



**FINANCIAL INTERMEDIATION, MACROECONOMIC DYNAMICS,  
AND TRADE PERFORMANCE: UNPACKING THE DETERMINANTS OF  
INTERNATIONAL TRADE IN AN EMERGING AFRICAN ECONOMY**

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**Abstract**

This study examines the effect of credit of commercial banks on international trade in Nigeria using annual time-series data from 1990 to 2023 from the Central Bank of Nigeria statistical bulletin. The estimation is done using the Fully Modified Ordinary Least Squares (FMOLS) estimation method to determine the contribution of bank credit, exchange rate, inflation, gross domestic product, and structural reforms to trade performance. The findings show that these effects of bank credit and GDP on international trade are positive and relatively strong, whereas the exchange rate has both positive but moderate impacts. On the other hand, inflation shows no substantial effect, showing how little short-term fluctuations in price levels matter in trade. The results emphasize the role of financial sector development, macroeconomic stability and structural reforms, most notably the banking sector consolidation in 2005, in facilitating long-term trade growth. The paper has provided relevant policy recommendations to improve trade finance, exchange rate stability as well as financial inclusion as instruments of bolstering Nigerian integration into the global economy.

**Keywords:** *Bank Credit, International Trade, Exchange Rate, Gross Domestic Product, Inflation, Nigeria.*

**JEL Codes:** F13, F43, G21, O55

## **1. Introduction**

Financial intermediation and international trade are two topics that have been core in development economics, especially in the case of emerging economies like Nigeria. Bank credit availability is an important aspect in trade finance to ease liquidity crunch on both exporters and importers. In shallow capital markets, commercial banks would be the key intermediaries in facilitating the finance of trade flows (Patel, 2021). For Nigeria, as international trade is not only a means of growth but also a determinant of external sector stability, there is a need to understand the role of banking credit in trade performance, with regard to policy and practice. Recent evidence suggests inadequate access to credit has often constrained the ability of firms to participate competitively in global trade networks and hence limited export diversification (Hassan & Yu, 2007; Fapetu et al., 2022).

The initial aim of this research will be to analyze how the credit of commercial banks influences the volume of international trade in Nigeria. International trade is capital intensive requiring finance for working capital, logistics and foreign exchange transactions. High collateral requirements, high interest rates, and poor credit information systems are other nagging issues in Nigeria that have limited the accessibility of firms to financing (Sghaier, 2021). This paper throws some light on whether the intermediation role played by the financial sector can be used to facilitate the widening trade base in Nigeria by the emphasis on the bank credit as a determinant of the trade. In Africa, whose integration is gaining momentum under the African Continental Free Trade Area (AfCFTA), this goal is especially pertinent as competitive financing is a mandatory condition to participate (UNCTAD, 2021).

The second goal is to evaluate how the macroeconomic fundamentals such as inflation, exchange rate, and gross domestic product impact international trade in Nigeria. Trade competitiveness has always been observed to be highly influenced by exchange rate volatility since too much fluctuation results in uncertainty in decisions to export and import (Ezuem & Sagbara, 2025). Inflation, on the other hand, influences relative prices and can lead to distortions in trade incentives while GDP is a proxy for production capacity and demand conditions (Bonga-Bonga & Phume, 2020). Because Nigeria has a history of exchange rate distortions and macroeconomic turmoil, exploring these variables offers some understanding of the short-run and long-run dynamics that influence the outcome of trade. The third goal is to investigate the influence of structural change and domestic policy effects on determining the outcome of trade. In particular, a dummy variable is included in this study to measure the impact of the banking sector consolidation in Nigeria of 2005. The purpose of this reform

was to improve capital adequacy, financial stability, and efficiency of credit intermediation. Past studies revealed that structural banking reforms have a profound impact on the performance of the financial sector, and consequently, trade financing (Beck et al., 2010; Babajide et al., 2021). The effects of such reforms can be analyzed to determine whether changes wrought by a policy in the financial sector are reflected in the performance of international trade.

To accomplish these goals, the analysis will utilize the Fully Modified Ordinary Least Squares (FMOLS) estimation technique to resolve the problem of serial correlation and homogeneity, which will produce solid estimates in the long run. The empirical framework draws from the theories of financial intermediation, international trade, in particular the notion that financial deepening comes with risk sharing and lower transaction costs, both of which boost trade flows (Manova, 2009). By using this methodology, the research is part of empirical discussions of the finance-trade nexus in the African space, where institutional and structural challenges mean that theoretical expectations are often not met (Chua & Safiyanu, 2022).

In general, this work contributes to the literature in several ways. First, it presents new empirical evidence on Nigeria, spanning the period 1990-2023, which is characterized by important economic liberalization and reforms. Second, it includes both financial variables and macroeconomic fundamentals, providing an overall picture regarding the determinants of trade. Finally, the emphasis on structural reforms increases the policy relevance of the findings, including lessons for strengthening the financial sector and trade policy within the broader context of economic diversification and global integration. The rest of the paper is organized as follows: the theoretical and empirical literature is reviewed in Section 2, the methodology is presented in Section 3, results and policy implications of the empirical results are discussed in Section 4, and finally, the paper ends with recommendations provided in Section 5.

## **2. Literature and Theoretical Framework**

### **2. Empirical Review**

Empirical studies continue to focus on trade finance and bank credit as key limitations to the involvement of firms in global markets. Recent firm-level and country-level research finds that shocks to trade finance or limited bank lending have a significant negative effect on exports and can slow entry precision by firms into foreign markets (Patel, 2021; Xu, 2022;

Calani, 2024). Patel, (2021) capitalize on comprehensive firm-bank relationships to demonstrate that declines in the ability of banks to finance trade have a disproportionately negative impact on exporters compared to domestic activity; the macro- and micro-evidence they present reflects the perception that the health of banks and the availability of trade credit are first-order factors in export performance. This channel is supported by historical and recent quasi-natural experiments (Xu, 2022), which capture continuing trade downturns due to massive sizes of bankshocks. The findings give relevant empirical incentive to investigate the impact of commercial bank credit availability in Nigeria on aggregate trade volumes.

Another thread of empirical research studies the role of financial development and bank intermediation more generally. Cross-nation and panel research results indicate that more sophisticated financial regimes are related to high trade volumes and diversification of exports (Leibovici, 2021; Hassan & Yu, 2007, 2022; Manova, 2009). Leibovici (2021) constructs and estimates industry-level models identifying the relationship between financial depth and trade performance and reports that industries that have greater dependence on outside financial resources grow exports in response to financial development gains. In panel settings, Hassan & Yu, (2007) demonstrate that better depth and inclusion in the banking sector is associated with increased trade openness and levels. Combined, these studies have proposed that aggregate credit growth may stimulate trade through working capital relief, and funding fixed exporting costs.

At the sectoral and firm scales, empirical work, based on micro-data, reveals heterogeneity: Credit-constrained, small, and young, for instance, respond more strongly to improvements in trade finance or bank credit; Capital-intensive sectors show larger gains in exports in response to improvements in financing (Manova, 2009; Beck et al., 2010). Using firm-bank matched datasets, we find evidence of substitution between bank credit and trade credit: when bank lending tightens, there are changes in trade credit and collateral requirements that bound cross-border transactions (Patel, 2021; Chen, 2019). Because of this micro-heterogeneity, aggregate bank credit growth might be differentially affected by trade on different microstructure credit markets- which is also significant when targeting policy in Nigeria.

There is a sizable empirical literature examining the impact of exchange-rate movements and volatility on trade flows, and its conclusions are subtle. Exchange-rate depreciation has generally been found to stimulate exports via competitiveness mechanisms and discourage trade via volatility (uncertainty) by increasing the cost of contracting and hedging (Panel and

country studies: Ekanayake and Dissanayake, 2022; Xu et al., 2022; Urgessa, 2023). Empirical evidence tends thus to suggest compensating effects: as much as depreciation has a mechanical effect of enhancing price competitiveness, increased pass-through to domestic costs (and blocked access to foreign inputs financed with bank credit) may dull the benefits. There is some evidence that the exchange-rate-trade relationship may be country-structure sensitive (import intensity, export composition) and trade-finance-available sensitive (Ezuem & Sagbara, 2025; Chua & Safiyanu, 2022).

Some empirical studies target African countries in particular and offer evidence relevant to the region. Examining trade financing constraints more stringently in lower-income frontier economies with shallow capital markets and concentrated banking systems, panel analysis and country case studies reveal that these constraints manifest as a lower level of trade participation by the country in exports and a more significant reliance on imports (Fapetu et al., 2022; Sghaier, 2021). Disaggregated studies of trade flows reveal that imports of intermediates and capital goods are especially susceptible to credit restrictions in that firms use bank credit or trade finance to fund purchases of inputs; this fact explains why bank credit in Nigeria seems strongly associated with the aggregate levels of trade (imports and exports) in the empirical findings discussed above.

There is variety in the different identification strategies employed in the literature, notably firm-bank matched panels, difference-in-differences exploiting banking shocks, instrumental variables exploiting the health of banks or their exposure to branches, panel cointegration (FMOLS/DOLS), and ARDL/ARDL-type estimators for country time-series. Studies using cointegration and FMOLS/DOLS report sustained long-run relationships between financial variables and trade in a variety of settings, with different degrees of strength for these relationships across countries and time periods (Leibovici, 2021; Rahman et al., 2023). The combined cross-sectional (firm-level) and time-series (country-level) design reflects the multi-scale nature of the finance-trade nexus, and the need to combine long-run estimators (FMOLS) with micro-founded inference in country studies like the one at hand.

New dimensions that do not exclude established bank credit channels and are the focus of new empirical work include the rise of fintech, digital trade finance, and regulatory changes. Emerging evidence suggests that fintech and digital payment innovations can reduce transaction costs and partially replace traditional finance for trade, hence facilitating small-firm entry into exports (Kumari et al., 2024; Calani, 2024). Nonetheless, the penetration and regulatory context of fintech also differ widely among countries; in Nigeria, transactions with

larger, capital-intensive fintech do not fully displace bank trade finance, but rather complement it. Therefore, expansionary policies. Formal bank credit should be coordinated with support for digital trade-finance solutions to maximize reach.

## **2.2. Theoretical Framework**

The theoretical basis on the relationship between commercial bank credit and international trade can be based on the financial intermediation theory, trade-finance models, and the heterogeneous firms' model of international trade. Financial intermediation theory asserts that financial institutions such as banks play an important role in mobilizing savings and allocating capital to productive investments, and trade flows are affected by banks (Demirgüç-Kunt & Levine, 2009). The commercial banks increase the ability of firms to engage in international markets by lowering the cost of transactions as well as curbing a lack of information and supplying liquidity. Specifically, credit access enables companies to cover working capital needs, address fixed entry barriers, and manage swings in foreign demand (Patel, 2021).

The theoretical interconnection lies at the heart of the Melitz (2003) heterogeneous firms' model, which has been generalised to include financial frictions. In this model, companies will incur a sunken fixed expense  $F$  in order to access export markets. Define the profit of firm  $i$  in order to export, to be:

$$\pi_i = p_i q_i - c_i q_i - F \quad (1)$$

where  $p_i$  is the export price,  $q_i$  is the export quantity, and  $c_i$  is the marginal cost. When firms face financial constraints, access to external finance through banks determines their ability to cover  $F$ . If  $\pi_i < 0$ , the firm exits the export market, highlighting the role of credit in facilitating international trade participation.

From a financial intermediation perspective, commercial banks supply credit  $L_t$  to firms, which is allocated based on expected profitability and collateral requirements. Following Bernanke and Gertler's (1989) financial accelerator logic, the supply of credit can be expressed as:

$$L_t = \alpha Y_t - \beta r_t + \varepsilon_t \quad (2)$$

where  $Y_t$  represents aggregate output,  $r_t$  is the interest rate, and  $\varepsilon_t$  captures shocks to bank lending conditions. A positive shock to bank credit ( $\varepsilon_t > 0$ ) reduces borrowing costs and raises firms' capacity to engage in trade finance.

International trade can also be modeled through the gravity framework, extended to include financial variables. In the augmented gravity equation, bilateral trade flows  $T_{ij}$  between country  $i$  and country  $j$  depend not only on economic size and distance but also on credit availability:

$$T_{ij} = \gamma \frac{Y_i^\theta Y_j^\delta}{D_{ij}^\phi} \text{Credit}_i^\lambda \quad (3)$$

where  $Y_i$  and  $Y_j$  are the GDPs of the trading partners,  $D_{ij}$  is the distance, and  $\text{Credit}_i$  represents the depth of domestic bank credit in country  $i$ . The parameter  $\lambda > 0$  implies that an expansion in bank credit facilitates trade by lowering transaction costs and easing liquidity constraints.

Moreover, when considering exchange-rate effects, trade financing interacts with currency fluctuations. Let the real effective exchange rate (REER) be denoted as  $E_t$ . Export supply  $X_t$  is then a function of both bank credit and exchange rate competitiveness:

$$X_t = \eta_0 + \eta_1 L_t + \eta_2 E_t + u_t \quad (4)$$

where  $\eta_1 > 0$  captures the positive impact of bank credit, while  $\eta_2$  may be positive or negative depending on whether exchange-rate depreciation boosts competitiveness or raises import costs for intermediate inputs.

The theoretical expectation is therefore that greater commercial bank credit enhances trade flows by relaxing firms' financial constraints, consistent with the financial intermediation literature (Leibovici, 2021). However, in economies with exchange-rate volatility, high financing costs, or structural rigidities, the strength of this relationship may be attenuated (Hassan & Yu, 2007). Hence, the theoretical model provides testable hypotheses for the empirical investigation: (i) bank credit expansion increases international trade, and (ii) exchange-rate dynamics condition the magnitude of this effect.

### **3. Methodology**

#### **3.1. Data and Sample Selection**

This study uses secondary time-series data for the period 1990–2023, extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin and relevant World Bank databases, and includes the following variables: International Trade Volume (INTV), Total Bank Credit to International Trade (BC), Inflation Rate (INF), Exchange Rate (EXR), Gross Domestic Product (GDP), and a Domestic Policy dummy variable (DP) that captures the 2005 banking sector consolidation. These variables were selected based on the existing empirical literature

on the nexus between banking credit and international trade, which has highlighted the importance of credit availability, macroeconomic stability, and institutional reforms in determining trade performance (Baltagi, 2008; Demirgüç-Kunt & Levine, 2009). Using annual observations is consistent with the economic reporting framework in Nigeria, and the time frame is long enough to capture both structural reforms and business-cycle fluctuations. All variables were converted to their natural logarithmic form (except for the dummy variable), which reduces variance and enables coefficients to be interpreted as elasticities.

### 3.2. Empirical Models

The functional relationship between banking credit and international trade is expressed as:

$$INTV_t = f(BC_t, INF_t, EXR_t, GDP_t, DP_t) \quad (5)$$

The econometric representation of the model is given as:

$$INTV_t = \beta_0 + \beta_1 BC_t + \beta_2 INF_t + \beta_3 EXR_t + \beta_4 GDP_t + \beta_5 DP_t + \mu_t \quad (6)$$

where  $INTV_t$  denotes international trade volume at time  $t$ ;  $BC_t$  represents banking sector credit to international trade;  $INF_t$  is the inflation rate;  $EXR_t$  is the naira-dollar exchange rate;  $GDP_t$  represents gross domestic product;  $DP_t$  is a dummy for policy reform;  $\beta_0$  is the constant term;  $\beta_1 \dots \beta_5$  are the coefficients to be estimated; and  $\mu_t$  is the stochastic error term. To evaluate the sensitivity of results, additional models were estimated with exports (EXP) and imports (IMP) as alternative dependent variables, in line with established literature that distinguishes trade components in response to financial development and credit allocation (Beck et al., 2010; Musila & Yiheyis, 2015). The definitions and data sources of the variables are summarized in Table 1.

**Table 1: Definition of Variables and Sources**

Variable	Description	Measurement	Source
INTV	International Trade Volume	Value of exports plus imports	CBN Statistical Bulletin (2023)
EXP	Exports	Value of goods and services sold abroad	CBN Statistical Bulletin (2023)
IMP	Imports	Value of goods and services purchased from abroad	CBN Statistical Bulletin (2023)
BC	Bank Credit to Trade	Loans and advances to importers/exporters	CBN Statistical Bulletin (2023)
INF	Inflation Rate	Annual percentage change in CPI	World Bank WDI (2023)

EXR	Exchange Rate	Naira per US dollar (end-period average)	CBN Statistical Bulletin (2023)
GDP	Gross Domestic Product	Annual real GDP (constant 2010 USD)	World Bank WDI (2023)
DP	Domestic Policy Dummy	0 = pre-2005, 1 = post-2005 consolidation	Author's construct

Source: *Author (2025)*

### 3.3. Estimation Methods

Since the data are time-series, preliminary diagnostic tests were run to determine the order of integration of the variables, which were found to be integrated of order one,  $I(1)$ , therefore we run the cointegration analysis. The Fully Modified Ordinary Least Squares (FMOLS) estimator was used as the primary estimation technique, which was developed by Phillips and Hansen (1990) and is widely used in empirical trade–finance literature as it addresses endogeneity and serial correlation present in cointegrated systems, yielding asymptotically efficient estimates in small samples and handles mixed regressors (Asteriou and Hall 2021).

The long-run FMOLS specification can be expressed as:

$$INTV_t = \beta_0 + \beta_1 BC_t + \beta_2 INF_t + \beta_3 EXR_t + \beta_4 GDP_t + \beta_5 DP_t + \epsilon_t \quad (7)$$

To confirm the robustness of the results, the findings were validated using alternative estimation methods such as Dynamic OLS (DOLS) and Canonical Cointegration Regression (CCR), which are conceptually aligned with FMOLS, and sensitivity analysis was performed by re-estimating the models with exports and imports as dependent variables. Diagnostic tests including the Durbin-Watson statistic, heteroskedasticity tests, and stability tests (CUSUM and CUSUMSQ) were conducted to confirm the validity of the regression results. Post-estimation analysis was also conducted to examine the statistical significance and economic plausibility of the coefficients, particularly focusing on the magnitude and direction of the credit–trade nexus.

## 4. Results

### 4.1. Discussion of Results

As shown in Table 2, the Phillips–Perron (PP) unit root tests for all variables under study, namely BC, EXP, IMP, EXR, INF, GDP, and INTV, suggest that they are integrated of order one,  $I(1)$ , meaning that the series are non-stationary at their levels but become stationary after first differencing. This result is not surprising because the series are macroeconomic in nature

and trending behavior is common with structural changes and long-run economic growth (Nkoro and Uko, 2020). The outcome that all the series are  $I(1)$  justifies the application of cointegration techniques to investigate any possible long-run equilibrium relationship, which is in line with the argument that in open-economy macroeconomics, variables that are closely linked to credit availability (banking credit), exchange rate, and trade flows often move together over time as they respond to economic fundamentals (Narayan et al., 2022), thereby justifying the empirical strategy employed in this study. From an economic standpoint, the stationarity of the differenced series implies that shocks to any of the variables only have transitory effects, meaning that shocks to banking credit or inflation rates will not permanently change the trend of international trade, which is in line with the trade–finance theory that credit shocks affect trade mainly through liquidity and cost-of-capital channels, but its persistence is conditional on macroeconomic stability (Beck et al., 2010).

The fact that all variables are  $I(1)$  also points to the potential for structural reforms in stabilizing macroeconomic conditions in Nigeria: the dummy variable (DP) for the 2005 banking consolidation policy, which may have created new stochastic trends, may have reshaped the relationship between credit and trade, consistent with the evidence from Sub-Saharan Africa that financial sector reforms are often concurrent with shifts in trade performance (Sghaier, 2021). The result is also consistent with endogenous growth literature, which stresses that credit allocation plays a role in supporting the long-run expansion of trade and output (Aghion et al., 2021).

The finding that all variables are  $I(1)$  reinforces the argument that sustainable credit expansion is key to driving the structural transformation of trade flows, especially in the context of import-dependent economies like Nigeria. Lastly, the finding of  $I(1)$  processes also provides a rationale for the use of estimation methods that are robust to the problem of spurious regressions; establishing that all variables are  $I(1)$  reduces the risk of biased or inconsistent inference, which allows cointegration and fully modified OLS (FMOLS) techniques to identify meaningful long-run dynamics. Table 3 presents the cointegration results, which suggest mixed evidence of long-run relationships among the variables depending on the trade measure considered. For the international trade volume (INTV) model, bank credit (BC) emerges as the closest to statistical significance with a tau-statistic of -5.067 and a p-value of 0.100, suggesting near cointegration. This indicates that in the long run, fluctuations in banking credit may have equilibrium associations with international trade, consistent with financial intermediation theory (Demirgüç-Kunt & Levine, 2009).

The results for the export (EXP) model demonstrate a similar pattern, with BC again approaching significance at the 13% level. This suggests that bank credit plays a relatively Evidence shows that bank credit is more cointegrated with export activity than other macroeconomic variables, such as inflation and exchange rate, which do not show strong evidence of cointegration, lending additional support to recent empirical studies that emphasize the importance of access to trade finance for export diversification and competitiveness in emerging markets (Manova, 2009). For imports (IMP), bank credit shows the strongest cointegration evidence with a tau-statistic of -5.275 and a p-value of 0.074, indicating that credit availability plays a key role in supporting imports, which reflects Nigeria's structural reliance on foreign goods, raw materials, and intermediate inputs, consistent with recent findings that trade credit often serves as an alternative source of financing for underdeveloped capital markets that allows for import financing in resource-constrained economies (Asongu, 2020).

The relatively weak evidence of cointegration for exchange rate (EXR), inflation (INF), and GDP across the models suggests that these macroeconomic indicators exert more short-term rather than long-term effects on trade. Exchange rate volatility may affect trade flows temporarily through cost competitiveness, but it may not lead to a stable long-run equilibrium unless supported by complementary credit mechanisms (Xu et al., 2022). Inflationary pressures distort purchasing power in the short run, but structural adjustments often offset such effects in the long run.

The cointegration results underscore the importance of bank credit as a factor in trade performance in Nigeria, although the long-run relationships are not clearly significant at conventional significance levels, and the consistent pattern that BC approaches cointegration thresholds across models suggests that credit provision remains a policy lever, which aligns with the financial deepening hypothesis that effective credit allocation supports both import and export financing, and thus enhances trade capacity (Odhiambo, 2008). In broader terms, the results suggest that if the availability of credit does not keep pace with demand, Nigeria's trade performance may remain susceptible to macroeconomic shocks and global volatility, underscoring the policy imperative of maintaining financial sector reforms and expanding credit channels, particularly targeted trade finance instruments, to strengthen long-run trade resilience. On the other hand, INF is negative and insignificant, implying that price instability does not have a significant direct effect on trade volumes in the sample period, perhaps

because traders incorporate inflation expectations into pricing strategies, or because credit mechanisms offset inflationary constraints.

This outcome is consistent with recent evidence from Sub-Saharan Africa, which suggests that inflation primarily influences trade via indirect mechanisms, such as real income effects, rather than through direct price competitiveness (Bonga-Bonga & Phume, 2020). Interestingly, the strongest single determinant of trade volume, with a highly significant and positive coefficient (2.258), is gross domestic product (GDP), supporting the view that domestic productive capacity is a key driver of international trade: A rising GDP provides more supply for exports and higher demand for imports because of increased consumption and industrialization. The positive and significant dummy variable for domestic policy (DP), which captures the 2005 banking sector consolidation, confirms the positive impact of structural reforms, and the coefficient of 0.086 shows that policy-induced changes in the level of financial intermediation increased trade volumes, suggesting that institutional quality and regulatory reforms are important for financial–trade linkages (Allen et al., 2014). The regression diagnostics confirm the robustness of the model, with R-squared of 0.782, adjusted R-squared of 0.778, F-statistic of 33.67, and the Durbin-Watson statistic of 1.87.

**Table 2: Phillips–Perron (PP) Unit Root Tests**

Variable	PP Statistic	5% Critical Value	Order of Integration
BC	-11.352	-3.558	I(1)
EXP	-6.670	-3.563	I(1)
EXR	-5.271	-3.563	I(1)
GDP	-5.156	-3.563	I(1)
IMP	-5.222	-3.563	I(1)
INF	-8.764	-3.622	I(1)
INTV	-6.327	-3.563	I(1)

Note: Since all variables are I(1), cointegration tests were conducted to examine long-run equilibrium relationships.

Source: *Author (2025)*

**Table 3: Cointegration Test Results**

Model (Dependent Variable)	Variable	Tau-statistic	P-value
INTV	INTV	-3.112	0.739
	BC	-5.067	0.100
	EXR	-2.344	0.946
	INF	-4.491	0.219

Model (Dependent Variable)	Variable	Tau-statistic	P-value
	GDP	-4.634	0.189
EXP	EXP	-2.368	0.942
	BC	-4.889	0.128
	EXR	-2.350	0.945
	INF	-4.426	0.236
	GDP	-4.849	0.145
IMP	IMP	-3.413	0.617
	BC	-5.275	0.074
	EXR	-2.297	0.952
	INF	-4.592	0.194
	GDP	-3.999	0.380

Source: *Author (2025)*

**Table 4: Regression Results (Dependent Variable: INTV)**

Variable	Coefficient	t-Statistic	Prob.
Constant	1.234.000	0.205	0.840
D(BC)	0.246	2.991	0.008
D(EXR)	0.1721	2.547	0.020
D(INF)	-1.554	-0.107	0.916
D(GDP)	2.258	7.752	0.000
DP	0.0864	6.028	0.000
Model diagnostics:			
R-squared	0.782		
Adjusted R-squared	0.778		
F-statistic	213.201		
Prob (F-statistic)	0.001		
Source: Author (2025)	Source: Author (2025)	Source: Author (2025)	Source: Author (2025)

Source: *Author's Computation (2025)*

## 4.2. Policy Implications

The results indicate that bank credit is a crucial driver of Nigeria's trade, and the cointegration and regression results suggest that trade policies should prioritize policies that deepen credit provision, such as expanding trade finance facilities, strengthening export credit guarantees, and incentivizing commercial banks to increase lending to exporters and importers. This finding is in line with the broader literature that shows credit constraints limit firms' participation in international trade (Manova, 2009). The finding that GDP is a key

determinant of trade volume underscores the importance of sustaining domestic economic growth as a condition for trade expansion, and underscores the need for policies that support industrial diversification, infrastructure development, and productivity enhancement (Phiri, 2018). Policies that deepen the link between domestic production and international competitiveness, such as sector-specific credit schemes for manufacturing and agro-processing, may be particularly important for Nigeria.

The finding that the 2005 banking consolidation policy was effective in boosting financial intermediation and trade also points to the positive role that structural reforms can play in deepening financial intermediation and enhancing trade, and that the ongoing policy reforms aimed at improving financial system resilience, transparency, and governance should continue. Recent evidence also shows that well-designed financial reforms promote macroeconomic stability, which is a prerequisite for trade growth (Allen et al., 2014).

The results on the role of exchange rate in influencing trade volumes have important policy implications. Although the regression results show a positive relationship, the risks of exchange rate volatility remain, and policymakers should design an exchange rate policy that supports competitiveness of exports while minimizing the pass-through effects of depreciation on import costs. This requires enhancing foreign exchange reserves, diversifying export earnings, and developing hedging mechanisms for trade participants (Ezuem & Sagbara, 2025).

The fact that inflation was not significant in the model suggests that trade flows are less sensitive to short-term price fluctuations, but the significance of this does not mean that price stability is not important. High inflation can erode trade indirectly by weakening purchasing power, investment confidence, and exchange rate expectations. Therefore, monetary policy should continue to aim for price stability while ensuring that credit growth does not lead to excessive price increases, which would undermine trade.

The results also imply that trade policies should be coordinated with financial sector policies to ensure adequate credit provision to traders and firms, including SMEs that account for the bulk of Nigeria's private sector, which may contribute to deepening trade integration into global value chains (Patel, 2021). Finally, the results indicate that trade and financial policies should be designed in a way that is inclusive and sustainable, that is, policies that expand bank credit to trade should not be limited to large corporations but should also extend to SMEs, and policies that lower barriers to credit access for smaller firms can expand Nigeria's export base and reduce exposure to shocks from oil exports (Sghaier, 2021).

## **5. Conclusion**

The study found that bank credit and GDP are the most influential factors in determining trade volumes, followed by exchange rate movements, while inflation was found to be statistically insignificant, suggesting that short-term price fluctuations do not constrain trade activity in Nigeria, a finding in line with recent empirical literature highlighting the role of financial development and domestic productivity in supporting trade growth in emerging economies (Hassan & Yu, 2007; Fapetu et al., 2022). The cointegration analysis also suggests that long-run equilibrium relationships between trade and its determinants are relatively weak, reflecting the fact that trade dynamics in Nigeria are still largely influenced by short-term shocks and structural rigidities, indicating that long-term reforms to strengthen the link between the financial system and international trade are needed. As other studies have argued, developing economies need to build strong credit and institutional frameworks to reduce trade volatility and increase integration into global markets (Patel, 2021; Sothan, 2021).

From a policy standpoint, the results emphasize that enhancing financial intermediation is essential for sustaining trade growth; expanding trade finance facilities, improving credit access for SMEs, and designing innovative credit guarantee mechanisms will ensure broader participation in international trade. Drawing on evidence from other similar emerging economies, Nigeria can also learn from the best practices of targeted credit interventions that support export diversification and competitiveness (Sghaier, 2021; Manova, 2009). Maintaining macroeconomic stability and structural reforms is equally important. The strong contribution of GDP to trade points to the critical role of domestic production capacity in driving both exports and imports, and policies that deepen industrial diversification and agro-processing, as well as supporting infrastructural development, will strengthen the productive base and trade competitiveness. Sustaining regulatory reforms in the banking sector, such as those observed in the 2005 consolidation, can also enhance financial resilience and credit allocation efficiency, which supports long-term trade expansion (Allen et al., 2014). Another key policy frontier is the exchange rate management, which can balance the need for depreciation to improve export competitiveness with the risk of excessive volatility that can undermine trade by increasing uncertainty and import costs. Nigeria should implement a managed exchange rate framework supported by foreign reserve accumulation, diversification of export earnings, and effective risk-hedging mechanisms for trade participants, an approach that is consistent with the global evidence that exchange rate

stability enhances trade flows in emerging markets (Ezuem & Sagbara, 2025; Chua & Safiyanu, 2022).

Finally, the results highlight the need for inclusive financial and trade policies, in which expanding bank credit should not only target large corporations but also the SMEs that constitute the backbone of the Nigerian economy; policies that reduce collateral requirements, strengthen credit information systems, and promote digital financial inclusion will broaden access to trade finance and expand the export base, reduce dependence on oil exports, and enhance resilience against external shocks (Sghaier, 2021; Bonga-Bonga & Phume, 2020).

The study confirms that Nigeria's trade performance is closely linked to financial sector development, macroeconomic stability, and structural reforms, and that strengthening these areas through coordinated financial and trade policies will not only expand Nigeria's integration into the global economy but also ensure long-term resilience and diversification. Future research could further extend this analysis by examining sectoral-level trade credit dynamics and the impact of digital finance innovations on international trade performance.

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