

Global Value Chains and Trade Competitiveness in Nigeria

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ABSTRACT

The study examined global value chains and trade competitiveness in Nigeria between 2007 and 2025. The objectives of the study are to determine the effect of backward global value chain participation (BGV), logistics performance (LPI) and institutional quality (ISQ) on trade competitiveness (TCP) in Nigeria. The study used the Auto Regressive Distributed Lag (ARDL) model as the estimation technique. The findings based on the ARDL bound test results showed that, there is a long run relationship between global value chains and trade competitiveness in Nigeria during the period of study. Also, the ARDL short run results showed that, backward global value chain participation had negative effect on trade competitiveness in Nigeria. Nevertheless, both logistics performance and institution quality are positively related with trade competitiveness in Nigeria during the period of study. Thus, it was concluded that, to a large extent, global value chain in terms of logistic performance and institutional quality positively contributed to increase in trade competitiveness in Nigeria between 2007 and 2025. Based on the findings, it was recommended amongst others that, it is imperative that the government and policy makers establish a definitive national policy regarding the development of value chains that incorporated the strategies that promote competitiveness in national trade.

KEYWORDS

Backward, Competitiveness, Global value, Institutional quality, Trade

I. INTRODUCTION

The organization of global production has undergone a profound transformation over the past four decades. Advances in information and communication technologies, trade liberalization, declining transport costs, and the expansion of multinational enterprises have led to the fragmentation of production processes across national borders. Rather than producing goods entirely within a single country, firms increasingly distribute different stages of production; ranging from design and input sourcing to manufacturing, assembly, logistics, and marketing; across multiple locations. This reorganization of production is commonly conceptualized through the framework of Global Value Chains (GVCs), which emphasizes the sequencing of value-adding activities across countries and firms participating in global production networks.

Within this framework, international trade is no longer defined solely by the exchange of final goods, but increasingly by trade in tasks, intermediate inputs, and value-added components. As a result, a country's position in global trade depends less on the volume of

its exports and more on the specific functions it performs within value chains. Countries that specialize in knowledge-intensive and technology-driven activities, such as design, advanced manufacturing, logistics coordination, and branding; tend to capture higher levels of value. In contrast, those concentrated in primary production or basic processing often capture only a limited share of total value generated along the chain. This shift has fundamentally redefined the concept of trade competitiveness, placing greater emphasis on productivity, export sophistication, diversification, and upgrading within global production systems.

For many developing economies like Nigeria, participation in GVCs has been viewed as a potential pathway to industrialization and economic transformation. East and Southeast Asian economies have successfully leveraged GVC integration to transition from low-value assembly to higher-value manufacturing and services, supported by deliberate industrial policies, strong institutions, and sustained investments in infrastructure and human capital. Although Africa's participation in global trade has increased, it has largely occurred through forward linkages in GVCs, characterized by the export of raw or minimally processed commodities such as minerals, agricultural products, and crude oil (UNECA, 2021). As a result, the continent remains vulnerable to external price shocks and has struggled to achieve sustained improvements in trade competitiveness.

Within Africa, Nigeria as a country present a particularly instructive context for examining these dynamics. Nigeria has different institutions, relatively liberal trade regimes, and access to global markets, GVC integration, and trade performance but remain heavily dependent on primary commodities despite her economic potential. The scenario above suggest that participation in global value chains is required to guarantee improved trade outcomes. Furthermore, while the expansion of GVCs has enabled nations to participate in global production without fully developed domestic industrial bases, the benefits of such participation are not automatic. The ability to translate GVC participation into improved trade competitiveness depends critically on domestic structural conditions, including infrastructure quality, institutional quality and logistic performance.

Against this backdrop, this study examines the effect of global value chain participation on trade competitiveness in Nigeria over the period 2007 to 2025. Specifically, it provides empirical evidence on how backward global value chain participation and key domestic structural factors; namely logistics performance and institutional quality, interact to shape trade competitiveness outcomes in Nigeria.

The rest parts of this paper examined, the literature review, the methodology, the results and discussion as well as the conclusion and recommendations.

II. LITERATURE REVIEW

A. *Nigeria, GVC Governance and Sectoral Dynamics*

Nigeria's participation in global value chains (GVCs) is shaped by a dualistic economic structure, combining capital-intensive, hierarchical enclaves, especially in oil and gas, with fragmented agricultural value chains and emerging manufacturing and creative sectors. The dominance of hydrocarbons has historically created a pattern of hierarchical governance, where multinational oil companies internalize extraction, refining, logistics and marketing functions, thereby limiting technological spill over into the wider economy (Gereffi et al.,

2005). Meanwhile, agricultural commodities such as cocoa, sesame, cashew, ginger and hibiscus operate under captive or market-based governance, because smallholders depend heavily on intermediaries and exporters who impose quality, moisture, pesticide and traceability standards (Ponte, 2019). This bifurcation explains why Nigeria's overall GVC position remains skewed toward raw exports with limited domestic value addition (United Nations Conference on Trade and Development).

Energy constraints remain one of the most significant structural barriers to Nigeria's upgrading prospects. Although the country has more than 12,000 MW of installed generation capacity, actual available generation fluctuates between 4,000 and 5,500 MW due to gas supply constraints, transmission failures and infrastructure outages (Nigerian Electricity Regulatory Commission [NERC], 2024). Unreliable power forces manufacturers to rely on diesel or gas

Generators, raising unit production costs and undermining competitiveness in modular or relational value chains (World Bank, 2023). Industries requiring stable electricity, such as precision machining, textile spinning, cold-chain agro-processing and automotive assembly, are unable to scale or attract foreign buyers without predictable power quality (African Development Bank Group, 2022). Thus, Nigeria's energy shortfall is not simply a domestic infrastructure issue but a GVC-defining constraint.

A structural shift is occurring in downstream energy with the emergence of the Dangote Petroleum Refinery, a 650,000-bpd facility that significantly reduces Nigeria's dependence on imported refined fuels. The refinery began producing diesel and jet fuel in 2024 and is expanding petrochemical capacity, especially polypropylene (PP), with nameplate output reported above 800,000 tons per year (NERC, 2024). Since Nigeria previously imported most of its PP, PE/HDPE and PET needs for packaging, plastics, automotive interiors and synthetics, domestic availability of PP is likely to reduce imports, shorten lead times and enhance downstream manufacturing competitiveness. While Dangote has not yet initiated HDPE or LLDPE production, petrochemical scaling could eventually support domestic converters and reduce Nigeria's exposure to global resin price volatility (UNCTAD, 2023). For GVC participation, this enhances the feasibility of modular manufacturing in sectors like FMCG packaging, injection molding and synthetic textiles, and contingent on logistics reliability.

Agriculture remains a vital but under-upgraded component of Nigeria's GVC architecture. Commodities such as cocoa, sesame and cashew continue to be exported primarily in raw form, although processing clusters (e.g., for shea, cassava starch, cocoa liquor) have begun expanding.

Upgrading into premium agricultural markets requires traceability, aflatoxin management, pesticide monitoring and cold-chain integrity, conditions highly sensitive to logistics performance (UNCTAD, 2023). Without stable export windows, Nigerian agro-exporters are often forced into captive buyer relationships with large foreign importers who discount prices due to perceived risk. This creates a self-reinforcing cycle where upstream producers lack incentives to invest in higher-value tasks such as processing and certification.

Customs performance and port governance are therefore central to Nigeria's GVC pathway. Lagos ports have long been characterized by delays, unofficial payments, infrastructure

congestion and inconsistent documentation processes (World Bank, 2023). In response, the Nigeria Customs Service launched the Unified Customs Management System (UCMS), popularly called B'Odogwu, in 2024-2025 to integrate declarations, valuation, risk management and e-manifest submissions into a single digital interface. If effectively implemented and interoperable with shipping lines, SONCAP, NAFDAC and terminal operators, UCMS could significantly reduce clearance times and logistics uncertainty, enabling Nigerian firms to participate in stricter relational and modular chains that require documentation accuracy and timing reliability.

The fashion and apparel sector also demonstrates Nigeria's emerging global presence. Designers like Veekee James have penetrated U.S. bridal and prom markets using social media-driven relational governance, where bespoke design and co-creation with clients allow Nigerian firms to partially bypass traditional intermediaries. However, dependence on imported fabrics, lace, brocade, silk, tulle, keeps designers vulnerable to port delays. If domestic petrochemical output (e.g., PP) enables local textile intermediate production in the future, Nigeria could strengthen backward linkages for its fashion GVC segment.

Infrastructure, particularly roads and industrial corridors, serves as a structural determinant of GVC integration. Projects such as the Lagos-Ibadan Expressway reconstruction, Second Niger Bridge access roads, and planned Lekki-Epe corridor upgrades aim to reduce transit times and integrate industrial zones with ports. If consistently maintained, these corridors will reduce logistics variance and enhance Nigeria's compatibility with time-sensitive GVC governance types. When combined with UCMS reforms and petrochemical-driven input localization, Nigeria's GVC profile may gradually shift from a raw-commodity, captive-dominated structure to one where modular and relational upgrading becomes feasible.

B. Global Value Chain (GVC) Theory

Gereffi, Humphrey, and Sturgeon (2005) formalized GVC theory by highlighting the importance of business network coordination and the internationalization of economic activity. According to this view, international production is now more of a web of interdependent activities rather than a unified force, with each nation making a contribution that capitalizes on its unique capabilities. The emphasis in international commerce is changing from the export of finished items to the global coordination of more complicated manufacturing processes, and this change reflects that trend (World Bank, 2020).

C. Argument for the Basis of GVC Theory

Research and development, design, production, assembly, logistics, marketing, and distribution are the tenets of GVC theory. Technical capabilities, institutional conditions, and cost efficiency are the elements that govern the geographic distribution of these operations (Gereffi et al., 2005; Baldwin, 2016). As a result of this shift, the idea of "trade in tasks" emerged, when nations focus on certain aspects of production rather than whole sectors.

The idea of governance, central to GVC theory, provides an explanation for the collaborative nature of firms. Market, modular, relational, captive, and hierarchical governance were the five forms enumerated by Gereffi et al. (2005). When it comes to deciding how authority is distributed throughout the value chain, governance systems mirror the level of modifiability, supplier knowledge, and complexity. A large number of companies in the developing world

are hierarchical or captive, meaning that the largest businesses in the industry have significant influence over production and sales.

Upgrading is also an essential part of GVC theory. When nations or businesses achieve higher places in the value chain, it is considered an upgrade. Improvements in processes, goods, or functions, or even across industries, are all viable options (Gereffi & Fernandez-Stark, 2016). A product's complexity increases with an upgrade, but a process's efficiency increases with an upgrade. Functional upgrades need devoting time and energy to other worthwhile pursuits, like marketing or design. The argument puts forth the view that nations may reap the benefits of GVC membership only if they are able to do more than just participate.

D. Empirical Review

1. Backward Global Value Chain (GVC) Participation and Trade Competitiveness

Timmer, Los, Stehrer, and de Vries (2014) used data from the World Input-Output Database when considering countries with more advanced global value chains (GVCs) integration and stronger firm-level capabilities. They averred that, in many cases, intermediate inputs that are imported contribute more than simply raw materials for manufacture; they also bring the inherent knowledge and creativity of the source. Along similar lines, Keller (2010) proves that, imported intermediates are critical to the worldwide dissemination of technology, which boosts industrialised nations' creativity and production. The link is more strongly supported by data obtained at the corporate level. Businesses involved in global supply chains outperform their locally based rivals in terms of production and export intensity, which aligns with Melitz's (2003) theory of company heterogeneity. Businesses in industrialised countries with a strong absorption capacity get the most benefits from the potential of backward GVC engagement to become trade competitive, according to these studies. This is because businesses in these economies tend to have better access to cutting-edge tools, have better problem-solving abilities, and produce higher-quality goods and services as a result.

While the relationship between developing countries' trade competitiveness and participation in backward GVCs is complicated and conditional, it is there. One of the several benefits of integrating with GVCs is having access to global technology, management practices, and standards. Their usefulness, however, is enormously affected by regional capacities and legal frameworks.

There is a lot of space for improvement when it comes to backward engagement, particularly when it comes to exposure to imported intermediates that represent advanced technology. If these improvements are to come to fruition, it will be required to invest more in infrastructure, new procedures, and human resources. Unless certain conditions are satisfied, organisations could struggle to incorporate and use data from outside sources.

Several variables determine the degree to which GVC participation enhances competitiveness. Such variables include a stable economy, good leadership, and free trade. Businesses that take the incorrect tack risk putting all their eggs in the international supplier basket and failing to put enough money into expanding their own manufacturing capabilities. The short-term gains in efficiency aren't worth the long-term losses in structural change and competitiveness caused by this inefficient integration.

UNCTAD (2023) highlights the issue of "shallow integration," which happens when countries participate in GVCs but don't manage to achieve significant upgrading or value capture. Instead of leading to transformation, structural dependency might result from backward engagement if there aren't deliberate industry activities to promote skill development. Improving efficiency and being competitive in exports are two areas where African firms face unique difficulties. Some examples of such obstacles include an unreliable energy source, inadequate logistics, and a dearth of business-level expertise.

Research from the OECD (2022) shows that, these countries have a hard time absorbing foreign technology and inputs because of their low firm capacities, weak infrastructure, and undeveloped industrial bases. That is why, despite these nations' increasing participation in global markets, their competitiveness remains low.

2. *Logistics Performance and Trade Competitiveness*

This variation is quite similar to what we see when it comes to reverse GVC participation "a) Industrialised Nations". A crucial component of trade competitiveness, according to empirical data from industrialised countries, is logistical efficacy. Logistics networks are critical to a company's ability to compete in highly connected production systems because of the complex and time-sensitive nature of the supply chains within which they operate. Similar to tariffs, trade delays lower the value of time-sensitive items and disrupt production schedules. Similarly, in industries where JIT production is essential, trade volumes fall sharply for every extra day of export delay. Our research highlights the need of dependable and quick logistics systems in global value chains (GVCs), where cooperation across several nations is critical.

Because of their well-established logistical infrastructure, industrialised nations also have an easier time joining the global manufacturing networks that produce higher-value goods. Export performance is greatly enhanced by trade facilitation measures, according to research by Portugal-Perez and Wilson (2012). These mechanisms include well-functioning customs procedures, top-notch infrastructure, and transparent regulatory frameworks. To be successful in today's cutthroat marketplaces, logistics systems must do more than just provide services. They ought to aid businesses in minimising risk, increasing supply chain efficiency, and conforming to global standards.

The importance of logistics performance in determining the trade competitiveness of rising countries is as critical, but with additional caveats. Several further institutional and structural elements are necessary to improve export performance and facilitate GVC integration via logistics system improvements.

Improving trade facilitation and logistical facilities led to a rise in export volumes for emerging nations. Government, regulations, and the business climate all have a role in determining the actual magnitude of these advantages. Therefore, improving logistical performance is insufficient; we also need to restructure our institutions to make things more coordinated and less unpredictable.

Better ratings on the Logistics Performance Index (LPI) enhance export competitiveness, especially in the industrial sector, according to Marti, Puertas, and García (2014). They do,

however, highlight the need of logistics systems being in harmony with larger economic objectives, such as strategies for industrial growth and trade liberalisation, in order to achieve competitiveness benefits in the long run.

In the context of global value chains (GVCs), Taglioni and Winkler (2016) state that in order for companies to achieve the demanding quality standards, delivery deadlines, and traceability criteria set by lead corporations, effective logistics systems are crucial. More complex parts of global industrial networks may become accessible to nations with better logistical networks, rather than settling for simple assembly tasks.

Logistics performance is both a major impediment to and a possible facilitator of trade competitiveness, according to empirical data from emerging countries. An uncoordinated logistics system causes trade prices to rise and export efficiency to fall due to inadequate transportation networks, long customs processes, and overall, a lack of coordination.

The 2018 Logistics Performance Index (LPI) from the World Bank also shows that nations with poor logistics systems are less competitive when exporting and have higher trade expenses. More global market integration and larger trade flows are linked to better logistical services, infrastructure quality, and customs efficiency. But logistical upgrades may not be enough to keep a business competitive in the long run. Physical infrastructure, regulatory hurdles, institutional inefficiencies, and coordination issues are some of the variables that impact trade costs in developing countries. Not all logistical advancements are completely exploitable by businesses because of inadequate governance frameworks, unstable energy sources, and limited commercial capacity.

All things considered, the data demonstrates that logistics performance is an important, albeit situationally sensitive, factor in trade competitiveness. Participation in time-sensitive, high-value manufacturing networks is made possible by effective logistics systems, which immediately boost the competitiveness of industrialised nations. To successfully enhance logistics in underdeveloped nations, symbiotic institutional and policy frameworks are essential. Poor logistical performance is a major structural limitation in underdeveloped countries. Infrastructure inadequacies, poor governance, and a lack of skills at the corporate level are to blame. Therefore, to increase logistics performance and achieve significant gains in trade competitiveness, a coordinated strategy is needed that includes building infrastructure, reforming institutions, and training capacity. This is especially true when looking at Africa (World Bank, 2020; OECD, 2022).

3. *Institutional (Governance) Quality and Trade Competitiveness*

Institutional quality, often proxied by governance indicators such as rule of law, regulatory effectiveness, and control of corruption, is widely recognized as a fundamental determinant of trade competitiveness. Within the context of global value chains (GVCs), where production processes are fragmented across borders and require complex coordination, strong institutions play a critical role in reducing transaction costs, ensuring contract enforcement, and enhancing predictability in economic interactions. However, as with other determinants of competitiveness, the impact of institutional quality varies across developed, emerging, and developing economies, reflecting differences in governance capacity, enforcement mechanisms, and structural conditions.

Empirical evidence from developed economies consistently highlights institutional quality as a core driver of trade competitiveness. In highly advanced economies, strong legal systems, regulatory transparency, and effective governance frameworks facilitate complex production relationships and enable firms to operate efficiently within global production networks.

Institutions provide the “rules of the game” that shape economic performance by reducing uncertainty and transaction costs. Also, countries with stronger contract enforcement mechanisms tend to specialize in industries that require relationship-specific investments, an essential feature of GVC participation. Similarly, Acemoglu (2005) demonstrate that institutional quality is a fundamental determinant of long-run economic performance and comparative advantage. Further he shows that, institutional quality influences trade patterns by enabling countries to compete in industries characterized by complex contractual relationships and high coordination requirements. In developed economies, this translates into participation in high-value segments of GVCs, such as research and development, design, and advanced manufacturing, where governance reliability is essential. Dollar and Kraay (2003) find that countries with stronger governance structures tend to experience higher trade growth and improved economic outcomes. Similarly, Rodrik (2018) argue that institutions are more important than geography or trade openness in explaining differences in economic performance across countries. These findings suggest that institutional quality is a key enabler of competitiveness, particularly in economies undergoing structural transformation.

However, empirical evidence also indicates that institutional weaknesses can constrain firms’ ability to upgrade within GVCs. Krammer (2017) shows that weak governance frameworks limit innovation capacity and reduce firms’ ability to move into higher value-added activities. In addition, governance quality plays a crucial role in attracting foreign direct investment (FDI), which is a major channel for GVC integration. Globerman and Shapiro (2002) find that countries with stronger institutions attract higher levels of FDI, thereby enhancing their integration into global production networks. Institutional quality also affects firms’ ability to comply with international standards, which are increasingly important for participation in GVCs. OECD (2021) highlights that compliance with environmental, labour, and quality standards requires effective regulatory and enforcement mechanisms, which are often lacking in developing economies. This limits firms’ access to higher-value segments of global production networks.

Furthermore, institutional weaknesses undermine the effectiveness of other determinants of competitiveness. Hoekman and Nicita (2011) argue that even where physical infrastructure exists, poor governance can lead to inefficiencies, delays, and increased trade costs. In the African context, issues such as bureaucratic bottlenecks, policy inconsistency, and weak enforcement mechanisms further constrain the ability of firms to leverage improvements in logistics and infrastructure.

III. METHODOLOGY

This study adopted the ex-post facto research design. This research design explains the casual relationship between variables at a time. It is important to note that, trade competitiveness depends on global value chain. Hence, trade competitiveness represents the dependent variable while global value chain is the independent variable. The study used

the ARDL long and short-runs method to analyse the data collected from both the CBN statistical bulletin and the World Bank Development Indicator.

A. *Model Specification*

The functional form of the specified model was presented as;

$$TCP = f(BGV_t, ISQ_t, LPI) \quad (1)$$

The mathematical form of the models is stated thus:

$$TCP = b_0 + b_1BGV + b_2ISQ + b_3LPI + U \quad (2)$$

Econometric form of the model is stated as:

Where: TCP = Trade competitiveness, BGV= Backward global value chain participant, ISQ =Institution quality, LPI = Logistic performance index, b_0 = Constant parameter, b_1 - b_3 =Slope parameters and U=Error term

IV. RESULTS AND DISCUSSION

Table 1: Unit Root Test of Stability Results

Variables	At levels (Prob)	1 st Difference (Prob)	Comments
TCP	0.3140	0.0033	I(1) Stationary at Order One
BGV	0.01173	-----	I(0) Stationary at Order Zero
LPI	0.1294	0.0023	I(1) Stationary at Order One
ISQ	0.0051	-----	I(0) Stationary at Order Zero

Source: Author's Computation from E-view 12

The unit root test result showed that, two variables, backward global value chain participant (BGV) and institutional quality (ISQ) were stationary at level or order zero as a result of the fact that, their respective P-value is greater than the critical value at 5percent level of significance. However, the none stationary variables at order zero were subjected to unit root test at first difference or order one, and the analysis revealed that, the remaining two variables (TCP and LPI) were stationary at first differencing. This indicates that, the use of Auto Regressive Distributed Lag Model (ARDL) is more appropriate analytical procedure for the analysis.

Table 2: ARDL Bonds Test Results

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	5.494561	10%	2.37	3.2
K	3	5%	2.79	3.67

		2.5%	3.15	4.08
		1%	3.65	4.66

Source: Author's Computation from E-view 12

The bounds test for counteraction for the model revealed that, all the model showed long-run relationships amongst the variables used. Using the F-stat at 5% confidence interval, the model revealed that, the F-statistics is higher than the 5% critical value, indicating that there is the existence of a long run relationship between the independent variables (BGV, LPI and ISQ) and the dependent variable (TCP). Specifically, the result showed that, the F-statistic values of 5.494561, is greater than the upper bound value of 3.67. Therefore, the independent variables and the dependent variable have long run equilibrium relationship.

Table 3: ARDL Long Run Coefficient Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BGV	-399.2733	608.4971	-0.656163	0.5241
LPI	669.3121	728.2662	0.919049	0.3762
ISQ	1.418075	5.287343	0.268202	0.7931
C	1852.817	1883.148	0.983894	0.3446

Source: Author's Computation from E-view 12

The ARDL long run coefficient test results of the estimated model showed the relationships between the dependent and the independent variables over the period. The result revealed that, there is a positive long run relationship between the independent variables (LPI and ISQ) and the dependent variable. But there is a negative relationship between backward global value chain (BGV) and trade competitiveness (TCP) in Nigeria. Based on statistically significant, the independent variables are individually not significant with the dependent variable.

Table 4: ARDL Short Run Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	533.6307	291.9806	1.827624	0.0926
TCP(-1)*	-0.288010	0.234729	-1.226990	0.2434
D(BGV)	-114.9949	105.8669	-1.086221	0.2987
D(ISQ)	0.408420	1.446954	0.282262	0.7826
D(LPI)	28.69294	111.3117	0.257771	0.8010
CointEq(-1)*	-0.288010	0.091242	-3.156539	0.0083
R-squared	0.516353	Durbin-Watson stat		1.961196

Source: Author's Computation from E-view 12

The ARDL short run results of the estimated model showed that, there is a positive short run relationship between the independent variables, logistic performance and institutional quality (LPI and ISQ) and the dependent variable (trade competitiveness). But there is a negative relationship between backward global value chain (BGV) and trade competitiveness (TCP) in Nigeria.

The R-squared of 0.5163 showed that, about 52percent of changes in the dependent variable (trade competitiveness) was brought about by systematic changes in the three independent variables (backward global value chain, logistic performance and institutional quality). But

based on statistically significant, the independent variables are individually not significant with the dependent variable. The Durbin Watson value of 1.9611 which is very close to 2.0 bench mark, showed that, there is no serial autocorrelation problem in the estimated model. Thus, the estimated model is valid for policy implementation. More so, the coefficient of ECM appeared with the right sign (negative) and statistically significant. This implies that, there is about 29% annual speed of adjustment of the variables to long run equilibrium.

Table 5: Post Estimation Test: Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.402914	Prob. F(2,10)	0.2904
Obs*R-squared	3.943901	Prob. Chi-Square(2)	0.1392

Source: Author's Computation from E-view 12

The serial correlation helps to understand how a variable affects itself when lagged. The implication is that if a variable affects its self over time, it will result to spurious results and cannot be used for predictive purposes. The serial correlation results for the model revealed that, there are no issues of serial correlation among the variables used. This is shown by the probability of the f-stat and Chi-square being more than 0.05 statistical significance.

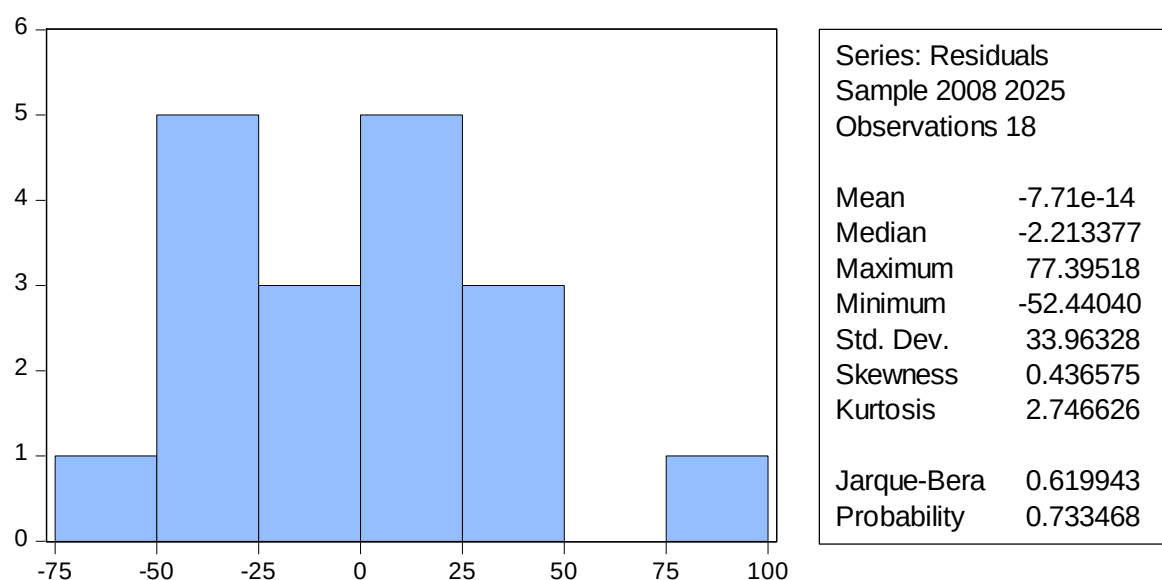


Figure 1: Normality Test Result

Based on the normality test results on Figure 1, the estimated model is well specified since the null hypothesis of the estimated model is accepted at 5percent level of significance. Specifically, t-value of 0.6199 with the corresponding probability value of 0.7334, showed that, the estimated model has no problem.

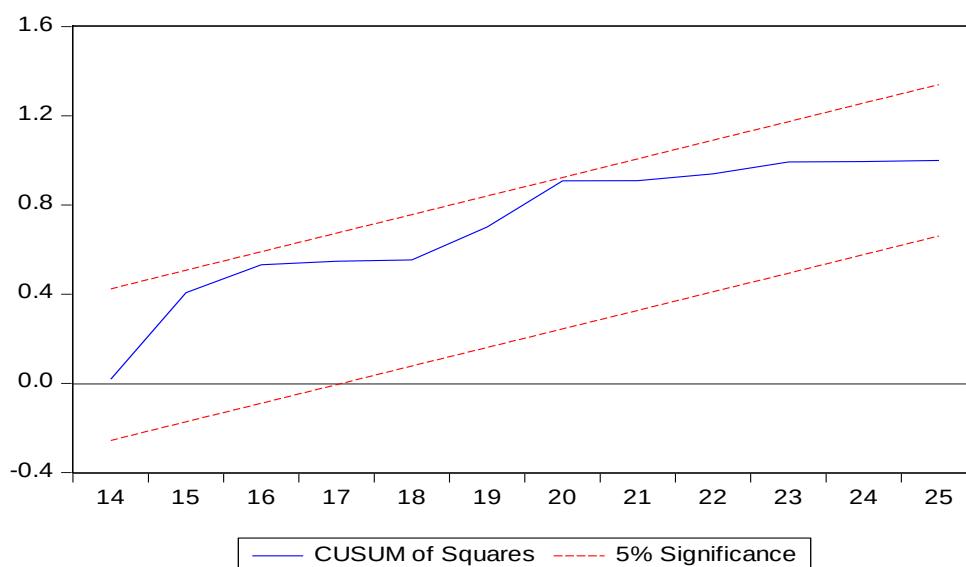


Figure 2: Stability Test: Ramsey CUSUM Square Result

CUSUM test graphs revealed the stability of the model and its applicability in the analysis. All the graph revealed that, the models are stable and therefore, applicable in the current analysis. This is because the CUSUM lines for the model stayed within the 5 percent critical bound and the CUSUM plot and did not cross the 5 percent critical lines.

V. CONCLUSION AND RECOMMENDATIONS

This study examined the global value chain and trade competitiveness in Nigeria from 2007-2025, with particular emphasis on the role of global value chain participation and other structural factors. The empirical analysis employed Trade Competitiveness (TC) as the dependent variable, while Backward Global Value Chain Participation (GVC), Logistics Performance (LP), and Institutional Quality (ISQ), and are the set of explanatory variables. To achieve the study objectives, ARDL technique was used to establish the existence of a long-run and short run relationship among the variables.

The key findings from the empirical analysis showed that, there is a long run relationship between global value chains and trade competitiveness in Nigeria during the period of study. Also, the ARDL short run results showed that, backward global value chain participation had negative effect on trade competitiveness in Nigeria. Nevertheless, both logistics performance and institution quality are positively related with trade competitiveness in Nigeria during the period of study. Thus, it was concluded that, to a large extent, global value chain in terms of logistic performance and institutional quality positively contributed to increase in trade competitiveness in Nigeria between 2007 and 2025. Based on the findings, it was recommended that, it is imperative that the government and policy makers establish a definitive national policy regarding the development of value chains that incorporated the strategies that promote competitiveness in national trade. Also, policy reforms should focus on strengthening institutional credibility and implementation capacity, rather than simply improving formal governance indicators. This includes enhancing regulatory transparency, ensuring consistency in policy application, and strengthening judicial systems for contract enforcement.

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