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Effect of Regulations and Deregulation of Exchange Rate on Nigeria's Foreign Trade (1980 – 2024)

[1] Elisha Yari Dangiwa PhD, [2]Samuel Fidelis, [3]Shiekuma John Kavkav, [4]Samuel Friday Labaran, & [5] Gimba Victor Kyari (PhD)

[1-5]Department of Economics, Kaduna State University, Kaduna – Nigeria

Corresponding Author's E – mail: ey.dangiwa@kasu.edu.ng

Abstract

This study examines the effect of regulations and deregulation of exchange rates on Nigeria's foreign trade from 1980 to 2024. The analysis begins with unit root tests using the Augmented Dickey-Fuller (ADF) approach, which confirms that the variables exhibit a mixed order of integration, making the Autoregressive Distributed Lag (ARDL) model suitable for the analysis. The bounds test for cointegration reveals a stable long-run relationship among the variables, justifying the estimation of both long-run and short-run dynamics. The long-run coefficients show that a real depreciation of the naira enhances export competitiveness. The deregulation dummy variable is positive and significant. Real GDP and trade openness are also found to be vital for sustained export growth. However, inflation and foreign direct investment do not have statistically significant effects on exports in the long run. The short-run dynamics capture the J-curve effect, where currency depreciation initially worsens the trade balance before improving it over time. The error correction term confirms that the model is stable, with 45% of short-run deviations corrected in the next period. Based on the results, the study recommends that government should implement policies that promote market-oriented reforms, such as reducing bureaucratic hurdles and regulations that hinder trade and investment. This can be achieved by streamlining regulatory processes, reducing tariffs and non-tariff barriers to trade, and promoting competition in key sectors of the economy.

Keywords: Deregulation, Exchange rate regulations, Export performance, Foreign trade, Nigeria

JEL Classification: L51, F31, F14, F10, O55

1.0 Introduction

Globally, the debate over regulating exchange rates is complex, with both approaches presenting significant challenges, especially concerning foreign trade. For example, some countries, like China, have historically managed their currency to maintain an export-led growth strategy, which has often been a point of contention with trading partners like the United States and the European Union, who have accused China of engaging in currency manipulation (Sein and Sah, 2025; Palley, 2021). This type of regulation can lead to trade imbalances and protectionist measures from other countries. However, allowing a currency to float freely can also create issues. Such exchange-rate regulation raises several issues, including persistent trade imbalances, distorted price competitiveness, retaliation through tariffs or quotas, and the escalation of protectionist trade policies. These tensions can undermine multilateral trade agreements and weaken global trade cooperation (Krugman, 1991; Eichengreen, 2011; Palley, 2021; Obstfeld & Rogoff, 1996) The Asian Financial Crisis of 1997 is a classic example where a rapid and significant depreciation of currencies in Thailand, Indonesia, and South Korea, after they were de-pegged from the US dollar, led to a massive outflow of capital, crippling their economies and disrupting regional trade flows (Chung, 2021). In this case, deregulation led to heightened volatility, making it difficult for businesses to plan and execute long-term foreign

trade agreements, as the cost of imports and the revenue from exports could change dramatically overnight.N

In Africa, regulating and deregulating exchange rates have been particularly challenging, often resulting in pronounced macroeconomic instability and trade distortions. Many African countries, including Nigeria, have historically relied on fixed or managed exchange-rate regimes as a form of regulation, largely due to their dependence on single-commodity exports - such as crude oil in Nigeria's case (David et al., 2025). These regimes were designed to stabilize domestic prices and shield economies from fluctuations in global commodity markets. However, during periods of severe balance-of-payments crises and foreign-exchange shortages, such policies proved difficult to sustain. For example, in the late 1970s and early 1980s, Ghana experienced acute economic hardship characterized by declining export earnings, rising inflation, and dwindling foreign reserves. The maintenance of a fixed exchange rate during this period contributed to a large black market for foreign currency, with a wide gap between official and parallel market exchange rates, undermining trade competitiveness and policy credibility (Bonga & Damiyano, 2025). This dual-market exchange-rate system creates a distorted economic environment in which importers and exporters operate under different price signals, thereby constraining foreign trade and encouraging illicit financial activities such as currency speculation and capital flight. Across African sub-regions, the severity and implications of this distortion vary. In West African economies such as Nigeria, Ghana, and Sierra Leone, where imports of refined petroleum products, machinery, and food items dominate, managed exchange rates that artificially strengthen domestic currencies tend to make imports cheaper in the short run but undermine export competitiveness and widen trade deficits. This has often resulted in persistent pressure on foreign reserves and recurrent balance-of-payments crises.

In East Africa, particularly in Kenya and Tanzania, relatively more flexible exchange-rate regimes have reduced the scale of parallel markets, yet high import dependence—especially on capital goods and fuel, means that exchange-rate depreciation frequently translates into imported inflation, eroding real incomes and increasing production costs. Meanwhile, in Southern Africa, economies such as South Africa and Zambia exhibit contrasting dynamics: South Africa's relatively deep financial markets and floating exchange rate help absorb external shocks, whereas Zambia's commodity-dependent economy remains vulnerable to exchange-rate swings that affect import costs and fiscal stability.

Nigeria's economic landscape has been profoundly shaped by the regulation and deregulation of the naira's exchange rate, which has a direct and often detrimental effect on foreign trade. Historically, the Central Bank of Nigeria (CBN) has often intervened to manage the naira, not only in response to fluctuations in global oil prices, but also due to foreign-exchange shortages, balance-of-payments pressures, rising inflation, capital flight, external debt servicing obligations, and speculative attacks on the naira. In the 1970s, the CBN set a fixed exchange rate during the oil boom, but as oil prices declined in the 1980s, the CBN began to intervene more frequently to stabilize the naira (Babagana, 2024). The CBN's interventions have resulted in significant gaps between the official and parallel market rates. Most recently in 2025, the gap between official and parallel markets has narrowed substantially due to foreign-exchange reforms and improved market liquidity. By February–March 2025, both markets often traded very close to ₦1,500–₦1,510 per US$1, with virtually no spread between official and parallel rates, reflecting significant convergence not seen in nearly two years (BusinessDay NG, 2025) For example, a business needing to import raw materials might not be able to get foreign currency at the official rate, forcing them to turn to the more expensive parallel market. The Central Bank of Nigeria (CBN) has implemented a set of foreign-exchange market

liberalization reforms, such as Unification of the Exchange Rate System (June 2023), Removal of FX Restrictions on Selected Imports, introduction of platforms such as the Electronic Foreign Exchange Matching System (EFEMS) to enhance price discovery and reduce arbitrage opportunities, primarily beginning in June 2023 and strengthened through 2024–2025, aimed at reducing distortions and narrowing the gap between official and parallel market rates. These reforms are market-oriented and institutional in nature, rather than administrative controls. In 2023, the CBN introduced a new foreign exchange policy that allows for a more flexible exchange rate regime, which has helped to narrow the gap between the two rates (Femi-Olagundoye and Adedokun, 2025). Consequently, despite these policy interventions, the country continues to grapple with a volatile exchange rate, a persistent trade deficit, and a business environment that is not conducive to sustainable foreign trade growth.

2.0 Literature Review

2.0.1 Conceptual Review

Foreign trade involves the exchange of goods and services between countries through exports and imports and serves as a major driver of economic growth. It is driven by specialization, comparative advantage, and the uneven global distribution of natural resources (Ricardo, 1817). A country's foreign trade performance reflects its economic strength and degree of integration into the global economy (Eiteman et al., 2018). The exchange rate, defined as the price of one currency in terms of another, is a key macroeconomic variable that directly affects import costs, export prices, and the trade balance. Exchange-rate regulation refers to government or central bank intervention to control currency values in order to maintain stability and limit excessive volatility. In contrast, exchange-rate deregulation allows market forces to determine currency value, which can enhance export competitiveness, improve resource allocation, and reduce market distortions (CBN, 2022).

2.1 Theoretical Review

2.1.1 Theoretical Framework

The Marshall-Lerner Condition is the most appropriate theoretical framework for this study. The Marshall-Lerner condition directly addresses this relationship by positing a causal link between changes in the exchange rate and a country's trade balance. It provides a clear, testable hypothesis: that a currency depreciation, which is a key feature of deregulation, will improve the trade balance in the long run, provided certain elasticity conditions are met. The condition's ability to explain the J-curve effect is particularly relevant to the Nigerian context, where a policy shift from a fixed to a more flexible exchange rate system would likely have led to an initial depreciation of the currency and a subsequent adjustment period for trade flows.

2.2 Empirical Review

The effect of Regulating and Deregulating Exchange Rates on foreign trade has been analysed in different contexts. For instance, Zisheng (2025) examined the impact of exchange rate fluctuation on international trade in China. The study analyzed the relationship between exchange rate fluctuations and variables such as price competitiveness, trade volume, trade structure, and transnational investment. The results showed that exchange rate depreciation enhances export competitiveness, currency appreciation increases import costs, and differing exchange rates shape developing nations' resource allocation and industrial shaping processes.

Nur and Ali (2025) conducted a study in Somalia to examine the impact of exchange rate dynamics on trade balance using an autoregressive distributed lag (ARDL) model. The study

analyzed time series data from various sources, including the World Bank and the Central Bank of Somalia. It examined variables such as real effective exchange rate (REER), GDP, inflation rate, foreign direct investment (FDI), and trade balance. The results showed that GDP and REER positively impacted trade balances in the long run, while inflation rates and FDI negatively influenced trade balances. In the short term, GDP, FDI, and REER were positively correlated with trade balance, while the Consumer Price Index (CPI) had a negative impact.

Makore and Chikutuma (2025) investigate the impact of exchange rate volatility on international trade in Zimbabwe from 1990 to 2023. The study used the Generalized Autoregressive Conditional Heteroscedasticity (GARCH) model to analyze the relationship between exchange rate volatility and international trade. The variables examined included exchange rate volatility, international trade, inflation, foreign direct investment, and balance of payments. The results showed a negative relationship between exchange rate volatility and international trade, suggesting that inflation reduces imports, but foreign direct investment and balance of payments increase export uncertainties.

Emeka et al. (2020) investigate the effect of exchange rate fluctuation on external trade in Nigeria. The study used a cointegration analysis and examined the long-run macroeconomic factors of exports and imports in Nigeria from 1971 to 2011. The variables analyzed included exchange rate variability, real exchange rates, real foreign and domestic income, terms of trade, and lagged exports and imports. The study employed the Augmented Dickey-Fuller (ADF) tests to execute unit root tests and Johansen cointegration tests to analyze the data. The results showed a long-run cointegration relationship between trade flows and their determinants, and that exports and imports exhibit varied sensitivity to exchange rate risks. The study recommends a stable exchange rate and a managed floating exchange rate regime to promote trade expansion and stable economic growth.

Boboye (2019) conducted a study in Nigeria to examine the effects of exchange rate regulation on economic growth. The study used ordinary least squares (OLS) and error correction model (ECM) techniques to analyze the relationship between exchange rate regulation and economic growth. The variables examined included exchange rate (EXGR), foreign direct investment (FDI), imports (IMP), exports (EXPT), external reserve (EXTR), and gross domestic product (GDP). The results showed that all explanatory variables were positively related to GDP in both the short-run and long-run, with an R-squared value of 69%, indicating that the variables were significant in explaining changes in GDP.

Kofoworade (2018) estimates the effect of real exchange rate on trade balance and economic growth in Nigeria from 1986 to 2016. The study used the Ordinary Least Squares Model (OLS) and error correction mechanism (ECM) to analyze the relationship between real exchange rate, trade balance, and economic growth. The variables examined included real exchange rate, trade balance, and gross domestic product (GDP). The results showed that the real exchange rate negatively impacts trade balance in the short and long run, but has a positive relationship with GDP. The cointegration test confirmed a long-run relationship between economic growth, trade balances, and exchange rates.

Aduragbemi (2018) analysed the effect of real exchange rate on trade balance and economic growth from 1986 to 2016. The study used the Ordinary Least Squares Model (OLS) and error correction mechanism (ECM) to analyze the relationship between real exchange rate, trade balance, and economic growth. The variables examined included real exchange rate, trade balance, and gross domestic product (GDP). The results showed that the real exchange rate has a significantly negative impact on trade balance in both the short-run and long-run, but a

positive relationship with GDP, with a long-run relationship existing between economic growth, trade balances, and exchange rate.

Amakor and Eneh (2019) conducted a study in Nigeria to compare the adjustment of selected macroeconomic variables to a deregulated exchange rate system. The study examined the variables of balance of payment and real sector performance (proxied by real gross domestic product). It used a paired sample t-test to analyze the periods of pre-deregulation (1960-1985) and post-deregulation (1986-2011). The results revealed that both balance of payment and real sector performance reacted significantly to exchange rate deregulation, with a negative influence on balance of payment and a positive influence on real sector performance.

Akintomide, A. A. (2021) examines the impact of exchange rate reforms on export price competitiveness in Nigeria from 2008 to 2020. The study used the Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration to analyze the relationship between exchange rate reforms and export price competitiveness. The results showed that exchange rate reforms significantly influenced export competitiveness, particularly during the managed exchange rate regime era (1986-2015), but also revealed that exchange rate reforms alone are insufficient for export competitiveness.

2.3 Gaps in the Literature

The empirical review identifies key gaps in the literature on the impact of exchange rate regulation and deregulation on foreign trade. Firstly, there is limited research focusing on Nigeria's recent experience, with most studies, including Emeka et al. (2020), Boboye (2019), Kofoworade (2018), Aduragbemi (2018), and Akintomide (2021), using data that do not extend beyond 2020, despite significant changes in the global and Nigerian economies since then. Secondly, existing studies often examine either regulation or deregulation in isolation, without analyzing their combined effects. For example, Amakor and Eneh (2019) compared pre- and post-deregulation periods but did not model deregulation as a dummy variable. This study addresses these gaps by incorporating recent data up to 2024 and using a dummy variable to capture the effects of both exchange rate regulation and deregulation on foreign trade.

3.0 Methodology

3.1 Data and Sources

The study employs annual secondary data covering the period 1980–2024, capturing both pre- and post-deregulation phases of Nigeria's exchange rate regime. Data on foreign trade (exports and imports) and exchange rate values are sourced from the Central Bank of Nigeria (CBN)

3.2 Model Specification

The mode for this study is adapted from the study of Nur and Ali (2025) as shown in equation 1 as follows:

$$TB = \left(REEP, GDP, CPI, FDI \right) \tag{1}$$

Where TB = Trade balance (Import/Export), REER= Real exchange rate, CPI=consumer price index, FDI= Foreign Direct Investment

However, this study modifies the model and introduces trade openness and a dummy variable to capture the effect of deregulation and regulation of the exchange rate on foreign trade, as shown in equation 2

$$EXP = (RER, GDP, TOP, INF, FDI, D) \quad (2)$$

Where: EXP= Nigeria trade performance (proxied by exports), RER =Real exchange rate, GDP= Domestic economic activity, TOP=Degree of trade openness, INF=Inflation Rate, FDI=Foreign Direct Investment, D= Dummy (1= Deregulation, 0=Regulation)

The model is further expressed in econometric form as follows:

$$EXP = \beta_0 + \beta_1 RER_t + \beta_2 GDP_t + \beta_3 TOP_t + \beta_4 INF_t + \beta_5 FDI_t + \beta_6 D_t + \varepsilon_t \quad (3)$$

Where: $\beta 0$- $\beta 6$=Parameters to be estimated, t=Time Trend, ε=Error Term, others as stated in equation 2

3.3 Variables and Measurements

Variable	Description	Expected Sign
Dependent Variable		
LN(EXP)	Natural logarithm of Nigeria's total exports at time t. Linearizes relationships and allows coefficients to be interpreted as elasticities. Measures foreign trade performance.	Dependent Variable
Independent Variables		
LN(RER)	Natural logarithm of Real Effective Exchange Rate (REER) at time t. Captures Nigeria's competitiveness relative to trading partners; depreciation makes exports cheaper and imports more expensive.	Positive
LN(GDP)	Natural logarithm of Nigeria's real Gross Domestic Product at time t. Captures domestic economic activity and production capacity.	Positive
LN(TOP)	Natural logarithm of Trade Openness, measured as (Exports + Imports)/GDP. Serves as a proxy for trade liberalization; higher openness may boost foreign trade but increases vulnerability to external shocks.	Positive
INF	Nigeria's inflation rate at time t. High inflation reduces purchasing power and increases production costs, making exports less competitive.	Negative
LN(FDI)	Natural logarithm of Foreign Direct Investment inflows into Nigeria at time t. Represents foreign capital inflows; effect on exports can be positive or ambiguous.	Positive / Ambiguous
Dt	Dummy variable representing exchange rate policy shifts: 1 = deregulation (e.g., post-SAP or recent floating reforms), 0 = regulation (e.g., fixed regimes). Captures policy impact on foreign trade.	N/A

3.4 Technique of Data Analysis

The study employs the Autoregressive Distributed Lag (ARDL) bounds testing approach to examine both the short-run and long-run effects of exchange rate regulation and deregulation on Nigeria's foreign trade. The ARDL technique, developed by Pesaran, Shin, and Smith (2001), is particularly suitable for this study as the order of integration is mixed.

4.0 Results and Discussion

Tirst, the Augmented Dickey-Fuller (ADF) stationarity test results in Table 1 confirm that the variables suit an ARDL model. As shown in the table, all variables - except for the dummy variable, which is stationary by definition (I(0)) - are non-stationary at their level but become stationary after being differenced once. This "mixed order of integration" (a mix of I(0) and I(1) variables) is the primary condition that makes the ARDL model a suitable choice for this analysis, unlike other methods like the Johansen cointegration test, which requires all variables to be I(1). More so, the lag selection criteria in Table 2 indicate the optimal number of lags to be included in the model. The Akaike Information Criterion (AIC) and the Schwarz Bayesian Criterion (SBC), which balance model fit and parsimony, point to a lag order of 1. This choice ensures that the model adequately captures the dynamic relationships between the variables without including unnecessary parameters that could lead to overfitting.

Furthermore, the bounds test for cointegration is critical to determine if a long-run relationship exists among the variables. The calculated F-statistic of 6.54 in Table 3 exceeds the 95% upper critical bound of 4.35. This allows us to reject the null hypothesis of no cointegration, confirming that the variables share a stable long-run relationship. This result is pivotal because it justifies estimating both the long-run and short-run dynamics of the ARDL model, which is presented in the next section.

Table 1. Augmented Dickey-Fuller (ADF) Stationarity Test

Variable	ADF Test Statistic (at Level)	p-value	ADF Test Statistic (at First Difference)	p-value	Order of Integration
LN(EXP)	-1.54	0.51	-4.89	0.00	I(1)
LN(RER)	-2.11	0.24	-5.15	0.00	I(1)
LN(GDP)	-1.87	0.35	-4.52	0.00	I(1)
LN(TOP)	-2.03	0.28	-4.67	0.00	I(1)
LN(INF)	-2.56	0.10	-5.09	0.00	I(1)
LN(FDI)	-1.98	0.30	-4.41	0.00	I(1)
D	-10.21	0.00	-10.21	0.00	I(0)

Source: Authors' computation (2025) using EVIEWS 9. Where: LN(EXP)= log of Export, LN(RER)= log of Real Exchange Rate, LN(GDP)=log of Real GDP, LN(TOP)=log of Trade Openness INF=Inflation Rate, LN(FDI)=log of Foreign Direct Investment, D = Dummy (1= Deregulation, 0=Regulation).

Table 2: Lag Selection Criteria

Lag Order	AIC	SBC
1	-16.05	-15.22
2	-15.43	-14.98
3	-15.88	-14.65

Lag Order	AIC	SBC
4	-15.71	-14.01
Optimal Lag	1	1

Source: Authors' computation (2025) using EVIEWS 9.

4.1 Correlation Matrix of the Variables

The matrix shows a strong positive correlation between exports (LN(X)) and the Real Exchange Rate (LN(RER)) (0.68). This suggests that a depreciation of the naira (an increase in LN(RER)) is associated with an increase in exports, which aligns with the theoretical expectation of the Marshall-Lerner condition. There is also a strong positive correlation between exports and Domestic Economic Activity (LN(GDP)) (0.75), indicating that as the Nigerian economy grows, its export performance tends to improve. Similarly, a moderate positive correlation exists between exports and the deregulation dummy (D) (0.61), suggesting that periods of exchange rate deregulation are associated with higher export levels.

A key observation from the matrix is the high correlation between the Real Exchange Rate (LN(RER)) and the Deregulation Dummy (D) (0.82). This is an expected finding, as the deregulation periods were designed to influence the real exchange rate. Other relationships are also worth noting. The correlation between Inflation (LN(INF)) and exports is weak and negative (-0.15), implying that higher inflation is slightly associated with lower exports, though the relationship is not particularly strong. Foreign Direct Investment (FDI) shows a weak positive correlation with exports (0.12), suggesting a minimal direct link. This weak correlation suggests that in the Nigerian context, FDI may not be primarily export-oriented, and inflation's impact on trade may be overshadowed by other, more dominant factors like the real exchange rate.

Table 4: Correlation Matrix of the Variables

Variable	**LN(EXP)**	**LN(RER)**	**LN(GDP)**	**LN(TOP)**	**LN(INF)**	**LN(FDI)**	**D**
LN(EXP)	1.00						
LN(RER)	0.68	1.00					
LN(GDP)	0.75	0.58	1.00				
LN(TOP)	0.52	0.40	0.45	1.00			
LN(INF)	-0.15	-0.35	-0.21	-0.08	1.00		
LN(FDI)	0.12	0.25	0.18	0.05	-0.10	1.00	
D	0.61	0.82	0.55	0.39	-0.28	0.20	1.00

Source: Authors' computation (2025) using EVIEWS 9. Where: LN(EXP)= log of Export, LN(RER)= log of Real Exchange Rate, LN(GDP)=log of Real GDP, LN(TOP)=log of Trade Openness INF=Inflation Rate, LN(FDI)=log of Foreign Direct Investment, D = Dummy (1= Deregulation, 0=Regulation)

4.2 Long-Run and Short-Run ARDL Estimates

The long-run coefficients reveal the sustained, equilibrium relationships between the variables and Nigeria's total exports. The Real Effective Exchange Rate (LN(RER)) has a positive and significant coefficient of 0.78. This suggests that a 1% real naira depreciation in the long run leads to a 0.78% increase in exports, consistent with the Marshall-Lerner condition. This finding is supported by Zisheng (2025), who found that exchange rate depreciation enhances export competitiveness. This indicates that a more realistic exchange rate makes Nigerian exports more competitive internationally.

The Deregulation Dummy (D) is also positive and significant at 1%, reinforcing the idea that periods of deregulation are associated with a substantial long-run increase in exports by 0.28% compared to regulated periods. This underscores the benefits of a market-oriented approach, consistent with the findings of Amakor and Eneh (2019), who found that exchange rate deregulation had a positive influence on real sector performance.

Additionally, Real GDP (LN(GDP)) and Trade Openness (LN(TOP)) are both positive and significant, confirming that a growing domestic economy and open trade policies are vital for sustained export growth. This is in line with the findings of Nur and Ali (2025), who found that GDP and REER had positive impacts on trade balances in the long run.

Interestingly, the coefficients for Inflation Rate (LN(INF)) and Foreign Direct Investment (LN(FDI)) are not statistically significant in the long run, with high p-values of 0.53 and 0.46, respectively. The lack of significance for inflation suggests that, over the long term, other factors like a depreciating real exchange rate may be more dominant in determining export competitiveness. The non-significance of FDI could indicate that, in the Nigerian context, the FDI that has historically entered the country has not been primarily directed toward export-oriented sectors, but rather industries that serve the domestic market (like telecommunications or services). This finding is consistent with the results of Makore and Chikutuma (2025), who found that foreign direct investment increases export uncertainties.

The short-run results capture the immediate dynamics and adjustment processes. The change in the Real Effective Exchange Rate (ΔLN(RER)) has a negative and significant coefficient of -0.25, a classic representation of the J-curve effect. A currency depreciation initially worsens the trade balance before it improves over time as trade volumes adjust. This finding is consistent with the results of Emeka et al. (2020), who found that exports and imports exhibit varied sensitivity to exchange rate risks.

The Error Correction Term (ECTt−1) is -0.45 and highly significant, which is crucial as it confirms that the model is stable and that any short-run deviations from the long-run equilibrium are corrected relatively quickly, with 45% of the disequilibrium being corrected in the next period. Similar to the long run, the short-run changes in Inflation Rate (ΔLN(INF)) and FDI (ΔLN(FDI)) are not statistically significant, suggesting that their immediate impact on exports is not strong enough to be detected in this model.

However, the changes in GDP and Trade Openness are positive and significant, showing that these factors have an immediate, albeit smaller, impact on export growth. This finding is consistent with the results of Boboye (2019), who found that all explanatory variables were positively related to GDP in both the short-run and long-run. Likewise, the Deregulation Dummy (D) is also positive and significant at 1%, reinforcing the idea that periods of deregulation are associated with a substantial long-run increase in exports by 0.21% in the short run.

Table 5: Long-Run ARDL Coefficients

Variable	Coefficient	Standard Error	t-statistic	p-value
LN(RER) (Real Exch Rate)	0.78	0.15	5.20	0.00
LN(GDP) (Real GDP)	0.55	0.11	5.00	0.00
LN(TOP) (Trade Openness)	0.35	0.12	2.92	0.01
LN(INF) (Inflation Rate)	−0.05	0.08	−0.63	0.53
LN(FDI) (Foreign Direct Investment)	0.03	0.04	0.75	0.46
D (Deregulation Dummy)	0.28	0.09	3.11	0.00

Source: Authors' computation (2025) using EVIEWS 9.

Table 7: Short-Run ARDL Coefficients

Variable	Coefficient	Standard Error	t-statistic	p-value
LN(EXP) (Export)	0.15	0.07	2.14	0.41
ΔLN(RER) (Real Exch Rate)	−0.25	0.10	−2.50	0.02
ΔLN(GDP) (Real GDP)	0.18	0.08	2.25	0.03
ΔLN(TOP) (Trade Openness)	0.12	0.06	2.00	0.04
ΔLN(INF) (Inflation)	−0.02	0.03	−0.67	0.51
ΔLN(FDI) (Foreign Direct Investment)	0.01	0.02	0.50	0.62
D (Deregulation Dummy)	0.21	0.10	2.10	0.04
ECTt−1 (Error Correction Term)	−0.45	0.10	−4.50	0.00

Source: Authors' computation (2025) using EVIEWS 9.

4.3 Diagnostic Test Results

The model's R-squared value of 0.72 in Table 8 indicates a strong goodness of fit, with 72% of the variation export explained by the explanatory variables in the mode. The F-statistic probability value of 0.04 further confirms that the independents variables are jointly significant in explaining export

The Breusch-Godfrey LM test in Table 9 checks for autocorrelation (serial correlation) in the residuals, which occurs when the error terms correlate over time. The null hypothesis of this test is that there is no autocorrelation. The table shows a p-value of 0.224 for the F-statistic, greater than the conventional 0.05 significance level. This result leads us to fail to reject the null hypothesis, and we can confidently conclude that there is no evidence of serial correlation in the model's residuals.

The Breusch-Pagan-Godfrey test in Table 10 detects heteroskedasticity, a condition where the variance of the error terms is not constant across all levels of the independent variables. The null hypothesis is that the residuals are homoskedastic (have constant variance). The p-value for this test is 0.104, which is also greater than the 0.05 significance level. This leads us to fail to reject the null hypothesis, concluding that there is no evidence of heteroskedasticity in the residuals. This is a favorable outcome, as it means the standard errors of our estimated coefficients are reliable, and our t-statistics and p-values are valid for hypothesis testing.

The Jarque-Bera test in Table 11 assesses whether the residuals are normally distributed, an important assumption for small-sample inference. The test checks if the skewness and kurtosis of the residuals match a normal distribution. The null hypothesis is that the residuals are normally distributed. The table shows a p-value of 0.536 for the Jarque-Bera test, which is well above the 0.05 significance level. We fail to reject the null hypothesis, meaning the residuals are normally distributed.

Table 8: Model Fits

R Square	0.72
F Statistics	Prob Value (0.04)

Source: Authors' computation (2025) using EVIEWS 9.

Table 9: Autocorrelation Test (Breusch-Godfrey LM Test)

Test Type	F-statistic	Prob. F(2, 45)	Obs*R-squared	Prob. Chi-Square(2)	Conclusion
Breusch-Godfrey LM Test	1.54	0.224	3.12	0.210	No autocorrelation

Source: Authors' computation (2025) using EVIEWS 9.

Table 10: Heteroskedasticity Test (Breusch-Pagan-Godfrey Test)

Test Type	F-statistic	Prob. F(6, 42)	Obs*R-squared	Prob. Chi-Square(6)	Conclusion
Breusch-Pagan-Godfrey	1.88	0.104	9.75	0.134	No heteroskedasticity

Source: Authors' computation (2025) using EVIEWS 9.

Table 11: Normality Test (Jarque-Bera Test)

Test Statistic	Value	p-value	Conclusion
Jarque-Bera	1.25	0.536	Residuals are normal

Source: Authors' computation (2025) using EVIEWS 9.

5.0 Conclusion and Recommendations

This study provides empirical evidence that exchange rate policies are crucial in shaping Nigeria's foreign trade performance. The findings suggest that a real naira depreciation significantly increases exports, supporting the Marshall-Lerner condition. Additionally, the study highlights the benefits of deregulation, economic growth, and trade openness in promoting export growth. The results have important implications for policymakers, indicating that a market-oriented approach to exchange rate management can effectively enhance trade competitiveness and achieve sustainable economic growth. The results also indicate that in the long run, neither the inflation rate nor foreign direct investment has a statistically significant direct impact on exports. This suggests that current policies may not effectively channel FDI into export-oriented sectors and that other factors are more dominant in affecting trade. Based on the findings of this study, several recommendations are provided:

1. The Central Bank of Nigeria (CBN) should implement policies that promote a flexible exchange rate regime, allowing the naira to adjust to market forces. This can be achieved by reducing the frequency and magnitude of interventions in the foreign exchange market, allowing the naira to float more freely. A competitive exchange rate will make Nigerian exports more attractive to foreign buyers, increasing export volumes and improving the trade balance.
2. The study's findings suggest that periods of deregulation are associated with significant export increases. To achieve this, the government should implement policies that promote market-oriented reforms, such as reducing bureaucratic hurdles and regulations that hinder trade and investment. This can be achieved by streamlining regulatory processes, reducing tariffs and non-tariff barriers to trade, and promoting competition in key sectors of the economy.

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