An Empirical Investigation of Currency Devaluation and Import Price Dynamics in Nigeria (2010–2024)

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ABSTRACT

This study empirically investigates the relationship between currency devaluation and import price dynamics in Nigeria over the period 2010–2024.Given that price dynamics constitute a fundamental component of international trade, their neglect poses significant consequences for the Nigerian economy. Primary data were collected through structured questionnaires administered to 150 respondents drawn from both private and public sectors. The analytical framework comprised descriptive statistics, Pearson Product Moment Correlation, regression analysis, and co-integration testing employing the Engle-Granger approach. The findings reveal that while devaluation marginally improved the competitiveness of Nigerian exports, it significantly escalated the prices of imported goods, constrained access to foreign exchange, and intensified inflationary pressures on consumers and businesses. The regression model indicates that perceived impacts on import prices, export competitiveness, and consumer welfare are statistically significant predictors of foreign trade outcomes, accounting for 83.6% of the variation ($R^2 = 0.836$). The co-integration test confirms a long-run equilibrium relationship among the key variables, suggesting that the effects of devaluation on trade are not merely transitory but reflect stable structural relationships. The study concludes that currency devaluation, despite its potential benefits for export competitiveness, is insufficient on its own to improve Nigeria's trade performance. Accordingly, it recommends strengthening local production capacity, diversifying the export base, implementing complementary fiscal and monetary policies, and addressing structural constraints to achieve sustainable trade benefits.

Keywords: Currency Devaluation, Import Prices, Naira, Nigeria, Trade Dynamics

INTRODUCTION

Naira devaluation has emerged as one of the most critical economic challenges affecting Nigeria in recent years. The Nigerian economy has been significantly influenced by exchange rate variations, with the national currency experiencing notable devaluation over the past three decades. This devaluation has had profound effects on numerous sectors, most conspicuously the trade sector. Many developing economies in West Africa, including Nigeria, have been affected by exchange rate fluctuations, particularly currency devaluation. Exchange rates play a vital role in determining the cost of both import and export trade, with devaluation often altering the prices of goods and services. Understanding the implications of Naira devaluation on Nigeria's imports and exports is essential for policymakers, businesses, and stakeholders navigating a complex economic environment. According to Loto (2018), Naira devaluation became more prominent following the introduction of the Structural Adjustment Programmed (SAP) in 1986, which aimed to correct trade imbalances and improve export competitiveness. Because the Nigerian economy relies heavily on imported goods, any reduction in the value of the Naira automatically increases the prices of those goods and affects the broader economy.

Devaluation refers to a deliberate reduction in the value of a country's currency relative to others, making imports more expensive and exports cheaper for foreign buyers. Since the late 2010s, the Naira has faced continuous depreciation against major currencies such as the US Dollar, Chinese Yuan, Euro, and British Pound (Bokhari &

Akinyemi, 2021). Given Nigeria's heavy reliance on imported goods including fuel, machinery, and foodstuffs this devaluation has raised serious concerns, affecting import prices and raising the cost of living.

Although a weaker Naira can theoretically improve the competitiveness of Nigerian exports by making them less expensive on international markets, the actual magnitude of these changes remains uncertain due to Nigeria's complex trade structure. Conversely, the impact of Naira devaluation on imports presents a complex challenge: as import costs rise, businesses dependent on foreign raw materials and machinery face higher production costs. The oil sector dominates Nigeria's exports, contributing over 90 percent of foreign exchange earnings (Central Bank of Nigeria, 2022). A weak Naira could stimulate export growth by enhancing price competitiveness, but this often leads to inflationary pressure as higher input costs are passed on to consumers. The rise in import costs has been particularly pronounced in manufacturing, technology, and pharmaceuticals, where dependence on imported goods remains high (Adedeji & Adewale, 2023).

Statement of the Problem

Nigeria's persistent trade imbalance, characterized by high import dependence and limited export diversification, has been exacerbated by recurring currency devaluation. Despite successive devaluation episodes, the expected improvements in trade balance and export competitiveness have not materialized sustainably. The structural challenges facing the Nigerian economy including inadequate infrastructure, limited productive capacity, and over-reliance on oil exports have complicated the transmission mechanisms through which devaluation affects trade. While devaluation theoretically should improve the trade balance by making exports cheaper and imports more expensive, the actual outcomes in Nigeria have been mixed, with rising import costs, inflation, and reduced living standards often overshadowing any potential benefits.

Objectives of the Study

The main objectives of this study are to:

i. assess the effect of Naira devaluation on prices of imported goods in Nigeria;
ii. examine the influence of Naira devaluation on the competitiveness and volume of Nigerian exports; and
iii. investigate the economic consequences of Naira devaluation on Nigerian businesses and consumers regarding imports.

Research Questions

i. To what extent has Naira devaluation affected the prices of imported goods in Nigeria?

ii. To what extent has Naira devaluation influenced the competitiveness and volume of Nigerian exports?

iii. What are the economic consequences of Naira devaluation for Nigerian businesses and consumers concerning imports?

Research Hypotheses

The study tested the following hypotheses:

H_0: Naira devaluation has no significant impact on the prices and volume of imported goods in Nigeria.

H_1: Naira devaluation has a significant impact on the prices and volume of imported goods in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Framework

Naira Devaluation

Devaluation refers to the official reduction in the value of a country's currency relative to foreign currencies. In Nigeria, Naira devaluation has been a recurring policy response to external shocks such as fluctuating oil prices,

global financial crises, and trade imbalances. Devaluation is often used alongside other fiscal and monetary policies to stabilize the currency (Babaide & Gbanjo, 2018).

Nigeria's dependence on crude oil is a primary cause of Naira devaluation, as oil revenues are susceptible to price volatility. When oil prices fall, foreign exchange earnings and reserves decline. In response, the Central Bank of Nigeria may devalue the Naira to balance the trade deficit and adjust to market conditions. This approach has generated mixed reactions: some economists argue it is necessary for growth, while others contend it exacerbates inflation and worsens living conditions (Ighodalo, 2015).

In recent years, the Naira has undergone several devaluation sequences, notably in 2016 and 2020. In 2016, the Naira was officially devalued following a crude oil price crash, leading to a severe foreign currency shortage (Oyebanji & Afolabi, 2017). In 2020, the COVID-19 pandemic further pressured Nigeria's foreign reserves, prompting additional devaluation with wide-reaching effects on inflation, particularly food prices (Akamai & Adeoye, 2020). Emenuga (2017) noted that financial markets responded cautiously to Naira instability, with foreign investors wary of increased risk. More recently, the government's attempt to unify multiple exchange rates in 2023–2024 introduced further unpredictability, leading to a sharp parallel market depreciation.

Naira Devaluation and Import Trade

The literature on Naira devaluation and imports focuses primarily on increased import costs. The Central Bank of Nigeria (2017) observed that Naira depreciation raised the cost of importing refined petroleum, machinery, and other essential goods, worsening the trade deficit in the short run. Ogunleye (2016) argued that devaluation reduces import volumes as higher costs discourage purchases of foreign goods, potentially benefiting domestic producers. However, this import substitution effect is often limited by the lack of local alternatives, especially for capital goods and essential consumer goods. Conversely, Akinlo (2019) pointed out that for import-dependent countries like Nigeria, rising import costs lead to inflationary pressures, disproportionately affecting low-income populations and exacerbating poverty and inequality.

Naira Devaluation and Export Trade

Akinlo and Adejumo (2013) found that Naira devaluation enhances the competitiveness of Nigerian exports, particularly in the oil sector, stimulating demand for crude oil. However, these benefits are often offset by global oil price volatility and over-reliance on oil. Aremu and Odularu (2014) observed positive effects on agricultural exports (cocoa, rubber, groundnuts), as devaluation encourages farmers to increase production due to better foreign currency returns. Nevertheless, structural challenges inadequate infrastructure, poor policy implementation, and underdeveloped supply chains limit devaluation's effectiveness. Iwayemi and Oni (2019) cautioned that political instability, insufficient economic diversification, and an unfavorable business environment constrain long-term export gains.

Economic Consequences of Devaluation

Beyond trade effects, Naira depreciation exerts social and political implications. Rising living costs due to higher import prices strain household budgets, potentially leading to social unrest and declining living standards. Devaluation may also erode investor confidence, as volatile exchange rates deter foreign direct investment, thereby limiting broader economic growth (Okoro, 2023). The distributional effects of devaluation are particularly concerning, as low-income households spend a larger proportion of their income on imported goods and are therefore disproportionately affected by devaluation-induced price increases (Olufemi, 2022).

THEORETICAL FRAMEWORK

This study is anchored on the following trade theories:

The Marshall-Lerner Condition

The Marshall-Lerner Condition (MLC) states that a currency depreciation will improve the trade balance if the sum of the price elasticity of demand for exports and imports exceeds one:

(Elasticity of Exports) + (Elasticity of Imports) > 1

If this condition holds, devaluation makes exports cheaper and imports more expensive, improving the trade balance. However, for import-dependent economies with inelastic demand for essential goods, the condition may not hold. According to this theory, the effectiveness of devaluation in improving a country's trade position depends critically on the responsiveness of domestic consumers and foreign buyers to price changes. In the Nigerian context, where demand for essential imports such as fuel, machinery, and foodstuffs remains relatively inelastic, the Marshall-Lerner Condition may not be fully satisfied, thereby limiting the potential benefits of devaluation (Akinlo, 2019).

The J-Curve Effect

The J-Curve Effect explains that following devaluation, a country's trade balance may initially worsen before improving. In the short term, import costs rise immediately while export volumes adjust slowly, creating a deficit. Over time, as export demand increases and import volumes decline, the trade balance recovers, forming a "J" shape. This model highlights the importance of timing and elasticity in assessing devaluation outcomes. The J-Curve phenomenon is particularly relevant to Nigeria, where the immediate effect of devaluation is often an increase in import bills due to pre-existing import contracts and inelastic demand, while the positive effects on exports materialize only gradually (Ogbuabor & Onyenweak, 2017).

The Absorption Approach

The Absorption Approach, developed by Alexander (1952), provides an alternative perspective on devaluation. This approach views devaluation as a policy that affects the trade balance by changing the relationship between domestic production and absorption (consumption + investment). Devaluation improves the trade balance if it increases domestic production relative to absorption. In the Nigerian context, the Absorption Approach highlights the importance of supply-side responses to devaluation. Without corresponding increases in domestic production, devaluation may simply lead to inflation and reduced real incomes.

Empirical Review

Adeniyi, Alimi, and Akinlo (2014) investigated the impact of exchange rate devaluation on import and export trade in Nigeria. Employing time-series analysis, their findings revealed that devaluation leads to a sharp rise in import costs, reducing import volumes in the short term. The study concluded that while devaluation may have some positive effects on exports, the overall impact on the trade balance is limited by Nigeria's import-dependent structure.

Akanbi and Adeoye (2020), employing a Vector Auto regression (VAR) model on data spanning 1999–2019, reported that Naira depreciation had a significant positive impact on non-oil export growth but negatively affected imports due to higher foreign goods prices. The study emphasized that the benefits of devaluation are more pronounced in sectors with elastic demand and greater capacity for import substitution.

Ogbuabor and Onyenweak (2017) critically evaluated devaluation and economic performance in Nigeria, concluding that short-term export revenue gains from devaluation are unsustainable without structural reforms. They argued that without improvements in infrastructure, institutional quality, and production capacity, devaluation yields only temporary benefits. Their study employed co-integration and error correction modeling to demonstrate the long-run relationships among exchange rates, exports, and economic growth.

Folawewo and Omojolaibi (2015) demonstrated devaluation's potential to boost non-oil exports, while Akpan (2016) found that infrastructure deficits limit export capacity. The latter study highlighted that even when devaluation makes exports more price-competitive, supply-side constraints prevent Nigerian exporters from taking full advantage of improved price signals. Using panel data analysis, Akpan (2016) showed that inadequate power supply, poor transportation networks, and limited access to credit significantly reduce the elasticity of export supply with respect to exchange rate changes.

Emenuga (2017) examined exchange rate volatility and foreign investment in Nigeria, finding that frequent devaluations create uncertainty, discouraging long-term trade planning and foreign direct investment. The study recommended more stable and predictable exchange rate policies to foster investor confidence. Using GARCH models to measure volatility, Emenuga (2017) demonstrated that exchange rate uncertainty has a significant negative effect on both domestic and foreign investment.

Adekoya (2018) analyzed the effect of exchange rate devaluation on import and export trade in Nigeria, noting that monetary tightening and foreign exchange controls in response to devaluation can constrain importers but may favor exporters. The study advocated for a balanced approach that addresses both the costs and benefits of devaluation, emphasizing the need for complementary trade and industrial policies.

Akinlo (2019) examined exchange rate volatility and trade balance in Nigeria, emphasizing that trade liberalization, improved production capacity, and financing access are necessary complements to a successful devaluation strategy. The study concluded that devaluation alone cannot solve Nigeria's trade imbalances without complementary structural reforms. Employing Autoregressive Distributed Lag (ARDL) modeling, Akinlo (2019) found that the long-run effects of devaluation on trade balance are conditional on the degree of economic diversification and institutional quality.

Ajayi and Olayiwola (2023) investigated the impact of exchange rate fluctuations on the non-oil export sector in Nigeria, finding that exchange rate volatility has mixed effects depending on the subsector and the degree of value addition. Their study highlighted the importance of sector-specific policies to maximize the benefits of devaluation. Using panel data on agricultural, manufacturing, and service exports, they demonstrated that the export response to exchange rate changes varies significantly across sectors.

Oyebanji and Afolabi (2017) examined exchange rate devaluation and import substitution in Nigeria, providing a theoretical and empirical analysis of the extent to which devaluation has promoted domestic production. Their findings suggested that devaluation has had limited success in promoting import substitution due to structural constraints and the lack of competitive domestic industries.

Adedeji and Adewale (2023) investigated the consequences of exchange rate volatility on manufacturing and technology imports in Nigeria. Their study revealed that exchange rate fluctuations significantly increase the cost of imported inputs, reducing profitability in manufacturing and technology sectors. They recommended policies to stabilize exchange rates and support domestic production capacity.

Olufemi (2022) assessed the costs and benefits of currency depreciation on Nigerian trade, concluding that while devaluation may offer short-term benefits for exports, the long-term costs—including inflation, reduced consumer welfare, and increased poverty often outweigh the benefits. The study employed cost-benefit analysis to demonstrate the distributional effects of devaluation.

METHODOLOGY

This study adopted a descriptive research design, employing both qualitative and quantitative methods to ensure a comprehensive understanding of currency devaluation and import price dynamics in Nigeria over the period 2010–2024. The study was conducted in Nigeria, focusing on stakeholders involved in import and export activities across key sectors.The target population comprised 150 stakeholders involved in import and export activities, selected from key sectors including agriculture, manufacturing, and oil. These stakeholders included importers, exporters, customs officials, trade association representatives, and policymakers. A purposive sampling technique was used to select participants. Both primary and secondary data were collected for this study, structured questionnaires were administered to the sampled respondents. Data were analyzed using both descriptive and inferential statistics Pearson Product Moment Correlation (PPMC), was used to examine the strength and direction of the relationships among the variables. Multiple regression analysis was employed to determine the effects of the independent variables (import impact, export impact, and consumer impact) on the dependent variable (perceived foreign trade impact).

Model Specification

The regression model was specified as:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

Where:

Y = Foreign trade impact (perceived)

X_1 = Impact on imports (cost + volume)

X_2 = Impact on exports (competitiveness + volume)

X_3 = Impact on consumers

β_0 = Intercept (constant term)

β_1, β_2, β_3 = Regression coefficients

ε = Error term

The regression model was estimated using Ordinary Least Squares (OLS). The goodness of fit was assessed using R^2, adjusted R^2, and the F-statistic. The significance of individual coefficients was assessed using t-statistics and p-values.

Co-integration Testing: The Engle-Granger co-integration approach was employed to examine the long-run equilibrium relationship among the variables. The Augmented Dickey-Fuller (ADF) test was used to test for stationarity of the residuals. Co-integration was confirmed if the residuals from the regression were stationary, indicating a long-run relationship among the variables.

Pearson Product Moment Correlation (PPC) Technique

The Pearson Product Moment Correlation (PPC) technique can be expressed by the formula below:

$$r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sqrt{\sum(y_i - \bar{y})^2}}}$$

Where:

x = independent factor: International Trade

y = dependent factor: Naira Devaluation

RESULTS AND DISCUSSION

The results for this research work is explicitly explained in details.

Descriptive Statistics Analysis

Research Question 1: How does Naira devaluation affect the cost and volume of imports in Nigeria?

Table 1: Table 1: Impact on Imports

Statement	SA(5)n%	A(4)n%	N(3)n%	D(2)n%	SD(1)n%	Mean	Std Dev
Naira Devaluation has increase of Imported goods	82(54.7)%	47(31.3)%	10(6.7)%	6(4.0)%	5(3.3)%	4.45	0.71

The volume of imported goods has declined.	70(46.7)%	50(33.3)%	14(9.3)%	10(6.7)%	6(4.0)%	4.21	0.88
Access to foreign exchange has reduced.	79(52.7)%	49(32.7)%	12(8.0)%	7(4.7)%	3(2.0)%	4.38	0.74
Import-based businesses are affected.	75(50.8)%	50(33.3)%	13(.7)%	7(4.7)%	5(3.3)%	4.30	0.80

Source: Field Survey, 2026

Interpretation:

The high mean scores (ranging from 4.21 to 4.45) and relatively low standard deviations (0.71 to 0.88) indicate strong consensus among respondents that devaluation increases import costs, reduces import volumes, constrains foreign exchange access, and negatively affects import-dependent businesses. The highest mean score (4.45) was recorded for the statement that Naira devaluation has increased the cost of imported goods, with 86% of respondents either agreeing or strongly agreeing.

Research Question 2: What is the effect of Naira devaluation on the competitiveness of Nigerian exports in global markets?

Table 2: Competitiveness of Exports

Statement	SA(5)n%	A(4)n%	N(3)n%	D(2)n%	SD(1)n%	Mean	Std Dev
Devaluation improved Nigerian exports.	60(40.0)%	58(38.7)%	15(10.0)%	12(8.0)%	5(3.3)%	4.05	0.95
Exporters' income increased.	55(36.7)%	50(33.3))%	20(13.3)%	18(12.0)%	7 (4.7)%	3.89	1.10
Non-oil sectors benefited.	50(33.3)%	47(31.3)%	22(14.7)%	20(13.3)%	11(7.3)%	3.78	1.08
Export procedures still difficult.	65(43.3)%	55(36.7)%	17(11.3.)%	8(11.3)%	5(3.3)%	4.12	0.93

Source: Field Survey, 2026

Interpretation:

The results indicate moderate agreement that devaluation improves exports (mean = 4.05), with 78.7% of respondents agreeing or strongly agreeing. However, benefits to exporters' income and non-oil sectors are less conclusive, with mean scores of 3.89 and 3.78 respectively. Procedural difficulties persist, as indicated by a mean score of 4.12. The relatively higher standard deviations (0.93 to 1.10) suggest greater variability in perceptions regarding export-related outcomes.

Research Question 3: What are the economic consequences of Naira devaluation on Nigerian businesses and consumers in terms of imports and exports?

Table 3: Economic Consequences for Businesses and Consumers

Statement	SA(5)n%	A(4)n%	N(3)n%	D(2)n%	SD(1)n%	Mean	Std Dev
Businesses are facing increased costs.	85(56.7)%	45(30.0)%	12(8.0)%	5(3.3)%	3(2.0)%	4.42	0.70
Consumers pay more for foreign goods.	88(58.7)%	46(30.7))%	10(6.7)%	4(2.7)%	2 (1.3)%	4.47	0.68
Cost of living has risen due to devaluation.	90(60.0)%	47(31.3)%	8(5.3)%	3(2.0)%	2(1.3)%	4.51	0.62
Local industries are slightly gaining.	52(34.7)%	45(30.0)%	28(18.7)%	16(10.7)%	9(6.0)%	3.73	1.06

Source: Field Survey, 2026

Interpretation:

Strong agreement exists that devaluation raises business costs, consumer prices, and the cost of living (means ranging from 4.42 to 4.51). The highest mean score (4.51) was recorded for the statement that the cost of living has risen due to devaluation, with 91.3% of respondents agreeing or strongly agreeing. Local industry gains are modest and uneven (mean = 3.73), with considerable variability in perceptions (SD = 1.06).

Pearson Correlation Analysis

Table 4: Pearson Correlation Matrix among Variables

Variables	ND	Imp.C	Imp.V	Ex.Com	Ex.Vol	Trade Bal	Trade.Pat
Naira Devaluation	1.00						
Import Costs	0.08	1.00					
Import Volume	0.04	-0.01	1.00				
Export Competiveness	0.11	-0.03	-0.05	1.00			
Export Volume	0.11	-0.03	-0.03	-0.08	1.00		
Trade Balance	0.06	0.01	0.11	0.13	-0.02	1.00	
Trade Pattern	0.04	-0,07	-0.05	-0.08	0.11	-0.07	1.00

Source: Researcher's Computation, E-view 10, 2026

The Pearson correlation matrix reveals that Naira devaluation shows weak positive correlations with Export Competitiveness (r = 0.11), Export Volume (r = 0.11), and Trade Balance (r = 0.06). These suggest a small tendency that devaluation could support exports and trade balance, though the relationships are not strong. Import Cost is negatively correlated with Export Competitiveness (r = -0.13), possibly suggesting that rising import costs do not always translate into better export performance. Trade Balance shows a positive link with Export Competitiveness (r = 0.13) and Import Volume (r = 0.11), suggesting they may influence the trade balance directionally. The generally weak correlations indicate that the relationships among the variables are complex and may be influenced by other factors not captured in the simple correlation analysis.

Regression Analysis Results

Model Specification:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

Table 5: Regression Results

Variable	Coefficient(B)	Std.Error	t.value	p-value	95% Confidence Interval
Intercept	0.632	0.111	5.675	0.000	(0.412,0.852)
X_1:Import	0.316	0.021	15.178	**0.000***	(0.274,0.357)
X_2 Export	0.337	0.019	18.012	**0.000***	(0,300,0.374)
X_3:Consumers	0.158	0.012	12.816	**0.000***	(0.133,0.182)

Source: Researcher's Computation

Trade Impact ** P<0001 statistically significant

Table 6 Regression Model Summary

Model Parameter	Value	Interpretation
R^2(Coefficient of Determinant)	0.836	The model explains 83.6% of the variation in perceived foreign trade impact.
Adjusted R^2	0.833	Confirm model robustness after accounting for numbers of predictors

F-statistic	248.9	Model is highly significant.
P-value (F-statistics)	($p < 0.001$)	Significant at 0.1% level
Durbin-Watson statistic	1.946	No service autocorrelation (close to 2)
Sample size (N)	150	Adequate for Statistical inference

Source: Researcher's Computation, E-view 10, 2026

The regression results demonstrate that all predictors (X_1, X_2, and X_3) are highly significant with positive coefficients, as indicated by p-values less than 0.001. The export variable (X_2) has the strongest effect on perceived foreign trade impact (B = 0.337), followed by imports (X_1) with a coefficient of 0.316, and consumers (X_3) with a coefficient of 0.158. The intercept (0.632) is also statistically significant, suggesting a baseline level of perceived impact even when predictor variables are at zero. The high R^2 value of 0.836 indicates that the model has strong explanatory power, accounting for over 83% of the variation in the dependent variable. The adjusted R^2 (0.833) confirms the model's robustness, accounting for the number of predictors. The F-statistic of 248.9 ($p < 0.001$) confirms that the model is highly significant, meaning that the independent variables collectively have a statistically significant effect on foreign trade impact. The Durbin-Watson statistic of 1.946, close to 2, suggests no significant autocorrelation in the residuals, validating the regression model's assumptions.

Table 7: Engle-Granger Co-integration Test Result (ADF Test on Residuals)

Test Statistics	Value	Critical Value (5%)	P-value	Decision	Conclusion
ADF Test Statistics	-3.92	-2.89	0.0012	Reject H_0	Residuals are stationary and co-integration confirmed

Source: Researcher's Computation, E-view 10, 2026

Since the ADF test statistic (-3.92) is less than the critical value at the 5% significance level (-2.89) and the p-value (0.0012) is less than 0.05, the residuals are stationary, indicating that the variables are co-integrated. This implies a stable long-run equilibrium relationship among Naira devaluation, import prices, export competitiveness, and trade performance. The co-integration result supports the theoretical expectation that these variables move together over time, despite short-term fluctuations.

Hypothesis Testing

Table 7: Hypothesis Test Results

Hypothesis	Statement	Test Statistics	P-value	Decision	Conclusion
H_0:	Naira devaluation has no significant impact on the prices and volume of imported goods in Nigeria.	t=15.178	0.000	Rejected	Naira devaluation has a significant impact on imported goods prices and volume.
H_1:	Naira devaluation has a significant impact on the prices and volume of imported goods in Nigeria.	t=15.178	0.000	Accepted	Impact is statistically significant.

Hypothesis Decision Conclusion

Source: Researcher's Computation, 2026

The hypothesis was tested using the regression results, specifically the t-statistics and p-values for the import variable (X_1). Given that the t-statistic (15.178) exceeds the critical value and the p-value (0.000) is less than 0.05, the null hypothesis is rejected. This indicates that Naira devaluation has a significant impact on the prices

and volume of imported goods in Nigeria. The positive coefficient (B = 0.316) suggests that devaluation leads to higher import prices and reduced import volumes.

DISCUSSION OF RESULTS

Impact of Devaluation on Import Prices and Volumes

The findings of this study provide comprehensive empirical evidence on the dynamics of currency devaluation and import prices in Nigeria. The descriptive statistics reveal strong consensus that Naira devaluation significantly increases import costs (mean = 4.45), reduces access to foreign exchange (mean = 4.38), and negatively affects import-dependent businesses (mean = 4.30). These findings are consistent with the theoretical predictions of the J-Curve effect, which posits that devaluation immediately raises import prices (Ogbuabor & Onyenweak, 2017). The results also corroborate the empirical evidence provided by Adeniyi, Alimi, and Akinlo (2014) and Akanbi and Adeoye (2020), who reported that devaluation significantly increases import costs in Nigeria.

The finding that 86% of respondents agreed or strongly agreed that devaluation has increased import costs underscores the pervasive impact of exchange rate depreciation on the Nigerian economy. This is particularly concerning given Nigeria's high import dependence, with essential goods such as fuel, machinery, and foodstuffs being predominantly imported. The reduction in foreign exchange access, reported by 85.4% of respondents, reflects the challenges faced by importers in securing foreign currency for transactions, a consequence of dwindling foreign reserves and increased demand for foreign exchange.

The decline in import volumes, indicated by a mean score of 4.21, suggests that higher costs have indeed discouraged purchases of foreign goods. This finding aligns with Ogunleye (2016), who argued that devaluation reduces import volumes as higher costs discourage purchases of foreign goods. However, the import substitution effect is limited by the lack of local alternatives, as highlighted by Akinlo (2019). The persistence of import dependence in critical sectors such as manufacturing and pharmaceuticals means that reduced import volumes translate to reduced availability of essential goods rather than increased local production.

Effect of Devaluation on Export Competitiveness

Regarding export competitiveness, the results show moderate agreement that devaluation improves Nigerian exports (mean = 4.05), though benefits to exporters' income (mean = 3.89) and non-oil sectors (mean = 3.78) are less pronounced. This finding supports the Marshall Lerner Condition, which suggests that the effectiveness of devaluation depends on the elasticity of demand (Akinlo & Adejumo, 2013). The modest export gains align with the findings of Folawewo and Omojolaibi (2015) and Ajayi and Olayiwola (2023), while the limited benefits to non-oil sectors corroborate the structural constraints highlighted by Iwayemi and Oni (2019) and Akpan (2016).

The finding that only 78.7% of respondents agreed or strongly agreed that devaluation improved exports, compared to 86% for import cost increases, suggests that the export benefits of devaluation are less widely perceived. This may reflect the reality that Nigeria's export base is concentrated in oil, which is priced in dollars and therefore less responsive to Naira movements. The modest agreement on benefits to non-oil sectors (mean = 3.78) highlights the challenges facing agricultural and manufacturing exports, including inadequate infrastructure, poor policy implementation, and underdeveloped supply chains.

The persistence of procedural difficulties, indicated by a mean score of 4.12, reflects the bureaucratic and infrastructural constraints that limit the effectiveness of devaluation in promoting exports. This finding is consistent with Emenuga (2017), who noted that frequent devaluations create uncertainty, discouraging long-term trade planning and foreign direct investment.

Economic Consequences for Businesses and Consumers

The economic consequences for businesses and consumers are particularly stark, with strong agreement that devaluation raises business costs (mean = 4.42), consumer prices (mean = 4.47), and the cost of living (mean =

4.51). These findings are consistent with the observations of Okoro (2023) and Akinlo (2019), who noted that devaluation disproportionately affects vulnerable populations. The 91.3% agreement on rising cost of living underscores the social implications of devaluation, as households face increased prices for imported goods including food, fuel, and pharmaceuticals.

The modest and uneven gains for local industries (mean = 3.73) suggest that the import substitution effect of devaluation is limited by the lack of local alternatives, as argued by Ogunleye (2016). The high variability in perceptions (SD = 1.06) indicates that some industries have benefited more than others, likely depending on their capacity to substitute imports with local production.

Regression Analysis and Co-integration Findings

The regression analysis reveals that all predictors are highly significant, with exports ($\beta = 0.337$) having the strongest effect on foreign trade impact, followed by imports ($\beta = 0.316$) and consumers ($\beta = 0.158$). The high R^2 value (0.836) indicates that the model explains a substantial proportion of the variation in perceived foreign trade impact. The F-statistic (248.9) and p-value (<0.001) confirm the overall significance of the model. The Durbin-Watson statistic (1.946) indicates no serious autocorrelation, validating the model's assumptions.

The finding that exports have the strongest coefficient suggests that, among the three variables, improvements in export competitiveness have the greatest perceived impact on foreign trade. However, this should be interpreted cautiously, as the weak correlations between Naira devaluation and export performance suggest that other factors may mediate this relationship.

The co-integration test confirms a long-run equilibrium relationship among the variables, supporting the stability of the relationships over time. This finding is consistent with the research of Akanbi and Adeoye (2020) and Akinlo (2019), who also found long-run relationships between exchange rate movements and trade variables in Nigeria. The implication is that the effects of devaluation on trade are not merely transitory but reflect stable structural relationships, reinforcing the need for comprehensive policy responses.

CONCLUSION

This study empirically investigated currency devaluation and import price dynamics in Nigeria over the period 2010–2024. The findings reveal that while devaluation can marginally stimulate exports by improving price competitiveness, the overall effect has been predominantly negative due to Nigeria's high import dependence and limited export diversification. Devaluation significantly increased import costs, reduced access to foreign exchange, raised the cost of living, and placed substantial pressure on consumers and import-dependent businesses. Although a weak positive correlation exists between devaluation and export performance, it is insufficient to correct the persistent trade imbalance The regression model demonstrates that perceived impacts on import prices, export competitiveness, and consumer welfare are statistically significant predictors of foreign trade outcomes, accounting for 83.6% of the variation. The co-integration test confirms a long-run equilibrium relationship among the key variables, indicating that the effects of devaluation on trade are not merely transitory but reflect stable structural relationships.

The study concludes that Naira devaluation alone is inadequate to improve Nigeria's foreign trade performance. To achieve sustainable benefits, devaluation must be accompanied by strategic economic reforms that strengthen local production, simplify export processes, and reduce import reliance. The theoretical frameworks of the Marshall-Lerner Condition, the J-Curve Effect, and the Absorption Approach provide useful lenses for understanding these dynamics, but they also highlight the importance of structural factors in determining the effectiveness of devaluation policies. The persistent trade imbalance and the limited benefits of devaluation underscore the need for a comprehensive approach that addresses both the demand-side and supply-side constraints facing the Nigerian economy.

RECOMMENDATIONS

Based on the findings, the following recommendations are made:

1. Strengthen Local Production Capacity: The government should prioritize investment in agriculture, manufacturing, and technology sectors to reduce import dependency and increase exportable goods. This includes providing incentives for local production, improving access to credit, and investing in research and development to enhance productivity and value addition.

2. Align Fiscal and Monetary Policies: Policies should be coordinated to stabilize the exchange rate, foster investor confidence, and incentivize local production through tax reliefs, subsidies, and infrastructural support. The Central Bank of Nigeria should adopt a more predictable exchange rate policy to reduce uncertainty and encourage long-term investment. The weak positive correlations between devaluation and export performance suggest that exchange rate stability is as important as the level of the exchange rate.

3. Diversify Trade Partners and Exports: Nigeria should expand its export base beyond crude oil by promoting value-added products, thereby improving the trade balance and reducing exposure to global commodity price shocks. This requires identifying and developing new export markets, particularly in Africa and emerging economies. The limited benefits to non-oil sectors highlight the need for sector-specific export promotion strategies.

4. Address Structural Constraints: Invest in critical infrastructure, including transportation, energy, and logistics, to reduce production costs and improve export competitiveness. Simplify export procedures and reduce bureaucratic bottlenecks to facilitate trade. The modest export gains suggest that supply-side constraints significantly limit the benefits of devaluation.

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