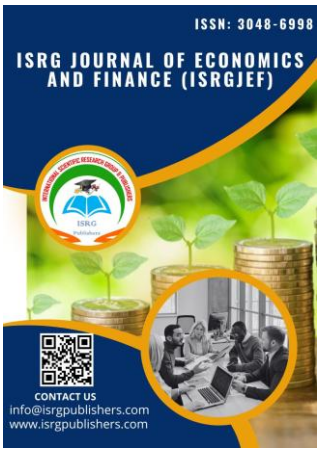
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Investigating the Effect of Globalisation on Income Inequality in Nigeria

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Abstract

This study examined the short-run and long-run effects of globalisation on income inequality in Nigeria from 1986 to 2024. Spurred by conflicting theoretical arguments regarding the distributional consequences of market openness, the study applies an Autoregressive Distributed Lag Error Correction Model (ARDL-ECM) to evaluate the relationship between the KOF globalisation index and the Gini coefficient, while controlling for real GDP per capita, inflation, human capital, and government expenditure. Unit root tests confirm a mixed integration structure, validating the choice of the ARDL framework. In contrast, post-estimation diagnostics confirm residual normality, parameter stability, and the absence of serial correlation or heteroskedasticity. The bounds test and a highly significant adjustment coefficient confirm a stable long-run cointegrating relationship. Long-run multipliers revealed that globalisation significantly reduces income inequality, supporting classical trade theory by expanding economic returns for Nigeria's abundant low-skilled labour force. Conversely, real GDP per capita significantly worsened inequality, exposing an exclusionary domestic growth model heavily concentrated within capital-intensive enclaves like the oil and telecommunications sectors. The system self-corrected deviations toward equilibrium at a slow rate of 9.1% annually, reflecting deep internal structural rigidities, while short-run dynamics are dominated by the self-reinforcing momentum of lagged inequality. The study concludes that while global integration is a viable tool for long-run inequality reduction, its benefits are actively short-circuited by Nigeria's non-inclusive domestic growth structure. It is recommended that policymakers aggressively de-enclave the growth engine by shifting capital allocations toward labor-absorptive sectors, subsidizing domestic value-added processing over primary commodity exports, and upgrading vocational education to better position the domestic workforce within global value chains.

Keywords: Globalization, Income Inequality, Gini Coefficient, ARDL-ECM, Inclusive Growth, Nigeria.

JEL Classification Codes: F63, D31, O55, C32.

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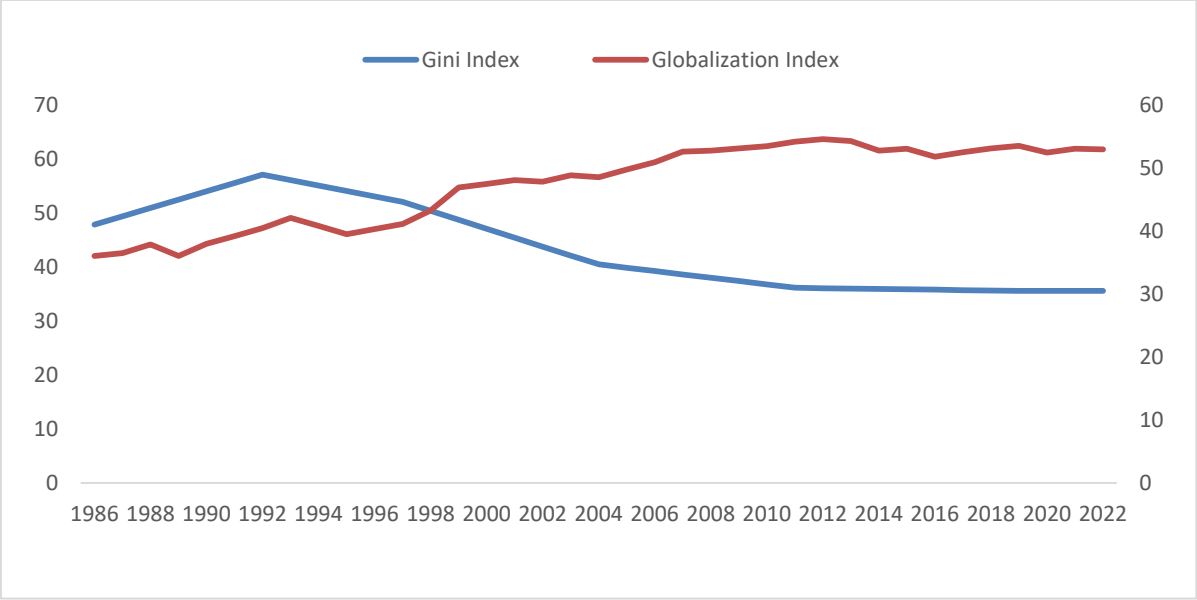
1. Introduction

Globalisation remains one of the most debated issues in development economics, particularly regarding its implications for income distribution. Over the past four decades, increasing integration through trade liberalisation, foreign direct investment, financial openness, and technological diffusion has transformed economies worldwide. While globalisation is often associated with economic growth, efficiency gains, and poverty reduction, its distributional consequences remain uncertain. The central question is whether globalisation reduces income inequality by expanding economic opportunities or exacerbates it by disproportionately benefiting skilled labour, capital owners, and internationally connected sectors (Stiglitz, 2012; Milanovic, 2016). Theoretical perspectives are equally divided. The Stolper-Samuelson theorem predicts that trade openness should reduce inequality in developing economies by increasing demand for abundant low-skilled labour, whereas contemporary theories emphasize the role of skill-biased technological change and capital mobility in widening income disparities (Goldberg & Pavcnik, 2007; Helpman, 2018).

Empirical evidence reflects this ambiguity. Although globalization has contributed to income convergence across countries, inequality within many economies has persisted or increased, suggesting that the gains from integration are not evenly distributed (Rodrik, 2018; World Bank, 2024). This debate is particularly relevant in Nigeria, where economic liberalization since the Structural Adjustment Programme (SAP) of 1986 has deepened integration into global markets. Despite periods of economic expansion and rising global connectedness, income inequality remains a major development challenge, raising concerns about the inclusiveness of globalization-led growth.

Figure 1

Trends in Globalization and Income Inequality in Nigeria.



Source: World Bank and ETH Zurich KOF

Figure 1 shows a substantial increase in Nigeria's globalization index over the study period, reflecting greater integration with the global economy. In contrast, the Gini index exhibits fluctuations but remains relatively high throughout much of the period. The divergence between the upward trend in globalization and the persistence of income inequality suggests that deeper global integration has not been accompanied by a commensurate improvement in income distribution. This pattern highlights the need for further empirical investigation into the nature of the globalization-inequality relationship in Nigeria.

Against this background, this study examines whether globalization reduces or worsens income inequality in Nigeria. By providing updated evidence from the Nigerian economy, the study contributes to the ongoing debate on the distributional consequences of globalization and offers insights into how the gains from global integration can be made more inclusive.

2. Literature Review

The relationship between globalization and income inequality has generated extensive theoretical and empirical debate. Classical trade theory, particularly the Stolper-Samuelson theorem, argues that globalization should reduce inequality in developing economies by increasing demand for relatively abundant low-skilled labour and raising their earnings (Stolper & Samuelson, 1941). In contrast, contemporary globalization theories contend that technological advancement, capital mobility, and participation in global value chains tend to favour skilled workers and owners of capital, thereby widening income disparities within countries (Goldberg & Pavcnik, 2007; Helpman, 2018). These competing perspectives provide the foundation for the divergent empirical evidence observed across countries and regions. Cross-country studies offer no clear consensus on the distributional effects of globalization. While globalization has been associated with declining inequality between countries through accelerated growth in emerging economies, evidence suggests that inequality within countries has often increased (Milanovic, 2016; Rodrik, 2018). Recent studies attribute these differences to variations in institutional quality, labour market conditions, educational attainment, and the capacity of governments to redistribute the gains from economic openness (IMF, 2024; World Bank, 2024). Consequently, the impact of globalization appears to be highly dependent on country-specific characteristics rather than a universally predictable outcome.

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Evidence from developing economies is similarly mixed. Some studies find that trade liberalization and financial openness increase inequality by concentrating gains among skilled workers and capital-intensive sectors, particularly where institutional weaknesses limit broad participation in global markets (Goldberg & Pavcnik, 2007; UNCTAD, 2022). Other studies report that globalization can reduce inequality through employment creation, export expansion, foreign direct investment, and knowledge spillovers that improve income opportunities for lower-income households (Nwosa, 2020; Udoh et al., 2022). These contrasting findings suggest that the relationship between globalization and inequality is conditioned by factors such as human capital development, economic diversification, and institutional effectiveness.

Nigeria reflects this broader ambiguity. Since the introduction of the Structural Adjustment Programme in 1986, the country has pursued policies aimed at increasing openness to trade, investment, and international capital flows. Although these reforms strengthened Nigeria's integration into the global economy, income inequality has remained persistently high. Empirical evidence is divided. Ogunyomi et al. (2013) and Ogede et al. (2022) argue that globalization contributes to rising inequality through trade and financial channels, whereas Nwosa (2020) and Udoh et al. (2022) report that foreign direct investment and other dimensions of globalization can improve income distribution by expanding employment and income-generating opportunities. Differences in findings may reflect variations in data coverage, econometric techniques, and measures of globalization.

A notable limitation of the existing literature is the reliance on narrow indicators such as trade openness or foreign direct investment, which capture only specific dimensions of globalization. Furthermore, relatively few studies have examined the Nigerian case using recent data and comprehensive globalization measures that incorporate economic, social, and political dimensions simultaneously. This study addresses these gaps by employing an updated measure of globalization to reassess its effect on income inequality in Nigeria. In doing so, it contributes to a more nuanced understanding of whether globalization has promoted inclusive development or reinforced existing disparities within the Nigerian economy.

3. Methodology

3.1 Theoretical Framework

This study adopts the Heckscher-Ohlin-Stolper-Samuelson (HOSS) framework as its theoretical foundation for examining the effect of globalization on income inequality in Nigeria. The Heckscher-Ohlin theory postulates that countries specialize in the production and export of goods that intensively use their relatively abundant factors of production, while importing goods that require relatively scarce factors (Heckscher, 1919; Ohlin, 1933). Building on this framework, Stolper and Samuelson (1941) demonstrated that trade liberalization alters the returns to factors of production by increasing the income of the abundant factor and reducing the income of the scarce factor. In developing economies where low-skilled labour is relatively abundant, globalization is expected to increase demand for labour, raise wages, and reduce income inequality. The relevance of this framework lies in its direct linkage between globalization and income distribution. According to the theory, increased integration into global markets through trade, foreign direct investment, and financial openness should improve income distribution by expanding employment opportunities and increasing returns to labour. However, subsequent developments in globalization theory suggest that the benefits of globalization may not be equally distributed. Technological change, capital mobility, and differences in human capital endowment can disproportionately favour skilled workers and owners of capital, resulting in rising income inequality despite greater openness (Goldberg & Pavcnik, 2007; Helpman, 2018). Consequently, the effect of globalization on inequality remains an empirical issue that depends on country-specific economic structures and institutional conditions. The theoretical relationship may be expressed as:

$$INEQ_t = f(GLOB_t, Z_t) \ldots\ldots \quad (1)$$

Where, $INEQ_t$ represents income inequality, $GLOB_t$ denotes globalization, and Z_t represents a vector of control variables influencing income distribution. Based on the HOSS framework and contemporary globalization theory, income inequality is expected to respond to changes in globalization through trade, investment, and technological channels.

Following the theoretical framework, the empirical model is specified as:

$$GINI_t = \alpha_0 + \alpha_1 GLOB_t + \alpha_2 lnGDPPC_t + \alpha_3 SSER_t + \alpha_4 INF_t + \alpha_5 GOV_t + \mu_t \quad \ldots\ldots \quad (2)$$

μ_t = Error Term

$\alpha_1 - \alpha_5$ = Parameters to be Estimated

The expected sign of globalization of coefficient, α_1 is theoretically ambiguous. The Stolper–Samuelson theorem predicts a negative relationship $\alpha_1 < 0$, implying that globalization reduces inequality through increased demand for labour. In contrast, modern globalization theories suggest a positive relationship $\alpha_1 > 0$ if the gains from integration are concentrated among skilled workers and capital owners. The effects of the control variables depend on their influence on income distribution. Higher human capital accumulation is generally expected to reduce inequality, while inflation is often associated with worsening income distribution. GDP per capita may either reduce or increase inequality depending on the stage of economic development, whereas effective government expenditure is expected to promote a more equitable distribution of income.

3.2 Estimation Technique

This study employs the Autoregressive Distributed Lag (ARDL) bounds testing approach developed by Pesaran, Shin, and Smith (2001), which was also used by Ikechukwu et al. (2025) and Ashakah (2023) to examine the relationship between globalisation and income inequality in Nigeria. The ARDL technique is particularly suitable because it can be applied when variables are integrated of mixed orders, I(0) and I(1), provided none is integrated of order two, I(2). In addition, the approach performs efficiently in small samples and enables the simultaneous estimation of both short-run and long-run relationships. The empirical analysis begins with unit root tests to determine the order of integration of the variables. Following confirmation that the variables satisfy the ARDL requirements, the bounds testing procedure is employed to ascertain the existence of a long-run relationship between globalization and income inequality. The null hypothesis of no cointegration is tested against the alternative of a long-run equilibrium relationship. If cointegration is established,

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the long-run coefficients and the associated error correction model (ECM) are estimated. The general ARDL specification is expressed as:

$$\Delta GINI_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 \Delta GINI_{t-i} + \sum_{i=0}^{p} \alpha_2 \Delta GLOB + \sum_{i=0}^{p} \alpha_3 \Delta lnGDPPC_{t-i} + \sum_{i=0}^{p} \alpha_4 \Delta SSER_{t-i} + \sum_{i=0}^{p} \alpha_5 \Delta INF_{t-i} + \sum_{i=0}^{p} \alpha_6 \Delta GOV_{t-i} + \emptyset_1 GINI_{t-1} + \emptyset_2 GLOB_{t-1} + \emptyset_3 lnGDPPC_{t-1} + \emptyset_4 SSER_{t-1} + \emptyset_5 INF_{t-1} + \emptyset_6 GOV_{t-1} + \mu_t \ldots\ldots \quad (3)$$

The corresponding Error Correction Model (ECM) is specified as:

$$\Delta GINI_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 \Delta GINI_{t-i} + \sum_{i=0}^{p} \alpha_2 \Delta GLOB + \sum_{i=0}^{p} \alpha_3 \Delta lnGDPPC_{t-i} + \sum_{i=0}^{p} \alpha_4 \Delta SSER_{t-i} + \sum_{i=0}^{p} \alpha_5 \Delta INF_{t-i} + \sum_{i=0}^{p} \alpha_6 \Delta GOV_{t-i} + \theta ecm_{t-1} \ldots \quad (4)$$

Where, ecm_{t-1} represents the lagged error correction term and θ measures the speed at which short-run disequilibrium adjusts toward the long-run equilibrium path. The coefficient of the error correction term is expected to be negative and statistically significant, indicating convergence to long-run equilibrium following short-run shocks.

To ensure the reliability of the estimated model, a series of post-estimation diagnostic tests, including serial correlation, heteroskedasticity, normality, functional form, and stability tests (CUSUM and CUSUMSQ), are conducted.

Table 1

Definition of Variables and Sources of Data used for the Regression Analysis

Variables	Definition and Measurement	Sources
Income Inequality (GINI)	Gini coefficient measuring the degree of income inequality in the economy. Values closer to 0 indicate greater equality, while values closer to 100 indicate greater inequality.	WIID
Globalization Index (GLOB)	Globalization Index measuring the economic, social, and political integration of Nigeria with the global economy.	ETH Zurich KOF Globalization Database
GDP per Capita (lnGDPPC)	Natural logarithm of GDP per capita, used as an indicator of average income and economic development.	WDI
Secondary school enrolment ratio (SSER)	Secondary school enrolment ratio used as a proxy for human capital accumulation and educational attainment.	WDI
Inflation Rate (INF)	Annual percentage change in the consumer price index, reflecting macroeconomic stability.	WDI
Government Final Consumption Expenditure (GOV)	Government final consumption expenditure expressed as a percentage of GDP, capturing the redistributive role of government.	WDI

Source: Author's Compilation (2026)

4. Results and Discussion

Descriptive statistics give an overview of the distribution and variability of the variables used in the analysis. The mean, standard deviation, minimum, and maximum of each variable are examined to determine the characteristics and extent of variation in the dataset. Table 2 presents the descriptive statistics of the variables employed in the study. The results show that the mean values of GINI, GLOB, GDPPC, SSER, INF and GOV are 43.68, 47.31, 1,926.02, 37.21, 19.91 and 4.14, respectively. The standard deviations indicate considerable variation across the observations, particularly in inflation (INF), GDP per capita (GDPPC) and secondary school enrolment (SSER), reflecting changes in Nigeria's economic and socioeconomic conditions over the study period. The minimum and maximum values also reveal substantial variation in the variables, with inflation exhibiting the widest range, from 5.39 to 72.84, while GINI ranges from 35.60 to 57.15. Overall, the descriptive statistics indicate sufficient variability in the variables for further econometric analysis.

4.1 Descriptive Statistics

Table 2

Descriptive Statistics of the Variables for the Regression

Variable	Obs.	Mean	Std. Dev	Min	Max
GINI	39	43.68	7.80	35.6	57.15
GLOB	39	47.31	6.39	36.04	54.63
GDPPC	39	1926.02	454.44	1390.47	2585.73

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SSER	39	37.21	8.32	21	56.21
INF	39	19.91	17.03	5.39	72.84
GOV	39	4.14	2.98	0.91	9.45

Note: These are raw data before the log transformation

Source: Authors' computations (2026) using Eviews 13.

4.2 Unit Root Test

To avoid spurious regression arising from non-stationary panel data, the stationarity properties of the variables were examined using the Augmented Dickey-Fuller (ADF) and Phillip-Parron (PP) unit root tests. The results, presented in Table 3, indicate a mixed order of integration. While income inequality (GINI) and inflation rate (INF) are stationary at levels, the remaining variables become stationary after first differencing (Ashakah et al. 2025). Overall, none of the variables is integrated of order two, I(2), confirming the suitability of the ARDL bounds testing approach.

Table 3

Unit Root Test

Variable	**ADF**		**PP**		**Order of Integration**
	Level	*First Diff.*	*Level*	*First Diff.*	
GINI	-2.060 **	–	-2.276	-1.762	I(0)
GLOB	-1.445	-3.567 ***	-0.977	-5.363 ***	I(1)
GDPPC	-0.907	-2.599 ***	-1.359	-4.153 ***	I(1)
SSER	-1.398	-3.074 ***	-2.738	-6.750 ***	I(1)
INF	-2.255 **	–	-3.265 *	–	I(0)
GOV	-1.238	-2.689 ***	-1.888	-6.009 ***	I(1)

Note: * p < 0.1, ** p < 0.05 and *** p < 0.01

Source: Author's Computation (2026) using Eviews 13.

4.3 Lag Order Selection Criteria

Before conducting the ARDL cointegration framework, it is methodologically imperative to determine the optimal lag structure for the time-series variables to prevent over-parameterization and eliminate residual serial correlation. To achieve this, an unrestricted Vector Autoregression (VAR) baseline was established, and the optimal lag length was evaluated across five standard information criteria: Sequential Modified Likelihood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), and Hannan-Quinn Information Criterion (HQ). The selection results are detailed in Table 4.

The results reveal a minor divergence between the conservative criteria and the flexible criteria. The Schwarz Information Criterion (SC) and Hannan-Quinn (HQ) optimize the system at lag 1. Conversely, the Final Prediction Error (FPE) and the Akaike Information Criterion (AIC) select an optimal lag order of 2. Following the standard practice in macro-development literature, and considering that the core ARDL model estimation relies on the AIC for its automated optimization sweep, a maximum lag length of 2 was chosen as the baseline boundary for the model. This choice preserves sufficient degrees of freedom while ensuring the elimination of error dependencies within our sample size.

Table 4

VAR Lag Order Selection Criteria

Lag	**LogL**	**LR**	**FPE**	**AIC**	**SC**	**HQ**
0	-487.3995	NA	32335.04	27.41108	27.67500	27.50320
1	-245.0673	390.4241*	0.350293	15.94818	17.79562*	16.59299*
2	-205.9103	50.03394	0.349992*	15.77279*	19.20375	16.97029
3	-169.9230	33.98802	0.581365	15.77350	20.78798	17.52369

Note: * indicates lag order selected by the criterion. LR: sequential modified LR test statistic (each test at 5% level); FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion; HQ: Hannan-Quinn information criterion.

Source: Authors' computations (2026) using Eviews 13.

To examine the presence of a long-run equilibrium relationship among the variables, the ARDL Bounds Test for cointegration was conducted using the small-sample critical values developed by Narayan (2005). As presented in Table 5, the calculated joint F-statistic is 4.543, which is evaluated under Case 2 (restricted constant) with 5 cointegrating regressors. Given our sample size of 37, the calculated F-statistic strictly exceeds the upper bound I(1) critical values at the standard 5% significance level for both the (N = 35) boundary (4.013) and the (N = 40) boundary (3.920). Consequently, the null hypothesis of no levels relationship is robustly rejected at the 5% level. This provides definitive empirical evidence of a stable, long-run cointegrating vector tying income inequality, globalization, GDP per capita, human capital, inflation,

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and government consumption expenditure together in Nigeria. Accordingly, the model can be securely parameterized into its full error correction representation to discuss both long-run multipliers and short-run adjustment dynamics.

Table 5

ARDL Bounds Test for Cointegration

Variable	Value	Significance levels					
F-statistics	4.543						
		10%		5%		1%	
Sample Size		I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
	35	2.331	3.417	2.804	4.013	3.900	5.419
	40	2.306	3.353	2.734	3.920	3.657	5.256

Source: Authors' computations (2026) using Eviews 13.

4.4 Empirical Results and Discussion

Following the robust verification of a long-run levels relationship via the Narayan (2005) small-sample bounds test (F = 4.5435), the dynamic properties of the optimized (ARDL(2,0,0,1,1,0)) specification were mapped into an Error Correction representation. The structural parameters showing both the short-run differences and the long-run multipliers are structured in Table 6. The estimated model exhibits exceptionally high explanatory power and fit, indicated by an R-squared of 0.9022 and an Adjusted R-squared of 0.8933. This satisfies classical time-series thresholds, demonstrating that over 89.3% of the systematic variations in Nigeria's income inequality are captured by the joint interaction of globalization and the macroeconomic control variables.

Table 6

ARDL Cointegration and Short-Run Error Correction Representation (Model: 2, 0, 0, 1, 1, 0)

Explanatory Variables	Coefficient	Std. Error	t-Statistic	Prob.
Short run Dynamics (SR)				
D(GINI(-1))	0.443526***	0.133565	3.320682	0.0026
D(INF)	-0.004677	0.004869	-0.960527	0.3453
D(SSER)	0.011653	0.023168	0.502999	0.6190
C	-6.847067	10.46542	-0.654256	0.5185
COINTEQ*	-0.091414***	0.014662	-6.234730	0.0000
Long run Regressors (Level Equivalents)				
GLOB	-0.219120***	0.050166	-4.367856	0.0002
LNGDPPC	2.989554**	1.447418	2.065439	0.0486
INF	-0.014476**	0.006322	-2.289693	0.0301
SSER	-0.029815	0.019078	-1.562791	0.1297
GOV	-0.009412	0.023299	-0.403951	0.6894
R-squared	0.902209	Adjusted R-squared		0.893319
F-statistic	101.4852	Durbin-Watson stat		2.241178
Prob(F-statistic)	0.00000			

Note: *** p < 0.01 and ** p < 0.05

Source: Authors' computations (2026) using Eviews 13.

Crucially, the error correction coefficient (COINTEQ) is negative (-0.0914) and highly statistically significant at the 1% level (p = 0.0000). This satisfies the theoretical conditions established by Pesaran et al. (2001), acting as an absolute confirmation of a stable long-run convergence path. The coefficient indicates that following a localized macroeconomic shock, the system self-corrects deviations back toward the long-run steady-state equilibrium at an adjustment speed of 9.1% per annum.

The long-run multipliers reveal that globalization (GLOB) exerts a negative and highly statistically significant influence on income inequality in Nigeria (α = -0.2191, p = 0.0002). This finding provides strong empirical validation for the classical Heckscher-Ohlin-Stolper-Samuelson (HOSS) theoretical framework, which posits that global integration expands opportunities and lifts returns for a developing country's abundant factor of production – specifically low-skilled labour. This long-run compression of the Gini coefficient by globalization mirrors the empirical conclusions of Nwosa (2020), who observed that sustained trade and financial openings eventually activate labor-absorptive channels in Nigeria's

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non-oil sectors. It also matches the assertions of Udoh et al. (2022), who noted that long-run cross-border financial flows, particularly stable remittances, work toward narrowing domestic wealth disparities.

In contrast, economic size and development, proxied by log GDP per capita (lnGDPPC), shows a positive and statistically significant relationship with income inequality (α = 2.9896, p = 0.0486). This confirms that long-run economic expansion in Nigeria has historically been exclusionary rather than inclusive, consistently favoring higher-income brackets. This behavioral pattern perfectly maps onto the initial upward phase of the classical Kuznets hypothesis, wherein early-stage growth worsens disparities due to structural dualism and the intensive concentration of capital within urban, capital-intensive enclaves like the petroleum extraction and telecommunications sectors. This exclusionary growth path is heavily supported by the work of Ogede et al. (2022) and Ibrahim and Okoh (2021), who both established using ARDL tools that growth without structural diversification in Nigeria leaves the rural and informal workforce largely marginalized.

Macroeconomic inflation (INF) exhibits a significant negative long-run relationship with inequality (α = -0.0145, p = 0.0301). While inflation generally acts as a regressive tax, this long-run negative coefficient suggests that extended inflationary environments in Nigeria may diminish the real wealth portfolios of capital owners faster than low-income agrarian households who rely on nominal wage adjustments or subsistence production. Secondary education enrollment (SSER) and government expenditure (GOV) do not exert statistically significant long-run multiplier effects, echoing warnings from Ogunyomi et al. (2013) that public consumption and human capital investments frequently fail to alter long-run distribution profiles due to persistent institutional leakages and uneven educational quality.

In the short run, the first lag of the differenced dependent variable (D(GINI(-1)) displays a positive and highly significant coefficient (α = 0.4435, p = 0.0026). This provides clear proof of structural distribution momentum, meaning that past inequality shocks automatically propagate into the current period. Short-run changes in inflation (D(INF)) and education enrollment (D(SSER)) remain statistically flat, indicating that transitory adjustments in macroeconomic or human capital variables take extensive horizons to mature before significantly reshaping the internal income structures of the Nigerian state.

4.5 Diagnostic and Stability Tests

To verify the statistical reliability, robustness, and mathematical validity of the estimated ARDL(2,0,0,1,1,0) model, a comprehensive suite of post-estimation diagnostic tests was conducted. The empirical findings are structured and presented in Table 7. First, the Breusch-Godfrey Serial Correlation LM test yields an F-statistic of 1.384 with an associated probability value of 0.501. Because this p-value strictly exceeds the standard 5% significance threshold (p > 0.05), we fail to reject the null hypothesis of no serial correlation, confirming that the residuals are entirely free from serial dependency and that the model's lag structure is perfectly specified. Second, the Breusch-Pagan-Godfrey test for heteroskedasticity records a statistic of 14.443 with a p-value of 0.107. This outcome confirms that the error variance remains constant and homoskedastic over time, validating the reliability of our standard errors.

Third, the Jarque–Bera normality test evaluates the distribution of the error term, yielding a statistic of 5.062 and a probability value of 0.080. Since this exceeds the 0.05 benchmark, we fail to reject the null hypothesis of normal distribution, certifying that the residuals adhere to classical assumptions and that the generalized p-values are mathematically uncompromised. Finally, the Ramsey RESET test, utilized to evaluate the functional form adequacy, displays an F-statistic of 2.273 and a probability value of 0.143. This indicates that the model is free from omitted non-linear variable bias or structural misspecification. Collectively, these post-estimation tests give the model a completely clean bill of health, proving that the estimated short-run and long-run coefficients are highly robust, efficient, and reliable for drawing macroeconomic policy conclusions.

Table 7

Diagnostic Test

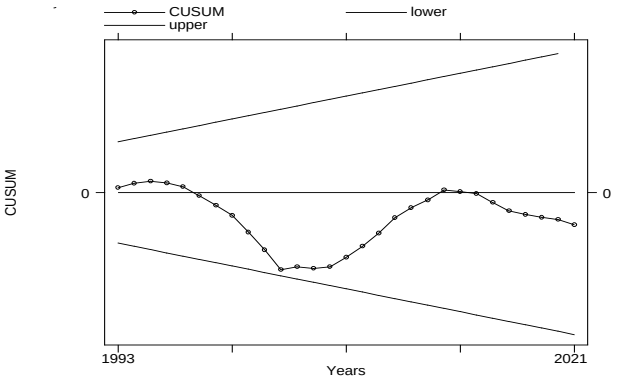
Test	Statistics	p-value
Breusch-Godfrey Serial Correlation LM Test	1.384	0.501
Breusch-Pagan-Godfrey Heteroskedasticity Test	14.443	0.107
Jarque–Bera (Normality test)	5.062	0.080
Ramsey RESET test	2.273	0.143

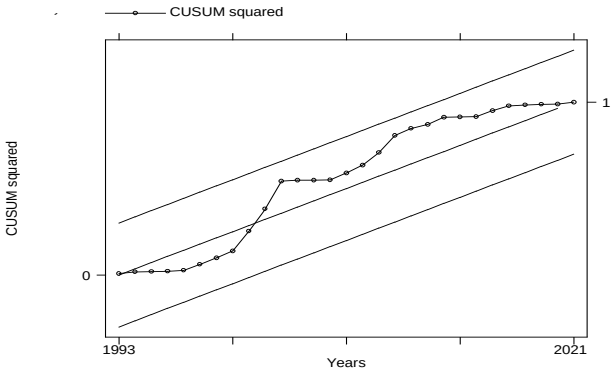
Source: Authors' computations (2026) using Eviews 13.

Beyond the residual diagnostics, the structural stability of the long-run and short-run coefficients was evaluated using the Cumulative Sum (CUSUM) and Cumulative Sum of Squares (CUSUMSQ) tests developed by Brown et al. (1975). As illustrated in Figure 2, both the CUSUM and CUSUMSQ statistics remain completely bounded within the 5% critical significance lines. This structural tracking confirms that the parameters governing the globalization-inequality nexus in Nigeria are highly stable over the study period, certifying the model's suitability for reliable macroeconomic policy recommendations.

Figure 2

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Source: Authors' computations (2026) using Eviews 13.

5. Conclusion and Recommendations

The empirical findings of this study move beyond simple statistical outputs to reshape how we view Nigeria's economic path. The interaction between globalization and the domestic landscape reveals a crucial structural insight: the primary challenge in Nigeria is not the external shock of opening up markets, but the internal design of its growth engine. By analyzing these relationships, this study highlights a clear disconnect between global integration and domestic expansion. Global forces work to integrate and balance the economy over time, expanding opportunities for the broader workforce. However, the internal growth engine operates in an isolated enclave, concentrating wealth within narrow, capital-intensive sectors rather than distributing it across the population. This internal friction systematically counteracts the progress made through global integration, locking the country into a cycle of high inequality. Furthermore, the slow pace of economic adjustment highlights deep structural rigidities and institutional bottlenecks that delay progress. This slow response emphasizes that market openness alone cannot fix internal structural imbalances without deliberate policy intervention. Ultimately, the path forward does not require retreating from global markets or relying solely on raw GDP expansion. Instead, Nigeria needs to structurally redesign its domestic economy. To achieve long-term, equitable development, policymakers must shift focus from simply chasing growth to building a diversified, labour-absorptive domestic system that connects global opportunities with the wider population.

To reconcile the structural disconnect between global opportunities and Nigeria's exclusionary growth model, policymakers must move away from passive market integration and move toward active structural intervention. The following targeted interventions are required to turn globalization into a tool for shared prosperity:

i. **Aggressively De-Enclave the Domestic Growth Engine:** Since traditional economic growth concentrates wealth within capital-intensive sectors like oil and telecommunications, the Federal Ministry of Finance and the Central Bank of Nigeria (CBN) must intentionally pivot capital toward labor-absorptive sectors. This requires setting mandatory credit-allocation quotas and low-interest lending windows specifically for smallholder agricultural value chains, rural micro-enterprises, and domestic light manufacturing. Decoupling GDP expansion from isolated sectors is the first step toward making growth inclusive.

ii. **Transition from Primary Commodity Exporting to Local Value Addition:** The long-run capacity of globalization to compress inequality can only be unlocked if Nigeria shifts its position in global value chains. The Federal Ministry of Industry, Trade and Investment should establish heavily subsidized special economic zones (SEZs) dedicated entirely to agro-processing and raw material manufacturing. Processing agricultural yields and solid minerals within domestic borders will turn raw output into thousands of low-skilled manufacturing jobs, directly increasing wages for the most vulnerable populations.

iii. **Restructure Public Expenditure to Overcome Structural Bottlenecks:** The weak redistribution performance of government expenditure indicates that public funds are stuck in administrative overheads rather than structural transformation. The Budget Office of the Federation must aggressively trim recurrent costs and redirect revenue into connective infrastructure—such as rural electrification, cold-chain logistics, and decentralized transport networks. Building these links will lower entry barriers for informal actors, allowing them to participate in broader markets.

iv. **Overhaul Human Capital to Prevent Digital and Global Marginalization:** Education must serve as an economic bridge rather than a driver of stratification. The National Universities Commission (NUC) and the Federal Ministry of Education must urgently realign secondary and technical vocational curricula with the requirements of the global digital economy. Upgrading regional technical colleges with digital, vocational, and technical competencies will prevent low-skilled workers from being squeezed out by technological changes, giving the local workforce the skills needed to capture international remote work and digital trade opportunities.

References

1. Ashakah, F. O., Mgbomene, C., Metieh, F. C. & Opara, F.N. (2025). High Inflation in Nigeria: A Demand-Pull or Cost-Push Phenomenon? *International Journal of Economics and Financial Issues, 15(4), 283-291.*
2. Ashakah, F.O.(2023). Government Expenditure, Tax Revenue, and Economic Growth: Empirical Evidence from Nigeria. Jalingo Journal of Social and Management Sciences, 5(1), 263-276.

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3. Brown, R. L., Durbin, J., & Evans, J. M. (1975). Techniques for Testing the Constancy of Regression Relationships over Time. *Journal of the Royal Statistical Society: Series B (Methodological), 37*, 149-163. https://doi.org/10.1111/j.2517-6161.1975.tb01532.x
4. Goldberg, P. K., & Pavcnik, N. (2007). Distributional effects of globalization in developing countries. *Journal of Economic Literature, 45*(1), 39–82. https://doi.org/10.1257/jel.45.1.39
5. Heckscher, E. F. (1919). The effect of foreign trade on the distribution of income. *Ekonomisk Tidskrift, 21*, 1–32.
6. Helpman, E. (2018). *Globalization and Inequality*. Harvard University Press.
7. Ibrahim, V. H., & Okoh, M. O. (2021). Income inequality and economic development in Nigeria: An empirical assessment. *Journal of Economics and Allied Research*, *6*(4), 100–109. Retrieved from https://jearecons.com/index.php/jearecons/article/view/124
8. *Ikechuckwu, K.C., Maku, O. & Ashakah, F.O. (2025). Impact of Government Expenditure on Economic Growth in Nigeria: Implications for Policy Implementation. International Journal of Economics and Management Research, 3(1), 56-70.*
9. International Monetary Fund. (2024). *World economic outlook: Policy pivot, rising threats*. Washington, DC: IMF.
10. Milanovic, B. (2016). *Global inequality: A new approach for the age of globalization*. Harvard University Press.
11. Narayan, P. K. (2005). The saving and investment nexus for China: Evidence from co-integration tests. Applied Economics, Taylor & Francis Journals, 37(17), 1979-1990. DOI: 10.1080/00036840500278103
12. Nwosa P. I. (2020). Globalisation, Economic Growth and Income Inequality in Nigeria. *Indian Journal of Human Development*, *14*(2), 202-212. DOI: 10.1177/0973703020948484
13. Ogede, J. S., Maku, O. E., Oshinowo, B. O., & Ologundudu, M. M. (2022). Trade openness, foreign direct investment and income inequality: New empirical evidence from Nigeria. *ACTA Universitatis Sapientiae, Economics and Business, 10*(1), 8–22.
14. Ogunyomi, O. O., Daisi, O. R., & Oluwashikemi, R. A. (2013). Economic globalization, income inequality and economic growth in Nigeria: A static data analysis (1986–2010). *ABC Journal of Advanced Research, 2*(2), 126–134.
15. Ohlin, B. (1933). *Interregional and International Trade*. Harvard University Press.
16. Pesaran, M. H., Shin, Y. & Smith, R. J. (2001) Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics, 16*, 289-326. http://dx.doi.org/10.1002/jae.616
17. Rodrik, D. (2018). *Straight talk on trade: Ideas for a sane world economy*. Princeton University Press.
18. Stiglitz, J. E. (2012). *The price of inequality: How today's divided society endangers our future*. W. W. Norton & Company.
19. Stolper, W. F., & Samuelson, P. A. (1941). Protection and real wages. *Review of Economic Studies*, *9*(1), 58–73. https://doi.org/10.2307/2967638
20. Udoh, I. E., Effiong, U. E., & Ekpe, J. P. (2022). Globalization and income inequality in Nigeria. *International Journal of Management, Accounting and Economics*, *9*(12), 822–847.
21. United Nations Conference on Trade and Development (UNCTAD). (2022). *World investment report 2022: International tax reforms and sustainable investment*. United Nations.
22. World Bank. (2024). *World development report 2024: The middle-income trap*. Washington, DC: World Bank.

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