economic growth: A study of Nigerian diasporas in Ghana. *Journal of South African Business Research*, 2015, Article ID 598378, 12 pages. https://doi.org/10.5171/2015.598378

Fredrick, A. E., Onuorah, A. C. & Osuji, C. C. (2025) Dynamics of Remittances and Economic Development in Nigeria. *Review of International Economic, Taxation, and Regulations*, 1(1), 47-58. https://doi.org/10.70865/rietr.v1i1.60

Goschin, Z. (2014). Remittances as an economic development factor: Empirical evidence from the CEE countries. *Procedia Economics and Finance, 10*, 54–60. https://doi.org/10.1016/S2212-5671(14)00282-5

Huay, C. S., Winterton, J., Bani, Y., & Matemilola, B. T. (2019). Do remittances promote human development? Empirical evidence from developing countries. *International Journal of Social Economics, 46*(10), 1173–1185. https://doi.org/10.1108/IJSE-12-2018-0673

Iheke, O. R. (2012). The effect of remittances on the Nigerian economy. *International Journal of Development and Sustainability*, 1(2). https://cenfri.org/wp-content/uploads/The-effect-of-remittances-on-the-Nigerian-economy.pdf

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

Islam, M. S., Rahaman, S. H., & Akhtar, T. (2023). Impact of remittance on economic growth and environmental quality in the purview of energy use, regulatory quality, and financial development. *Natural Resources Forum*. https://doi.org/10.1111/1477-8947.12353

Islam, M. Z., Rahaman, S. H., & Chen, F. (2024). How do R&D and remittances affect economic growth? Evidence from middle-income countries. *Heliyon, 10*(9), e30160. https://doi.org/10.1016/j.heliyon.2024.e30160

Issahaku, H., Abor, J. Y., & Amidu, M. (2018). The effects of remittances on economic growth: Reexamining the role of institutions. *The Journal of Developing Areas, 52*(4), 29–46. https://doi.org/10.1353/jda.2018.0050

John, J. I., Orok, A. B., & Udoka, C. O. (2020). Migrant remittances and economic growth: The Nigerian perspective. *International Journal of Scientific Engineering and Science, 4*(1), 52–57. http://ijses.com/

Kaasschieter, J. (2014). Remittances, Economic Growth, and the Role of Institutions and Government Policies. *Erasmus School of Economics*. http://hdl.handle.net/2105/15707

Kersan-Škabić, I., & Tijanić, L. (2022). The impact of remittances on economic development in the Central and Eastern European Countries. *Proceedings of the Faculty of Economics in Rijeka: Journal of Economic Theory and Practice*, *40*(2), 281–296. https://doi.org/10.18045/zbefri.2022.2.281

Matuzeviciute, K., & Butkus, M. (2016). Remittances, development level, and long-run economic growth. *Economies, 4*(4), 28. https://doi.org/10.3390/economies4040028

Meyer, D., & Shera, A. (2017). The impact of remittances on economic growth: An econometric model. *EconomiA, 18*(2), 147–155. https://doi.org/10.1016/j.econ.2016.06.001

Mohammed, U. (2022). Remittances, institutions and human development in Sub-Saharan Africa. *Journal of Economics and Development, 24*(2), 142–157. https://doi.org/10.1108/JED-03-2021-0041

Mutai, N. C., Ibeh, L., Nguyen, M. C., Kiarie, J. W., & Ikamari, C. (2024). Sustainable economic development in Kenya: Influence of diaspora remittances, foreign direct investment and imports. *African Journal of Economic and Management Studies*. https://doi.org/10.1108/AJEMS-07-2023-0307

Nadabo, Y. S. (2023). Revisiting the nexus between remittances and financial sector development in Nigeria. *Economic Journal of Emerging Markets*, *15*(2), 115–128. https://doi.org/10.20885/ejem.vol15.iss2.art1

Noushad, A. P., Parida, J. K., & Raman, R. K. (2020). Low-skilled emigration, remittances and economic development in India. *Migration and Development*. https://doi.org/10.1080/21632324.2020.1787099

Nwonye, N. G., Anowor, O. F., Okoh, J. I., Okanya, O. C., Obayi, P. M., Mbah, P. C., Onwumere, J. U. J., Ojeh, A., & Onuselogu, O. C. (2023). Government expenditures, foreign aid and remittances: A review of income inequality in Nigeria. *African Journal of Business and Economic Research, 18*(3), Article 9. https://hdl.handle.net/10520/ejc-aa_ajber_v18_n3_a9

Okorie, G. C., Nwabufo, F. E., & Oriaku, C. E. (2024). Remittances and economic growth of Nigeria. *GOUni Journal of Faculty of Management and Social Sciences, 9*(1), 168–175. https://eprints.gouni.edu.ng/3621/1/Remittances%20and%20Economic%20Growth%20of%20Nigeria%20A4%20168-175.pdf

Owotemu, A. E., Ifechi-Fred, N., & Faleti, A. (2024). Contributions of diaspora remittances to economic growth & development in Nigeria: A housing finance & infrastructure perspective 2000–2023. *Journal of Service Science and Management, 17*(4), 321–344. https://doi.org/10.4236/jssm.2024.174016

Pan, X., & Sun, C. (2024). Internal migration, remittances and economic development. *Journal of International Economics, 147*, 103845. https://doi.org/10.1016/j.jinteco.2023.103845

Periola, O. (2025). Sectoral productivity and real exchange rate effects of remittances: Evidence from Nigeria. *Future Business Journal, 11*(1), Article 80. https://doi.org/10.1186/s43093-025-00496-9

Stojanov, R., N˘emec, D., & Žídek, L. (2019). Evaluation of the long-term stability and impact of remittances and development aid on sustainable economic growth in developing countries. *Sustainability, 11*(6), 1538. https://doi.org/10.3390/su11061538

Tchekoumi, L. B., & Nya, P. D. (2023). Remittances and economic growth: What lessons for the CEMAC zone? *Cogent Economics & Finance, 11*(1), 2191448. https://doi.org/10.1080/23322039.2023.2191448

Weeraratne, B. B. (2024). Migration and development: The role of remittances. In *Political Science and Public Policy* (pp. 152–165). Edward Elgar Publishing. https://doi.org/10.4337/9781800887657.00018

Yensu, J., Nkrumah, S.K., Amankwh, S. & Ledi, K.K. (2022) The effect of exchange rate volatility on economic growth. *Risk Governance and Control Financial Markets & Institutions, 12*(4), 33-45. https://doi.org/10.22495/rgcv12i4p2

How to cite this article

Sokunbi, G. M., Oluwo, P. O., & Adeniwura, O. O. (2026). Unpacking the Remittance-Development Paradox: A Longitudinal Analysis of Human Development and Sustainability in Nigeria. *Applied Journal of Economics, Law and Governance*, Volume II, Issue 1(3), 73-90. https://doi.org/10.57017/ajelg.v2.i1(3).04

Article's history:

Received 3of February, 2026; Revised 21st of March, 2026;
Accepted for publication 29th of March, 2026; Available online: 7th of April, 2026;
Published as research article in Volume II, Issue 1(3), 2026.