

Impact Of Exchange Rate Regime on Non-Oil Export in Nigeria, 2008M1-2024M12

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Abstract- This study examined the regime-dependent impact of exchange rate movements on non-oil export performance in Nigeria from 2008M1 to 2025M12 using a Markov-switching regression framework. The analysis reveals that the effect of exchange rate depreciation on exports is neither uniform nor constant over time, but critically conditioned by underlying macroeconomic and structural environments. In the first regime, interpreted as a relatively favourable export regime, exchange rate depreciation exerts a strong and statistically significant positive effect on non-oil exports. In contrast, the second regime is characterized by a weaker, though still positive, exchange rate effect on non-oil exports. The results demonstrate that both strong and muted exchange rate effects can coexist within the same economy, depending on prevailing domestic conditions. The study emphasized that exchange rate flexibility must be complemented by stable foreign exchange access, targeted export financing, and structural reforms if Nigeria is to achieve sustained non-oil export growth and diversification.

Keywords- Non-Oil Export, Exchange Rate Regime, Interest Rate, Inflation and Money Supply

I. INTRODUCTION

Exchange rate management remains one of the most consequential macroeconomic policy choices for export-oriented growth in developing economies. By influencing relative prices, cost competitiveness, and foreign market access, the exchange rate regime shapes both the incentives and constraints faced by exporters. In theory, flexible exchange rate systems allow currencies to adjust in response to external shocks, thereby supporting export competitiveness, while fixed or heavily managed regimes are often adopted to stabilize prices and anchor expectations, sometimes at the expense of external competitiveness (IMF, 2019; Obstfeld & Rogoff, 1996). The effectiveness of any exchange rate regime, however, depends not only on its formal classification but also

on how it operates in practice, particularly in economies characterized by structural rigidities, import dependence, and weak productive capacity.

Nigeria presents a compelling case for examining this relationship. Despite decades of policy emphasis on economic diversification, non-oil exports have remained persistently weak, volatile, and narrowly concentrated, even as the country has experimented with multiple exchange rate regimes since the return to democratic governance. Between 2008 and 2024, Nigeria operated a sequence of managed pegs, crawling bands, multiple exchange windows, and partial liberalization episodes, often in response to oil price shocks, balance-of-payments pressures, and foreign exchange shortages (Central Bank of Nigeria [CBN], 2023; IMF, 2023). These regime shifts were accompanied by widening gaps between official and parallel market rates, episodic devaluations, and frequent administrative interventions, raising questions about how exchange rate policy has affected the competitiveness and performance of the non-oil export sector.

Empirical evidence on the exchange rate–export nexus in Nigeria remains mixed and inconclusive. While some studies find that exchange rate depreciation improves non-oil export performance by lowering export prices in foreign markets, others highlight the adverse effects of exchange rate volatility, foreign exchange rationing, and policy uncertainty on export supply, particularly in manufacturing and agro-processing (Adeniran et al, 2014; Alege et al, 2015; Danladi et al, 2015). Literature further suggest that the presence of multiple exchange rates and persistent misalignment may blunt the expected gains from depreciation, as exporters face higher input costs, restricted access to

foreign exchange, and weak pass-through to external markets (IMF, 2023; World Bank, 2024). Yet much of this literature treats the exchange rate as a single continuous variable, paying limited attention to how different exchange rate regimes condition the export response over time.

This study addressed this gap by examining the impact of exchange rate regime dynamics on Nigeria's non-oil export performance using monthly data from 2008M1 to 2024M12. By explicitly accounting for regime shifts, exchange rate behaviour, and macroeconomic controls within a unified empirical framework, the study moves beyond static depreciation-export arguments to capture the institutional and policy context in which exchange rate adjustments occur. In doing so, it contributes to the growing literature on exchange rate regimes and export performance in resource-dependent economies and offers policy-relevant insights for Nigeria's ongoing debate on exchange rate unification, external competitiveness, and sustainable export-led growth. This study therefore seeks to examine the impact of exchange rate regime on non-oil export in Nigeria.

II. LITERATURE REVIEW

This section focusses on the conceptual clarification. Starting with exchange rate Exchange rate has been described from different perspectives by researchers.

It is adjudged that exchange rate refers to the price of a country's currency in relation to other countries' currencies (Adesoye, 2012). Obadan and Okojie (2016) conceptualize exchange rate as an important price variable that connects domestic and world markets for goods and assets, serving as a measure of international competitiveness.

From a more technical perspective, Asher (2018) defines exchange rate as the rate at which one currency can be converted into another in the foreign exchange market, emphasizing its role in international trade and financial transactions.

According to MacDonald (2015), exchange rate represents not just a conversion factor between currencies but a critical macroeconomic variable that

influences a country's external sector performance and overall economic stability. Further elaborating, Isard (2017) describes exchange rate as a crucial relative price that helps achieve external and internal balance in an economy, while simultaneously serving as a key instrument of international trade.

Ahmed and Ali (2019) view exchange rate as a vital economic metric that reflects the relative strength of two currencies and serves as a barometer for comparing international prices and costs.

An exchange rate regime refers to the framework through which a country manages the value of its currency relative to others, shaping how exchange rates are determined, adjusted, and defended over time. The literature commonly distinguishes among fixed regimes, where authorities peg the currency to another currency; floating regimes, where exchange rates are determined largely by market demand and supply; and intermediate or hybrid regimes, which combine elements of both (IMF, 2016; Bevilacqua et al, 2019). Exchange rate regimes matter because they influence macroeconomic stability, inflation control, trade competitiveness, capital flows, and the transmission of monetary policy. For instance, fixed regimes can provide nominal anchors and reduce exchange rate volatility but often at the cost of monetary policy autonomy, while flexible regimes allow for shock absorption but may expose economies to volatility and pass-through effects (Obstfeld, Shambaugh, & Taylor, 2010). In developing and emerging economies, regime choice is further shaped by structural factors such as export concentration, financial depth, and institutional credibility, making exchange rate regimes not merely technical arrangements but reflections of broader political-economic priorities and constraints (Reinhart & Rogoff, 2004; Ilzetzki, et al, 2019).

Nigeria's non-oil exports sector can be linked into four broad constituents: agricultural exports, manufacturing exports, solid mineral exports, and services exports (Akeem, 2011).

Similarly, the non-oil exports are those commodities excluding crude oil (petroleum products), or groups of economic activities that are outside the petroleum and gas industry or not directly linked to them

(Adulagba, 2011; Onwualu & Olife, 2013). The non-oil export products are unlimited and inexhaustible (Abogan, Akinola, & Baruwa, 2014). Non-oil exports are those commodities excluding crude oil (petroleum products), which are sold in the international market for the purpose of revenue generation (Ogunsanwo, Obisesan & Olowo, 2020).

Uzonwanne, (2020) refers non-oil export to commodities apart from oil, which are sold in the international and national market. Non-oil export constitutes export commodities and earnings derived from commodities not relating to oil export (Akpa et al, 2022).

Non-oil exports are those commodities excluding crude oil (petroleum products), which are sold in the international market for the purpose of revenue generation (Ogunsanwo, Obisesan & Olowo, 2020). Exports play a vital role in the growth of any economy just as Ricardo (1817) pointed out that foreign trade is highly beneficial to a nation. Export promotion strategies are policies that encourage exports, often through the free movement of capital, workers, enterprises, and students; a welcome to multinational corporations; and open communications (Todaro & Smith, 2011). According to Abou-Stait (2005), an export led growth strategy aims to provide producers with incentives to export their goods through various economic and governmental policies. Usman & Salami (2018) further asserted that export helps in increasing the level of aggregate economic activities through its multiplier's effects on the level of national income. Non-oil export constitutes the list of export commodities compiled from PIAs returns by the National Export Promotion Council (NEPC).

The Purchasing Power Parity (PPP) theory is the theoretical framework to understand the relationship between exchange rate regime and non-oil export in Nigeria. The theory posits that exchange rates are primarily determined by the relative price levels between two countries. In the context of Nigeria, different regimes in the exchange rate reflect changes in domestic price levels relative to those of trading partners, influencing the competitiveness of Nigerian exports. When the domestic price level rises (inflation), the cost of Nigerian goods in foreign

markets increases, potentially reducing demand for exports.

Conversely, when the exchange rate depreciates due to economic imbalances, Nigerian goods become cheaper and more competitive globally, potentially boosting export performance. The PPP further emphasized that exchange rate changes are influenced by price indices over time, which can disrupt equilibrium. Such disruptions, as observed in Nigeria, create volatility that directly affects the predictability and profitability of exports. Therefore, the PPP theory provides the theoretical framework for assessing how exchange rate regime impact Nigeria's non-oil export by linking currency value dynamics to trade competitiveness and price stability (Usman & Salami, 2018).

On the other hand, Prebisch (1950) and Singer (1950) hypothesis, which emphasizes the importance of non-oil export performance for developing countries. The hypothesis argues that expanding the variety of export products is essential because the income elasticity of demand for primary products is low. By pursuing economic diversification, developing nations can mitigate the risks associated with commodity shocks, terms of trade volatility, and price instability. This perspective has been supported by scholars such as Cooper and Brainard (1968), Cadot, Carrère, & Strauss-Kahn, (2010), and Hesse (2008), who highlight the desirability of moving away from reliance on primary products. Furthermore, Shabana and Zafar (2014) underline that diversification has become a critical focus of contemporary economic policy for developing economies. Aligning with the above arguments, the export-led growth hypothesis posits that exports serve as a key driver of economic growth. An increase in the exportation of goods and services boosts export earnings, promotes employment generation, generates profits, stimulates higher productivity, and leads to the accumulation of reserves, these reserves, in turn, enable a country to maintain a stable balance of payments.

This section examines the existing literature on exchange rate regime and non-oil export. Using Shin et al. (2014) nonlinear Autoregressive Distributed Lag (ARDL) models and Pesaran et al. (2001) linear

ARDL models, the study by Bahmani-Oskooee and Arize (2022) show that nearly all of the 20 nations in Africa that the United States sells to and imports from are affected inequitably in the short run by exchange rate volatility. Also, there are sizable long-term asymmetries between U.S. imports from 12 countries and exports to 15 other nations. The study by Chien et al. (2020) demonstrated asymmetric analysis and result display far higher impact of a long-run asymmetric effect of exchange rate volatility on Taiwan's exports to Indonesia than on Taiwan's imports. This outcome corroborates with the finding of Bahmani-Oskooee et al. (2021).

Examining the impact of real exchange rate volatility on trade flows between the United States and China from January 2003 to June 2020 using an asymmetric ARDL model (Lee et al, 2022). According to empirical findings, nonlinear volatility adjustment has a longer-term impact on U.S. exports to and imports from China that is more significant than the ARDL model, although higher volatility will increase both U.S. imports and exports to China. The study concludes that China has benefited more than the United States from trade between the two countries in the chosen industries since joining the WTO. Dike (2016) used the GARCH method and discovered that a decrease in the number of exports is caused by an increase in the variance of the general economic shock in the exchange rate process. Particularly, changes in real exchange rates have a detrimental impact on export volume.

Ndidi and Alaba (2019) utilized time series data spanning from 1981 to 2017 and employed the Johansen methodology for cointegration testing and subsequently applying the Error Correction Model (ECM) to analyze the speed of adjustment. Additionally, they examined exchange rate volatility using the Autoregressive Conditional Heteroscedasticity (ARCH) approach. Their findings indicated that exchange rate fluctuations exert a significant and negative ARCH effect on non-oil export performance in Nigeria. Tasneem and Sawkut (2024) employing a GARCH model, the researchers analyzed annual data spanning from 1993 to 2022 in addition to ARDL bounds cointegration method. The results indicate that exchange rate volatility exerts a positive and significant influence on exports in both

the short and long term. In Bangladesh, Khan and Ahmed (2024) used data from 1981 to 2022 and employed the Autoregressive Distributed Lag bound testing methodology. The results indicate that fluctuations in exchange rates exert a negative influence on Bangladesh's exports in both the short and long term, with the adverse effects being significantly more pronounced over the long term. Udoh et al. (2023) used data from Nigeria between 1986 to 2021, the results of Autoregressive Distributed Lag (ARDL) model for analysis indicated that fluctuations in foreign exchange rates negatively and insignificantly affected agricultural volume and value added in Nigeria. Conversely, the study found a positive and significant effect of foreign exchange fluctuations on agricultural capacity utilization. Sule et al. (2023) from 2011 to 2021, employed multiple regression analysis and findings revealed a positive yet statistically insignificant relationship between the exchange rate, FDI, and export value in Nigeria.

Outtara (2023) used data covering the period from January 1, 2018, to December 31, 2022 in Turkey, the results of GARCH model indicate that export volume is significantly affected by fluctuations in exchange rate volatility. Rathnayaka and Dunusinghe (2022) conducted study in Sri Lankan using data from 2001 to 2019, the autoregressive distributed lag (ARDL) model indicate that exchange rate volatility has a positive correlation with export earnings in both the short and long term. Innocent et al. (2022) in Nigeria using quarterly data starting from first quarter of 2005 to the fourth quarter of 2020. The employed Autoregressive Conditional Heteroskedasticity (ARCH) model along with its extensions, namely GARCH, TARCH, and EGARCH models. The Autoregressive Distributed Lag (ARDL) Bounds test was applied to explore both short-term and long-term relationships between exchange rate volatility and exports. The results confirmed the existence of exchange rate volatility; however, they indicated that such volatility exerted a negative and statistically insignificant effect on export levels.

Rilwanu and Elisha (2021) in Nigeria using data from 1983 to 2020 and utilizing the Error Correction Model for their analysis, their findings from the interaction model indicated that the influence of exchange rates on exports is not significantly

contingent upon the level of financial development in Nigeria. Nevertheless, the marginal effects analysis demonstrated that the Exchange Rate exerts a significant positive effect on exports at both maximum and average levels of financial development during the study period. Conversely, at the minimum level of financial development, the exchange rate's impact on exports was found to be statistically insignificant. Mable and Shynet (2021) employed Ordinary Least Squares (OLS) methodology and findings indicated that both exchange rate and gross domestic product exhibited an insignificant negative correlation with exports, whereas broad money supply also demonstrated an insignificant negative relationship with exports. In their study in Nigeria, Mohammed and Maduechesi (2021) utilizing data from 1981 to 2019 and applied ordinary least squares. Their results demonstrated a positive and significant correlation between exchange rates and total exports in the short term. Emmanuel (2020) conducted study in Nigeria using data from 1986 to 2018, and employed the Error Correction Mechanism (ECM). The study results indicated a significant negative correlation between exchange rates and export performance in Nigeria, both in the short and long term.

The GARCH model is used in a similar way by Yakub et al (2019) to produce a series of nominal exchange rate volatility. The Granger causality test and the ARDL bounds testing approach are two estimate techniques. The short-term impact of exchange rate volatility on Nigeria's trade flows was evident from empirical data, but this effect did not persist over time. The findings of Aliyu (2010), who employed the vector error correction and the VAR model, indicate a long-run steady and adverse association between the volatility of the Naira exchange rate and Nigeria's non-oil exports. However, other result depicts that US Dollar exchange rate volatility exerts positive effect with non-oil exports. However, Kasman and Kasman (2005) used cointegration and an error-correction model and discovered that, over the long term in Turkey, exchange rate volatility showed a considerable positive effect on export volume. Also, using the error correction and GARCH model, Dickson and Ukavwe (2013) discovered that while exchange rate volatility does not account for changes

in import, it was significant and beneficial in accounting for changes in export. Serenis and Tsounis (2014) used the ARDL model, and the results demonstrate that volatility has a beneficial impact on Croatian and Cypriot exports.

Most of the extant literature focused on exchange rate on export sector performance (Yakub, Sani, Obiezue, & Aliyu, 2019; Mohammed & Maduechesi, 2021; Innocent et al. 2022; Rilwanu & Elisha, 2021). While few existing studies dwell on exchange rate and non-oil export in Nigeria (Ndidi & Alaba, 2019; Aliyu, 2010). There are varied effects across exchange rates on either on export performance or non-oil export sector in Nigeria with some exhibiting negative (Aliyu, 2010; Dike, 2016; Ndidi & Alaba, 2019; Udoh et al. 2023) while other reveal positive effect (Mohammed & Maduechesi, 2021; Dickson & Ukavwe, 2013; Sule et al. 2023). This study specifically set out to examine exchange rate regime partition across different years to see how they affect non-oil export sector in Nigeria using quarterly data from 200MQ1 to 2025M12.

III. METHODOLOGY

This study investigates the impact of exchange rate regime on non-oil export in Nigeria by utilizing the relevant series of exchange rate regime, official exchange rate, interest rate, inflation and money supply as well as monthly non-oil export value. The paper utilized monthly secondary data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin. Non-Oil Export (NOE) as a nominal value of export of goods and services is measured in US\$ million. The exchange rate (EXR), maximum interest rate (MLR), inflation rate (INFL) is expressed in usedrates. Money supply (MS) is expressed in Naira Million.

The data ranges from 2008M1 to 2025M12 and were chosen based on literature (CBN, 2024). To minimize the sharpness in time series data and produce effective outcomes, the low frequency data (EXP & MS) in nominal form were transformed into log-linear form (LN) or growth rate (%) prior to estimation, following the approach of Shahbaz et al. (2013). In other to investigate the above objective, this study adapts the empirical models by Aliyu

(2010), who employed the vector error correction and the VAR model, to examine the nexus between the volatility of the Naira exchange rate and Nigeria's non-oil exports. Similarly, Ndidi and Alaba (2019) examined exchange rate and non-oil export nexus utilizing data from 1981 to 2017 using Johansen cointegration testing and Error Correction Model (ECM). Taking cue from these empirical models (Aliyu, 2010; Ndidi & Alaba, 2019), the functional form of the model is expressed in equation [1]:

$$NOE = f(EXR, INF, INT, M2) \dots 1$$

Where: NOE = Non-Oil Export, EXR = Official Exchange Rate, INF = Inflation, INT = Interest Rate, and M2 = Money Supply.

In order to account for the effects arising from the transition from one exchange rate regime to another, the Markov switching model was adopted for this study taking cue from the empirical work of Oduyemi et al (2023) who examined exchange rate management and its implications for trade in Nigeria using data from 1981Q1 to 2018Q. A simplified two-state Markov Switching Regression for your model can be stated as:

$$NOE_t = \alpha_{(s_t)} + \beta_1(1, s_t) EXR_t + \beta_2 INF_t + \beta_3 INT_t + \beta_4 M2_t + \varepsilon_t, \varepsilon_t \sim N(0, \sigma^2) \dots 2$$

where $s_t \in \{1, 2\}$ is an unobserved regime (state) that follows a first-order Markov process with transition probabilities:

$$P(s_t = 1 | s_{(t-1)} = 1) = p_{11}, P(s_t = 2 | s_{(t-1)} = 2) = p_{22},$$

$$P(s_t = 2 | s_{(t-1)} = 1) = 1 - p_{11}, P(s_t = 1 | s_{(t-1)} = 2) = 1 - p_{22}.$$

In this specification, the intercept $\alpha_{(s_t)}$ and the exchange rate effect $\beta_1(1, s_t)$ are allowed to differ across regimes, while inflation, interest rate, and money supply enter as common effects across both states.

IV. RESULTS AND DISCUSSION

The descriptive statistics on Table 1 indicate notable differences in the behaviour and distribution of the variables over the sample period of 2008M1 to 2025M12 with 216 observations. Non-oil exports (NOE) exhibit moderate variability around a mean of 5.98, with a relatively low standard deviation (0.56),

suggesting gradual movements over time and mild positive skewness, implying occasional higher export outcomes. The exchange rate (EXR) shows greater dispersion, with a standard deviation of 0.76 and strong positive skewness, reflecting periods of sharp depreciation episodes relative to the average level. Inflation (INF) records the highest volatility among the variables, with a wide range between 7.71 and 34.80 and pronounced right skewness, indicating frequent inflationary spikes above the long-run average. Interest rate (INT) displays moderate variability and slight negative skewness, suggesting more frequent observations above the mean and relatively fewer extreme high values. Money supply (MS) is comparatively stable, with low dispersion and mild positive skewness, reflecting steady monetary expansion over time. The Jarque–Bera statistics indicate that all variables deviate from normality at conventional significance levels.

Table 1: Summary of Descriptive Statistics

	NO				
	E	EXR	INF	INT	MS
Mean	5.98	5.13	15.1	26.6	17.0
Median	5.98	5.03	13.0	27.1	16.9
Maximum	7.87	7.38	34.8	31.5	18.6
Minimum	4.74	4.25	0	6	4
Std. Dev.	0.56	0.76	6.53	8	9
Skewness	0.45	1.64	1.36	-0.60	0.57
Kurtosis	3.46	5.11	4.33	2.61	2.49
Jarque-Bera	9.21	5	137.0	82.4	14.3
Probability	0.01	0.00	0.00	0.00	0.00
Observation					
s	216	216	216	216	216

Source: Extract from Eview 13 Output

One of the pre-conditions for modelling time series data is determining the stationarity status of the variables of interest. As a result, presented in Table 2 are unit root testing results as obtained from a number of alternative unit root tests we considered.

Table 2: Unit Root Test

Augmented Dickey-Fuller Unit Root Test							
Variables	ADF	1% Criti cal	5% Criti cal	10% Criti cal	Prob	Order of Integrat ion	
NOE	-0.15294838	-12.5027***	-3.497	-2.887	2.581	0.0000	I(1)
EXR	-0.6132	-10.375***	-3.491	-2.887	2.581	0.0000	I(1)
INF	-0.182264	-12.748***	-3.491	-2.888	2.581	0.0000	I(1)
INT	-0.581388	-11.145***	-3.491	-2.888	2.581	0.0000	I(1)
MS	-0.76093365	-4.166**	-3.493	-2.888	2.582	0.0012	I(1)

Source: Extract from EViews 13 Output

The result of ADF unit root test reveal that the series of non-oil export (NOE), exchange rate (EXR), inflation (INF), interest rate (INT) and money supply (MS) achieved stationarity at first different (that is I(1)). Among others, it re-enforces our preference for the Markov Switching Regression model.

Table 3: Estimated Markov Switching Regression Model

Variable	Coefficient	Std. Error	Z-Statistic	Prob.
Regime 1				
EXR	0.4962	0.0953	5.2052	0.0000
Regime 2				
EXR	0.3500	0.0896	3.9050	0.0001
Common				
INF	-0.0104	0.0082	-1.2777	0.2014
INT	0.0076	0.013	0.5484	0.5834

MS	0.2198	0.0315	6.9803	0.0000
LOG(SIGMA)	-0.8407	0.0507	16.5961	0.0000
Transition Matrix Parameters				
P11-C	3.7450	0.6325	5.9212	0.0000
P21-C	-3.4771	0.6434	5.4045	0.0000
Mean dependent var	5.9829	S.D. dependent var		0.5617
S.E. of regression	0.4733	Sum squared resid		47.0363
Durbin-Watson stat	2.0650	Log likelihood		-142.8318
Akaike info criterion	1.3966	Schwarz criterion		1.5216
Hannan-Quinn criter.	1.4471			

Source: Extract from EViews 13 Output

In Regime 1, which may be interpreted as a relatively favourable export regime, the exchange rate (EXR) exerts a strong and statistically significant positive effect on non-oil exports, with a coefficient of 0.496 and a high z-statistic of 5.21. This suggests that exchange rate depreciation in this regime improves price competitiveness and is effectively transmitted into higher export performance, implying that exporters are able to respond to relative price incentives when macroeconomic and structural conditions are supportive. When foreign exchange is relatively accessible, logistics function tolerably, and working capital is available, exporters are able to convert naira depreciation into real gains in competitiveness. In such moments, firms expand output, penetrate regional and global markets, and non-oil exports respond strongly to exchange rate incentives. This reflects episodes when exchange rate adjustments align with supportive domestic conditions, allowing price signals to translate into actual trade outcomes.

Much of the existing work for Nigeria and comparable economies documents that the effect of exchange rate movements on exports is neither uniform nor stable over time, but depends critically on underlying macroeconomic and structural conditions. Studies that report a positive and significant exchange rate effect on exports, such as Mohammed and Maduechesi (2021), Dickson and Ukavwe (2013), and Sule et al. (2023), are consistent with the dynamics observed in Regime 1 of this study, where depreciation translates effectively into higher non-oil export performance under relatively supportive liquidity and operating conditions.

In Regime 2, the exchange rate effect remains positive but is weaker, with a coefficient of 0.350, though still statistically significant at conventional levels. Compared to Regime 1, this lower magnitude indicates a constrained environment in which exporters respond less strongly to exchange rate changes. In these periods, exporters face binding constraints that blunt the benefits of a weaker naira. Limited access to foreign exchange, high operating costs, infrastructure bottlenecks, policy uncertainty, and financing gaps restrict firms' ability to scale production or meet external demand. As a result, exchange rate movements generate only modest improvements in export performance, reinforcing the sense that depreciation alone cannot resolve Nigeria's non-oil export challenges. The strong role of money supply across both regimes' further underscores Nigeria's structural dependence on liquidity conditions. Exporters require consistent access to credit to finance inputs, manage working capital, and absorb cost pressures in an environment of volatile prices and interest rates. Where liquidity tightens, export activity stalls regardless of exchange rate movements.

Conversely, findings of weak, negative, or insignificant exchange rate effects reported by Aliyu (2010), Ndidi and Alaba (2019), Dike (2016), and Udoh et al. (2023) resonate strongly with Regime 2, where structural bottlenecks, exchange rate volatility, limited access to foreign exchange, and financing constraints dampen exporters' responsiveness to price incentives. The broader international evidence on asymmetric and nonlinear exchange rate effects, as documented by Bahmani-Oskooee and Arize (2022),

Lee et al. (2022), and Chien et al. (2020), further reinforces the interpretation that exchange rate impacts are state-contingent rather than constant. In this sense, the Markov-switching results reconcile the mixed empirical findings in the literature by showing that both positive and muted exchange rate effects can coexist within the same economy, depending on regime-specific conditions. The strong and persistent role of money supply across regimes also echoes studies emphasizing liquidity and financial depth as critical channels through which exchange rate movements affect export performance (Rilwanu & Elisha, 2021).

V. CONCLUSION AND POLICY REMARKS

The Markov-switching results show that exchange rate depreciation can support Nigeria's non-oil exports, but only under the right domestic conditions. In the favourable regime, exchange rate adjustments are strongly and effectively transmitted into export growth, indicating that when foreign exchange access is relatively smooth, financing is available, and operational constraints are less binding, exporters are able to convert price competitiveness into real market gains. In the constrained regime, however, the same depreciation yields weaker export responses, confirming that structural rigidities, policy uncertainty, and cost pressures significantly dampen the export payoff from exchange rate movements. Across both regimes, the consistent significance of money supply highlights the central role of liquidity and credit availability in sustaining export activity.

From a policy perspective, these findings imply that exchange rate policy alone cannot drive non-oil export expansion. Exchange rate flexibility must be complemented by stable foreign exchange access, predictable trade policy, and targeted liquidity support for exporters. Strengthening export-oriented credit schemes, reducing transaction and logistics costs, and ensuring a more transparent and market-responsive foreign exchange framework would allow depreciation to translate more reliably into export growth. Ultimately, Nigeria's non-oil export performance depends less on the direction of the exchange rate and more on the regime under which it operates. Aligning exchange rate management with supportive monetary conditions and structural

reforms is therefore essential for achieving sustained export diversification and resilience.

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